

Stock-book Non *E. coli*

(removed June 13 1958)

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Actinomycetes
Agrobacterium
Pseudomonas
yeast
Salmonella
enterics
Phages

Actinomyces

| Ref | Source | | |
|-------|-------------------|---|-------------------|
| WAc 1 | S. gasicus (1947) | McCoy Waleman #4 Rutgers 3496. | s. sm 25% alc |
| 2 | 879-1 WAc 1 | Arginineless (slow + on minimal) | s " 20% |
| 3 | 879-2 WAc 1 | Leucine no residual | |
| 4 | 880 " | CYSTINE + on minimal | |
| 5 | " 6 " | no residual | |
| 6 | " " | | |
| 7 | " " | | |
| 8 | " " | | |
| 9 | " | | |
| 10 | S. violaceus | McCoy 12/23/57 Fair growth poor spor. | |
| 11 | S. olivaceus | NRRL 12/23/51 Truly colonies, diffusing pigment | |
| 12 | S. gypsicidens | B-902 | |
| 13 | S. venezuelae | B-547 | |
| 14 | S. laevigata | B-1115 | |
| 15 | S. antibioticus | B-1257 | |
| 16 | S. coelizidus | B-1068 | |
| 17 | S. meiocarpus | | |
| 18 | 880 - WAc 11 | | |
| 19 | " " | | |
| 20 | " " | | |
| 21 | Burkholder 8 | S. gasicus | Threonineless B, |
| 22 | " 16 | " | Threonine |
| 23 | " 17 | " | Methionine |
| 24 | " 18 | " | Uracil - arginine |

10-25-54 30V
 10-25-54 31V
 10-25-54 32V
 10-25-54 33V Streptomyces sp. wild types isolated at Evanston Illinois 1954
 10-25-54 34V

" 35V
 " 36V
 " 37V WAc-36
 " 38V WAc-36
 " 39V WAc-34
 " 40V WAc-34
 WAc 41V
 WAc 42V
 WAc
 WAc 44V
 WAc 45V
 WAc 46V
 WAc 48V
 WAc
 WAc 51V
 WAc 52V

golden colored
 lavender gray colored
 serine or cystine def.
 tryptophane def. } by u.v.

ex. WAc 32 leuc-green S. cyanescens

WAc 59V

WAc 34

S. gasicus Trypt-Purine (GentA or on H)

DATE:

June 1956

REF:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---------------|--------------|----------------|---|-------------------------------------|---|----------------------|-------------------|----|
| 1. | WAc-74 vv | | ex WAc34 | | ara - purine | | | <i>S. griseus</i> | |
| 2. | WAc-86 vv | | fresh isolate | | protox | | | <i>S. griseus</i> | |
| 3. | WAc-114 vv | | ex WAc16 | | ara - colorless aspor | | <i>S. coelicolor</i> | | |
| 4. | WAc-115 vv | | ex WAc16 | | meth - red aspor | | <i>S. coelicolor</i> | | |
| 5. | WAc-124 vv | | ex WAc115 | | meth - golden aspor. | | <i>S. coelicolor</i> | | |
| 6. | WAc-127 vv | | as Sermenti #5 | | reported as 1Meth - Hist - blue | | <i>S. coelicolor</i> | | |
| 7. | no WAc number | Sermenti #14 | | | reported as glut - prot - colorless | | <i>S. coelicolor</i> | | |
| 8. | no WAc number | Sermenti #1 | | | prototroph wild type | | <i>S. coelicolor</i> | | |
| 10 | | | | | | | | | |
| 20 | | | | | | | | | |
| 30 | | | | | | | | | |
| 40 | | | | | | | | | |
| 50 | | | | | | | | | |

* on AMS grows with cyst prod - shows no glut requirement

WAc -

DATE: Nov 9 1955

REF: New isolate

Agrobacterium Stocks

DATE:

REF:

Pseudomonas fluorescens

STOCKS

| PF O | Ref. A3.12 | Source: Stainer | Agency <u>not FTS</u> | Remarks. "Wild type" |
|---------|---------------|--------------------|-----------------------------|--|
| 1 ✓ | 761-1 | PF O | UV-Penicillin | HISTIDINE ? |
| 2 ✓ | 761-2 | " | " | Isoleucine-Valine |
| 3 ✓ | 761-7 | " | " | Phenylalanine |
| 4 ✓ | 761-9 | " | " | TRYPTOPHANE |
| 5 ✓ | 761 b | PF 3 | <i>Streptomycin M</i> E 4 B | Pa - SR |
| 6 ✓ | 761 b 1 | PF O | uv-penicillin | L - |
| 7 ✓ | " b 4 | " | " | Guanine (Hypox + Adenz) |
| 8 ✓ | " b 6 | " | " | ARGININE |
| 9 ✓ | " b 8 | " | " | METHIONINE |
| 10 ✓ | 761-5 | PF O | " | Phenylalanine; leucisoxyg + val |
| 11 ✓ | 761-14 | PF O | " | B-12 + folic acid (Pyridoxal) |
| 12 - | - | PF 6 | | leucine SR |
| 13 x | - | PF 16 | | A3.16 SR |
| 14 x | - | PF 17 | | A3.17 SR |
| 15 ✓ | A3.12 | Stainer | Formerly PF O | |
| 16 x | A3.16 | | Received from Stainer | |
| 17 ✓ | A3.17 | | " " " | |
| 18 ✓ | " T 23 " | | " " " | |
| 19 ✓ | 870-1 | PF 12 | uv, Penicillin | leuc SR; Isol. Val. |
| 20 ✓✓ | -2 | | | TRYPT. |
| 21 ✓✓ | -3 | | | IDENTIF. GROWTH |
| 22 ✓✓ | -4 | | | |
| 23 ✓✓ | -1 | PF 9 | UV, Penicillin | HIST |
| 24 ✓✓ | -2 | | | Isol. Val. |
| 25 ✓✓ | -3 | | | TRYPT. |
| 26 ✓✓ | -4 | | | HISTIDINE |
| 27 ✓✓ | -5 | | | CYSTINE |
| 28 ✓✓ | -6 | | | CYSTINE Guanine |

Yeast cultures.

| WY | Ref. | Some | Remarks |
|-------|----------------------|--------------------|---------------------------------------|
| 1 ✓✓ | Pompeii 62 | (1100) | Prototroph a S. cerevisiae disperse |
| 2 ✓✓ | Pompeii 63 | " | " |
| 3 ✓✓ | Pompeii 62-20-194 | typ, unicil a | " |
| 4 ✓✓ | Pompeii 67-1 | mult, adem a | " |
| 5 ✓✓ | Aotearoa S. fragilis | " | disperse |
| 6 ✓✓ | Rubbo 4/1/53 | Red Star (Fresh) | isolated from com. product |
| 7 ✓✓ | " | Red Star ADY (dry) | explan. " " " |
| 8 ✓✓ | " | WY-6 | explan. " " " |
| 9 ✓✓ | " 12/17/53 | WY 6 | explan. - induced " petite" |
| 10 ✓✓ | " 12/17/53 | WY 6 | explan. - induced petite |
| 11 ✓✓ | " 12/18/53 | WY 7 | explan. - induced petite |
| 12 ✓✓ | Leesbury 1/25/54 | WY 5 | explan. - induced petite |
| ✓✓ 13 | Leesbury 1/3/54 | WY 3 x WY 4 | Difluid cross of WY 3 & WY 4 dis. |
| 14 ✓✓ | TATUM 1/19/54 | 99Rd (from Reanne) | Ady (pink) meth |
| 15 ✓✓ | 2018a | " | " |
| 16 ✓✓ | 2022x | " | " |
| 17 ✓✓ | 200a | " | " |
| 18 ✓✓ | 201a | " | " |
| 19 ✓✓ | 2033x | " | " |
| 20 ✓✓ | 2508x | " | " |
| ✓✓ 21 | Lindgren 1/21/54. | 15189 a | S HA ME MG disperse |
| ✓✓ 22 | " | 14854 a | S HA ME MG poor growth |
| 23 ✓✓ | " | 12965 | " |
| 24 ✓✓ | " | 13893 | " |
| 25 ✓✓ | Phenom | 59RT | Normal |
| 26 ✓✓ | Phenom | 59RA | Petite |
| 27 ✓✓ | Rutho | WY 1 | UV, irradiation Methionine less |
| 28 ✓✓ | " | WY 15 x 17 | Diffloid cross |
| 29 ✓✓ | " | WY 15 x 18 | Diffloid cross |
| 30 ✓✓ | " | Petite ex WY 15 | " |
| 31 ✓✓ | " | Petite ex WY 16 | " |
| 32 ✓✓ | " | Petite ex WY 4 | " |
| 33 ✓✓ | " | Petite ex WY 18 | " |
| 34 ✓✓ | " | Petite ex WY 3 | " |
| 35 ✓✓ | " | Petite ex WY 3 | " |
| 36 ✓✓ | Caroline Raut | 50.2 a | Petite ex WY 17 |
| 37 ✓✓ | " | 108.3N a | Me Gal- |
| 38 ✓✓ | " | 159.4 a | ad Gal-Mal- |
| 39 ✓✓ | " | 168.4 a | ad Gal-Mal- |
| 40 ✓✓ | " | 159.4 a | Isolated from mixed cult. as record |
| 41 ✓✓ | R.R. FOWELL | DOL 536 | ✓✓ WY 59 = pure culture, OK as record |
| 42 ✓✓ | 28/9/54 | HML+ | |
| 43 ✓✓ | " | HQ5a- | |
| 44 ✓✓ | " | HQ10c- | |
| 45 ✓✓ | Rea. | 10/20/54 WY 38-UV. | More sensitive to light |
| 46 ✓✓ | " | " | " |
| 47 ✓✓ | " | " | " |
| 48 ✓✓ | " | " | " |
| 49 ✓✓ | " | " | " |
| 50 ✓✓ | " | " | " |
| 51 ✓✓ | " | " | " |
| 52 ✓✓ | " | " | " |
| 53 ✓✓ | " | " | " |
| 54 ✓✓ | " | " | " |

| WY. | Ref. | Source | Remarks |
|-------|---------------------------|-----------------------|--|
| 55 ✓ | Raw. 10/30/54 | UV. WV 38 UV. | Am. animo ac. yeast |
| 56 ✓ | " | " " | " |
| 57 ✓ | " | " " | " |
| 58 ✓ | " | " " | " |
| 59 ✓ | " | " " | " |
| 60 ✓ | " | " " | " |
| 61 ✓ | " | " " | " |
| 62 ✓ | " | " " | " |
| 63 ✓ | " | " " | " |
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| 69 ✓ | " | " " | " |
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| 71 ✓ | " | " " | " |
| 72 ✓ | " | " " | " |
| 73 ✓ | " | " " | " |
| 74 ✓ | " | " " | " |
| 75 ✓ | " | " " | " |
| 76 ✓ | " | " " | " |
| 77 ✓ | " | " | " |
| 78 ✓ | L.J. WICKERHAM. 7/1/54 | NRRL Y-1822 Y-1683 | Diploid <i>H. subpellucens</i> . |
| 79 ✓ | " | " | " |
| 80 ✓ | " | " Y-1822-12 | " |
| 81 ✓ | " | " Y-1683-11 | " |
| 82 ✓ | " | " Y-1598 | " |
| 83 ✓ | " | " Y-2153 | " |
| 84 ✓ | " | " Y-366 | " |
| 85 ✓ | " | " Y-2153-4 | " |
| 86 ✓ | " | " Y-366-8 | " |
| 87 ✓ | " | " Y-1134 | " |
| 88 ✓ | " | " Y-230 | " |
| 89 ✓ | " | " Y-1205 | " |
| 90 ✓ | " | " Y-1140 | " |
| 91 ✓ | Raw. 2/18/54 | WR42 UV. (F-2) | Mating type |
| 92 ✓ | " | " (F-4) | Zygosaccharomyces ashbyii |
| 93 ✓ | Lindgren. | * 16003 α | Disexual diploid <i>H. anomala</i> |
| 94 ✓ | Rec'd 3/1/55 | 16068-16072 | Unisexual " <i>H. anomala</i> |
| 95 ✓ | ✓ | 16072 | Mating type |
| 96 ✓ | ✓ | 16074 | Saccharomyces lactis |
| 97 ✓ | Raw. | 276/3 P-2/1 A2 | Mating type. <i>S. lactis</i> |
| 98 ✓ | Ephemer. | B15 P4 | " leucine + arginine R+ |
| 99 ✓ | 7/1/55 | 53/13 α | " lysine R-(5) Malt + Meff Hef rag φ Trypt + ur M74 PA |
| 100 ✓ | Dec. | 53/13 C | + - - - + - - + - + + |
| 101 ✓ | Raut. | 112.3 N (Normal) | Δ Gal Malt + Meff Hef rag φ Trypt + ur M74 PA |
| 102 ✓ | 12/15/55 | 102.3 P-2 (petite) | + - - - + - - + - + + |
| 103 ✓ | " | 102.3 P-3 (petite) | Δ 16071 α |
| 104 ✓ | " | 56.1 P (petite) | - + - + - + + + |
| 105 ✓ | " | 140.1 (petite) | " good mating pair" |
| 106 ✓ | " | 145.2 (petite) | " |
| 107 ✓ | " | 146.2 (petite) | " Ad - Malic white R- |
| | | | S- (originally S- R- as received.) |
| | | | Δ Pa Math mega C |
| | | | same |
| | | | same |
| | | | Δ pa Ma? Th Ma? Ga? C |
| | | | Δ pa Math C2 |
| | | | Δ pa Ma Th C2 |
| | | | Δ pa math? C2 |

| WY | Reference | Source | 226/3ba. | Remarks. |
|-------|--|--|---|--------------------|
| 108 ✓ | ROMAN 24/3 | 4240C - Ephemerin a ad ₂ . | | |
| 109 ✓ | " | 4235D - " | | |
| 110 ✓ | REW. | 24/2) spont. seg. from D16 (q1x8-16) Th - R ^{+S+} | X ad ₂ | |
| 111 ✓ | R&W | B4 dip q2x42. | <u>Th-petite</u> | |
| 112 ✓ | " | G3 | | |
| 113 ✓ | " | C4 } dips. 26x42. (p 104 notes.) | | |
| 114 ✓ | " | E4 } | | |
| 115 ✓ | " | g-16 Th petite from WY44 - UV. | | |
| 116 ✓ | " | D14 q1x8-16 proto selection. } diploid. | | |
| 117 ✓ | " | D16 " unselected } | | |
| 118 ✓ | " | 10-25 - In - ? from WY44 - UV | | |
| 119 ✓ | " | 2G (8-16x42) dip. for test of nature of 8-16 petite. | | |
| 120 ✓ | SPIEGELMAN 1/57. | WINGE'S STRAIN 55. | G.g. Mama D/a - dip S.c. & Sch. | LOST |
| 121 ✓ | " | " 33-E-26. | " Nist - g _c a. | |
| 122 ✓ | R.E.W. q1-L. & Ang ⁻ Li ⁺ R ⁺ | " | - heat resistance (21.2g/L in 6TY) not clonally stable. | |
| 123 ✓ | " 91-LP3 | " R ⁻ | | |
| 124 ✓ | " 91-LP5 | " " | | |
| 125 ✓ | " 91-LP7 | " " | | |
| 126 ✓ | " 91-LP9 | " " | | |
| 127 ✓ | " 110-Ac3. | a Th ₂ Ac ⁺ R ⁺ | - actidione resistant (10mg/L) - clonally stable. | |
| 128 ✓ | " 110-Ac2 | " " " | | |
| 129 ✓ | " 110-AP3 | " " " R ⁺ | - acriflavine petite from WY127. | |
| 130 ✓ | " 110-PI | a Th ₂ R ⁻ | " " " WY110. | |
| 131 ✓ | " 110-P4. | " " | " " " | |
| 132 ✓ | " D75. | hybrid WYq1 x WY44. | | |
| 133 ✓ | " D79. | " WY92 x WY44. | | |
| 134 ✓ | " 124-b | a/d Ang ⁻ R ⁺ | - Spore seg. from (D75). Not stim. by leucine: Dotted | sporulation |
| 135 ✓ | " 113-b | a/g " " | " " " | Will not spot dots |
| 136 ✓ | " T1 | Hybrid q1-L x 110 Ac3. } Sporulation +. | | |
| 137 ✓ | " T6. | " (WY122) - (WY127) } | | |

Sp 3 *Spirillum nitroini*

SM-6 Baron (May 1960) *Serratia marcescens* original culture

SM-6-11 " S^R high freq. recipient

SM hybrid 6 L⁺ " S^S lab + from cross of ST2 × SM6 → 6L⁺

NB: There is a serratia in the Colibool too, W 2745
(= donor now for rec)

Coli and *Salmonella* phage.
 ("pp -")

Source p. Host range + characters.

| 1 | Sewage | 225 | SY-20 | W24 | K-12 | s |
|----|-----------|--------------|----------------|--|-----------|-------|
| 2 | " | 225 | SY-20 | small plaque | K-12 | s |
| 3 | " | 225 | SY-21 | small plaque | K-12 | s |
| 4 | " | | SY-21 | large plaque, many centers | | |
| 5 | SY-21 | 226 | SY-36 | large plaque (S.94/warmp) only. | | |
| 6 | Sewage | | SY-21 | moderate confluent plaque, SY-21; SY-23. | | |
| 7 | SY-23 | N2. — | SY-21 | small plaques (maybe two?) | | |
| 8 | Sewage | 458-2 | K-12 | large plaque | | |
| 9 | Sewage | 458-20 | K-12 | small plaque | | |
| 10 | Hershey | T16 | K-12 | small plaque, high titer | | |
| 11 | " | Border Small | K-12 | small plaque | | |
| 12 | " | C36 | K-12 | wide margin very wide margins on W811 | | |
| 13 | Luria | | K-12 | = C36. | | |
| 14 | Sewage | 458-C1 | K-12 | Lysogenic | see W1397 | = λ2? |
| 15 | " | " C2 | K12 | | | |
| 16 | " | " C3 | K12 | | | |
| 17 | " | " CY | K12 | | | |
| 18 | " | " C5 | K12 | | | |
| 19 | " | 481. | W518 | (λ-) but not W811 (λ+). | | |
| 20 | Blodridge | 499 | W518 | not W811. | | |
| 21 | " | 513 | Nutant of p20; | attacks W811. | | |
| 22 | Sewage | 458-a | K-12 | | | |

65
66
67
68
69
70 *rapetum* 22
71 SW1009 13
72 SW1008 23
73 SW1007 14
74 1036G1 (b)
75 1005
76 1004
77 1030 2
~~78 1032~~
79 1033
80 1034
81 1046.1
82 1046.12
83 1035
84 *S. gallinaceum* 22
85 *S. pallidum* 22
86 SW1043 22
87 1045 22
88 1049 26
89 926 22
90 PB.BB01 22
91 SW1061 22
92 SW1092 22
93 SW940 9

(mostly a) A: pura

atc - d SW 925-936

F. 2
F. 3
(-)

18 (part)
m
S & T 2

Salmomella typhimurium Stock Cultures

Lilleengen cultures

| No. | Representative | Used | Other |
|-------|----------------|-------|-------------|
| LT-1 | 84 | = TM1 | 306 ✓✓ |
| LT-2 | 85 | = TM2 | 87 ✓✓ |
| LT-3 | 22 | | 525 |
| LT-4 | 125 | | 536 ✓✓ |
| LT-5 | 193 | | |
| LT-6a | 205 | | |
| LT-6b | 538 | | 119 |
| LT-7 | 578 | βADDS | 203 ✓✓ |
| LT-8 | 43 | | 590 |
| LT-9 | 116 | | 497, 504 |
| LT-10 | 414 | | |
| LT-11 | 74 | ✓✓ | 82 ✓✓ |
| LT-12 | 151 | | 114 ✓✓ |
| LT-13 | 167 | ✓✓ | 331 |
| LT-14 | 135 | | 199, 11412 |
| LT-15 | 297 | ✓✓ | 508, 518 ✓✓ |
| LT-16 | 9 | ✓✓ | 23 ✓✓ |
| LT-18 | 100 | | 89 |
| LT-19 | 2 | ✓✓ | |
| LT-20 | 428 | | |
| LT-21 | 192 | | |
| LT-22 | 409 | βADDS | 426 |

Edwards cultures

| No. | Details |
|------|-----------------------------------|
| S-20 | " Monophasic I |
| S-21 | " II " Edwards 1946. |
| S-23 | Diphasic = Wheeler - Bowman 3542. |
| 12. | S.typhimurium var. copenhagen |
| 13. | " " "O" form |
| 14. | " phase II II |

Hershey culture

| No. | Details |
|-------|----------------------------|
| SW-36 | S.typhimurium var. Webster |

Boyd cultures

| No. | Details |
|------|--------------------------|
| 1404 | Supposedly non-lysogenic |
| 1411 | " " " |

Berman cultures

| No. | Details |
|--------|------------------------|
| SW-516 | Vet. Sci. Mouse colony |
| SW-517 | " " " " |

Salmonella Serotypes

Obtained from Edwards--- number refers to station circular # 54
 = SW 701-~~800~~ 900

- 1. ✓ S. paratyphi A
- 2. ✓ S. paratyphi Avar. durazzo
- 3. ✓ S. paratyphi B self typhi (lyophil 703A, 703B)
- 4. ✓ S. paratyphi B
- 6. ✓ S. paratyphi B phase II
- 15. ✓ S. stanley
- 16. ✓ S. heidelberg
- 17. ✓ S. chmester
- 18. ✓ S. san-diego
- 21. S. derby
- 27. S. abortus-ovis
- 28. ✓ S. abortus-bovis
- 36. ✓ S. cholerae-suis var. kunzendorf
- 50. ✓ S. newport
- 56. ✓ S. glostrup
- 57. ✓ S. typhi H 901 W BADS (lyophil #SW757)
- 59. ✓ S. typhi 2V
- 60. ✓ S. typhi Watson V
- S. typhi V-E 1
- S. typhi V-F 1
- S. typhi
- S. typhi
- 64. S. enteriditis
- 67. ✓ S. moscow
- 68. ✓ S. mlegdum
- 70. ✓ S. eastbourne -
- 71. ✓ S. sendai
- 74. ✓ S. gallinarum
- 75. ✓ S. pullorum
- 76. ✓ S. london
- 87. ✓ S. senftenberg
- 90. ✓ S. aberdeen
- 91. ✓ S. peona
- 92. S. worthington
- 95. ✓ S. hvittingfoss (sw 745)
- 98. ✓ S. kentucky
- 103. ✓ S. abony (lyophil 803A, 803B)
- 105. S. Wichita
- 119. S. habana
- 125. ✓ S. altendorf
- 128. S. vejle
- 129. ✓ S. montivideo
- 134. E. coli-1
- 137. ✓ E. coli-2
- 139. ✓ E. coli-3
- 140. ✓ E. coli-4 (lyophil 840A, 840B)
- 142. ✓ E. coli-5
- 145. S. kaapstad
- 148. ✓ S. salinatis
- 162. ✓ S. florida ✓
- 163. S. madelia phase 1

Salmonella phages

| No. | Source | Details |
|--------|------------|---|
| SP-1 | Sewage | SY-20 small plaque |
| SP-2 | " | SY-20 small clear plaque |
| SP-3 | " | SY-21 large hazy plaque |
| SP-4 | " | SY-21 large clear plaque |
| SP-5 | SY-21 | S.gallinarum |
| SP-6 | Sewage | SY-21; SY-23 |
| SP-7 | SY-23 | SY-21 |
| SP-49 | Rittenberg | S. cholerae-suis |
| SP-50 | " | S. poona |
| HP-21 | Hershey | SW-36 Large plaque |
| HP-13 | " | " Small " |
| HP-15 | " | " Medium " |
| HP-18 | " | " " |
| HP-20 | " | " Hazy small plaque |
| HP-22 | " | " Medium plaque |
| HP-23 | " | " Small " |
| LP-30 | Lilleengen | LT-14 # 135 |
| LP-39 | " | LT-13 # 331 |
| LP-36 | " | LT-22 # 409 |
| LP-34 | " | LT-12 # 111 |
| LP-31 | " | LT-4 # 125 |
| LP-33 | " | LT-16 # 23 |
| LP-8 | " | LT-6b #119 |
| LP-32 | " | LT-11 # 74 |
| LP-37 | " | LT-1 # 306 |
| LP-4 | " | LT-3 # 22 |
| LP-2 | " | LT-19 # 100 |
| LP-28b | " | LT-5 #193 |
| PLT-- | LT-- | Any phage obtained from lysogenic members of LT |

~~for~~

~~for~~

PLT'

LT

phage from PLT via activation

942-1

Bulgakov

Bulgakov's x phage C
" phage A

942-2

Uetake

Phage from S. zelandica 7452 (S21124).
~ S. new-brunswick 5411 (S21125)
.. S. cambridge (S21126)
~ S. kinshasa (S11127).

85P

86P

E2-1P

E2-2P

S Y
1 para A
23 pullorum
14
15
16
17
18 abortusbovis
22 typhar ✓✓?
23 typhar X
24 abortus equi
25 newport
26 london
28 urbana
30 inverness
31 adelaide
32 montevideo
33 panama
34 para A
36 gallinarum
37 dublin
39 typhar
40 typhar
42 para A
43 enteritidis
46 enteritidis
51 para B
52 para B
53 para B
54 para B
56 cholerae suis
57 typhi suis
58 abortus ovis
61 typhar IV variant Methionineless.
70 typhar methionineless Beth Israel 2443
71 typhi suis Beth Israel 2443
72 para A 3 " " 3607
73 sendai " " 3280
74 typhi VW
75 para A
76 para A ✓✓ Kauffmann.
77 para A durazno "
78 typhi Z "
79 typhi Watson ✓✓ " K.A.D.
80 sendai "
81, 2 blagdan "
83 typhar
854 kentucky
115 coli 1
139 anatis
20 } typhimurium 1 + 2.
21 }

SALMONELLA

| SW | Reference | Source | Agent | Mutation | Details |
|-----|----------------|------------------|---------------------|----------------------------------|---------|
| 1. | I IV V,i,-- | prtotrophic | | S-20 monophasic I | Edwards |
| 2. | I IV V,-,1,2,3 | " | | S-21 " | II " |
| 3. | 208 | SW-1 | U.V. | Histidine | |
| 4. | " | " | " | " | |
| 5. | " | SW-2 | " | Yeast Extract | |
| 6. | 208 | " | " | PAB weak response | |
| 7. | " | SW-2 | " | Leucine-iso leucine-valine | |
| 8. | " | " | " | Tryptophane | |
| 9. | " | Spontaneous | Xylose variable (#) | | |
| 10. | SW-8 | U.V. | Arabinose (-) | | |
| 11. | ----- | | | | |
| 12. | | Sw-10. | Sp6 | Sp6R (nutrition uncertain) | |
| 13. | 260 | SW-7 | U.V. | Galactose (-) Sp6S | |
| 14. | NZ 9/1/48 4 | SW-1 | U.V.PEN | Leucine | |
| 15. | " " 1 | " | " " | leucine replaceable by A 12 (CM) | |
| 16. | 2 9/14 1 | SW-3 | " " | (Histidine) Proline | |
| 17. | " B1 | SY-23 | " " | Histidine | |
| 18. | " B2 | " | " " | Leucine | |
| 19. | " B3 | " | " " | Methionine | |
| 20. | " B4 | " | " " | Cystine or methionine | |
| 21. | " B5 | " | " " | " " | |
| 22. | " B6 | " | " " | A 12 any | |
| 23. | " B7 | " | " " | A 5 not single | |
| 24. | " Bla | SW-17 | " " | Lysine # methionine | |
| 25. | " Blb | " | " " | Threonine | |
| 26. | " Blc | " | " " | A-12-(all)--- | |
| 27. | " B2a | Sw-18 | " " | Methionine | |
| 28. | " B2b | " | " " | " | |
| 29. | " B2c | " | " " | Ess. A.A. | |
| 30. | " B2d | " | " " | A 12 (only) | |
| 31. | " B2e | " | " " | " | |
| 32. | " B3a | SW-19 | " " | Proline (OH proline) | |
| 33. | " B3b | " | " " | Leucine | |
| 34. | " B3c | " | " " | Proline (OH proline) | |
| 35. | " B3d | " | " " | Histidine | |
| 36. | " B3f | " | " " | Cystine | |
| 37. | Hershey NZ B1c | S. Webster | | | |
| 38. | " B9 | SW-17 | " " | A 12 only | |
| 39. | " B11 | SY-23 | " " | Phenylalanine, tyrosine (both) | |
| 40. | " B16 | " | " " | Proline | |
| 41. | " B10 | " | " " | Histidine | |
| 42. | " B1d | SW-17 | " " | Methionine | |
| 43. | " Blc | " | " " | Proline | |
| 44. | " B2g | SW-18 | " " | Methionine | |
| 45. | " B2h | " | " " | " | |
| 46. | " B3g | Sw-19 | " " | " | |
| 47. | " B3h | " | " " | Proline | |
| 48. | " B3j | " | " " | " | |
| 49. | Rittenberg | S. cholerae-suis | (requires Bl) | Iso-leucine # valine | |
| 50. | " | S. poona | | | |
| 51. | NZ 10/19 | SW-25 | U.V. plates | Maltose (-) | |
| 52. | " | " | " | " | |
| 53. | " | " | " | " | |
| 54. | " | " | " | " | |
| 55. | " | " | " | " | |

Salmonella Con't

| SW | Reference | Source | Agent | Mutation | Details |
|------|----------------|--------------------|------------------------------|-------------------------------|---------|
| 56. | NZ 11/2 | SW-50 | U.V. PEN. | Cystine | |
| 57. | " " | " | " " | Cystine # methionine | |
| 58. | " " | " | " " | Leucine | |
| 59. | " " | " | " " | Pyrimidine (uracil) | |
| 60. | " 11/4 | " | " " | A 12 | |
| 61. | " " | " | " " | " | |
| 62. | " " | " | " " | " | |
| 63. | " " | " | " " | " | |
| 64. | " " | " | " " | " | |
| 65. | " " | " | " " | ? | |
| 66. | " " | " | " " | ? | |
| 67. | " 11/5 | SW-52 | " plates | Arabinose (-) glucose - | |
| 68. | " " | " | " " | " | |
| 69. | " " | " | " " | " | |
| 70. | " " | Sw-31 | " " | Galactose (-) | |
| 71. | " " | " | " " | " | |
| 72. | " " | " | " " | " | |
| 83. | 34R Rittenberg | SW-49 | | SP 49 R | |
| 74. | 91 M " | SW-50 | | Arginine | |
| 75. | " 2 " | SW-74 | | Arginine Purines(NZ xanthine) | |
| 76. | Hershey (NZ) | SW-36 | Spontaneous | Bl or Ca pnt. | |
| 77. | #/14 | SW-36(76) U.V. PEN | | Cystine (BL) | |
| 78. | NZ 3/25 | " | " " | Cystine (serine) | |
| 79. | " " | " | " " | " " | |
| 80. | " 3/29 | " | " " | " (arginine) | |
| 81. | " " | " | " " | Leucine | |
| 82. | " 4/26Y | " | " layer | " | |
| 83. | " " | " | " " | " | |
| 84. | " 4/29 | SW-58 | U.V. PEN | Glutamic (proline) | |
| 85. | " " | " | " " | Cystine | |
| 86. | " " | " | " " | Threonine | |
| 87. | " 5/16 | SW-13 | Sp7 | Sp7 R (lysogenic) on lactose | |
| 88. | " " | " | " | " " | " |
| 89. | " " | " | " | " " | " |
| 90. | " " | " | " | " " | " |
| 91. | " " | " | " | " " | " |
| 92. | " " | Sw-75 | U.V. plates | Maltose (-) | |
| 93. | " " | " | " " | Maltose slow | |
| 94. | " " | SW-84 | " " | Mannitol slow | |
| 95. | " " | " | " " | " " | |
| 96. | " " | " | " " | " " | |
| 97. | " 5/18 | SW-50 | U.V PEN | Bl | |
| 98. | " " | " | " " | " | |
| 99. | " " | " | " " | " | |
| 100. | " " | " | " " | "? | |
| 101. | " 5/23 | SW-92 | U.V. plates | Mannitol (-) | |
| 102. | " 6/6 | SW-87 | Autonomous lysis on dextrose | | |
| 103. | " " | " | " " | " " | |
| 104. | " " | SW-2 | Sp7 | Sp7 R | |
| 105. | " " | " | " | " | |
| 106. | " " | " | " | " | |
| 107. | " " | " | " | " | |
| 108. | " " | " | " | | |
| 109. | " 6/9 | SW-87 | Autonomous lysis on maltose | | |

| SW | Source | Agent | Mutation | D escrip | Preservation |
|--------------------|---------------|----------|--|---------------------|--------------|
| Salmonella mutants | | | | | |
| 3. | S-20 | U.V. | Histidine | | |
| 4. | " | " | Xanthaxanth | " | |
| 5. | S-21 | " | Yeast extract | | X |
| 6. | " | " | pab weak response | | |
| 7. | " | " | Leucine, iso-leucine, valine | | |
| 8. | " | " | Tryptophane | L | |
| 9. | " | " | Xylose variable spontaneous | | |
| 10. | SW-8 | " | Arabinose - | | |
| 12. | SW-10 | SP-6 | SP-6R | | |
| 13. | SW-7 | U.V. | Galactose - | | L |
| 14. | SW-1 | U.V.Pen. | Leucine | | L |
| 15. | " | " | " replaceable by CM | | X |
| 16. | SW-3 | " | Proline | | |
| 17. | SY-23 | " | Histidine | | L |
| 18. | " | " | Leucine | | |
| 19. | " | " | Methionine | | |
| 20. | " | " | Cystine or methionine | L | |
| 21. | " | " | " | | |
| 22. | " | " | Am-1 | | |
| 23. | " | " | Am-5 | | |
| 24. | SW-17 | Z | Lysine # methionine | | |
| 25. | " | " | Threonine | | |
| 26. | SW-18 | " | Methionine | | |
| 27. | " | " | " | L | |
| 28. | " | " | Essential AA | | |
| 29. | " | " | Am-1 | | |
| 30. | " | " | " | | |
| 31. | SW-19 | " | Proline | | |
| 32. | " | " | Leucine | L | |
| 33. | " | " | Proline | | |
| 34. | " | " | Histidine | L | |
| 35. | " | " | Cystine | | |
| 36. | Hershey, A.D. | | S.typhimurium Webster | | X |
| 37. | SW-17 | U.V. Pen | Am-1 | | |
| 38. | SY-23 | " | Phenylalanine # tyrosine | L | |
| 39. | " | " | Proline | | |
| 40. | " | " | Histidine | | |
| 41. | " | " | Methionine | | |
| 42. | SW-17 | " | Proline | | |
| 43. | " | " | Methionine | | |
| 44. | SW-18 | " | " | L | |
| 45. | " | " | " | | |
| 46. | SW-19 | " | Proline | | X/- |
| 47. | " | " | " | | |
| 48. | " | " | Iso-leucine # valine | | |
| 49. | Rittenberg | | S.cholerae-suis (requires B ₁) | | |
| 50. | " | | S.poona | | |
| 51. | SW-25 | U.V. | Maltose - | | |
| 52. | " | " | " | | |
| 53. | " | " | " | | X |
| 54. | " | " | " | | |
| 55. | " | " | " | | |

X = lost

X = absent

| SW | Source | Agent | Mutation | Details | Preservation |
|------|--------|--------------|---------------------------|---------|--------------|
| 56. | SW-50 | U.V. Pen | Cystine | | |
| 57. | " | " | " # methionine | | |
| 58. | " | " | Leucine | | |
| 59. | " | " | Uracil | | |
| 60. | " | " | Am-1 | | |
| 61. | " | " | " | | |
| 62. | " | " | " | | |
| 63. | " | " | " | | X |
| 64. | " | " | " | | |
| 65. | " | " | " | | |
| 66. | " | " | " | | |
| 67. | SW-52 | U.V. | Arabinose - | | |
| 68. | " | " | " | | X. |
| 69. | " | " | " | | |
| 70. | SW-31 | " | Galactose - | | |
| 71. | " | " | " | | |
| 72. | " | " | " | | L |
| 73. | SW-49 | SP-49 | SP-49R | | L |
| 74. | SW-50 | ? | Arginine | | L |
| 75. | SW-74 | ? | Xanthine | | L |
| 76. | SW-36 | Spontaneous | Thiamine | | L |
| 77. | " | U.V. Pen | Cystine | | L |
| 78. | " | " | " or serine | | L |
| 79. | " | " | " " | | L |
| 80. | " | " | 2 or arginine | | L |
| 81. | " | " | Leucine | | X. |
| 82. | " | " | " | | |
| 83. | " | " | " | | |
| 84. | SW-58 | " | Glutamic (proline) | | |
| 85. | " | " | Cystine | | |
| 86. | " | " | Threonine | | |
| 87. | SW-13 | SP-7 | SP-7 R (lysogenic) | | L |
| 88. | " | " | " | | |
| 89. | " | " | " | | |
| 90. | " | " | " | | |
| 91. | " | " | " | | |
| 92. | SW-75 | U.V. plates | Maltose - | | X. |
| 93. | " | " | Maltose slow | | |
| 94. | SW-84 | " | Mannitol slow | | |
| 95. | " | " | " | | |
| 96. | " | " | " | | |
| 97. | SW-50 | U.V. Pen | Thiamine | | L |
| 98. | " | " | " | | |
| 99. | " | " | " | | |
| 100. | " | " | " | | |
| 101. | SW-92 | U.V. plates | Mannitol - | | |
| 102. | SW-87 | Autonomous | lysis on dextrose | | L |
| 103. | " | " | " | | |
| 104. | SW-2 | SP-7 | SP-7 R | | L |
| 105. | " | " | " | | |
| 106. | " | " | " | | |
| 107. | " | " | " | | |
| 108. | " | " | " | | |
| 109. | SW-87 | Autonomous | lysis on maltose | | L |
| 110. | SY-115 | Purification | Prot. lac- lac | | X. |
| 111. | " | " | Histidine, lac # | | L |

| SW | Source | Agent | Mutation | Details | Preservation |
|-------|-----------------|--------------|-------------------------------|---------|--------------|
| 112. | SW-111 | U.V. Pen | Thiamine | | |
| 113. | SW-110 | " | Purines | | L |
| 114. | S.madelia | " | Pantothenate | | L |
| 115. | " | " | Am-2 | | |
| 116. | " | " | Am-1 | | |
| 117.✓ | " | " | ↳ Pantothenate | | |
| 118.✓ | " | " | Histidine # glycine | | X |
| 119. | " | " | Pantothenate | | |
| 120. | " | " | Methionine # lysine | | L |
| 121. | " | " | Vitamins | | |
| 122. | " | " | Pantothenate | | |
| 123. | " | " | Am-2 | | |
| 124. | " | " | Pantothenate | | |
| 125. | " | " | Am-2 | | |
| 126. | " | " | Yeast extract | | |
| 127. | " | " | Hydrolized casein | | |
| 128. | " | " | Pantothenate | | |
| 129. | " | " | " | | |
| 130. | " | " | Yeast extract | | |
| 131. | " | " | Am-2 | | |
| 132. | " | " | Pantothenate | | |
| 133. | " | " | " | | |
| 134.✓ | SW-113 | " | Leucine | | X |
| 135.✓ | SW-134 | U.V. plates | Maltose - | | X |
| 136. | " | " | " | | |
| 137. | SW-118 | U.V. Pen | Am-3 | | L |
| 138. | " | " | Am-2 | | |
| 139. | SW-131 | " | Cystine # iso-leucine #valine | | L |
| 140. | " | " | " " | | |
| 141.✓ | SW-114 | " | Thiamine | | |
| 142.✓ | SW-111 | " | Leucine | | X |
| 143. | SW-139 | U.V. plates | Maltose - | | L |
| 144. | SW-141 | # | Mannitol - | | L |
| 145. | SW-137 | Purification | Smooth | | |
| 146. | SW-135 | U.V. plates | Mannitol - | | L |
| 147. | SY-33 | U.V. Pen | Purines | | L |
| 148. | " | " | HC | | X |
| 149. | " | " | Am-1 | | L |
| 150. | SY-84 | " | Vitamins | | |
| 151. | SW-140 | " | Am-1 | | |
| 152. | SW-149 | " | Am-5 | | |
| 153. | " | " | Am-3 | | |
| 154. | " | " | Yeast extract | | |
| 155. | SW-78 | SM | Sr | | L |
| 156. | " | " | " | | |
| 157. | SW-81 | Azide | Az ^R | | L |
| 158. | SW-111 | reversion | Histidine # | | L |
| 159. | E.coli | 134 | Histidine-, lac # | | L |
| 160. | SY-28 | U.V.Pen | Methionine | | L |
| 161. | " | " | Uracil | | L |
| 162.✓ | E.coli X S.coli | | prototroph | | |
| 163.✓ | SW-160 | U.V.Pen | Cystine | | X |
| 164. | " | " | " | | |
| 165. | SW-161 | " | Thiamine | | X |
| 166.✗ | " | " | " | | |

| SW | Source | Agent | Mutation | Details | Preservation |
|------|-------------|------------|-----------------------|---------------------|--------------|
| 167. | LT-8 (43) | U.V.Pen | Yeast nucleic acid | | X |
| 168. | " | " | Cystine | | L |
| 169. | " | " | Phenylalanine | | L |
| 170. | SW-161 | " | Isoleucine-valine | | L |
| 171. | " | " | Leucine | | X |
| 172. | " | " | Serine | | L |
| 173. | " | " | Proline | | L |
| 175. | LT-2 (85) | " | Proline | | |
| 176. | 272 | " | Methionine | | lost |
| 177. | " | " | Leucine | | A tube OK |
| 178. | " | " | Phenylalanine | | L " " |
| 179. | " | " | Histidine | | X |
| 180. | " | " | Cystine # methionine | | X " " |
| 181. | " | " | Cystine | | X " " |
| 182. | " | " | " | | |
| 183. | LT-7 (578) | " | Cystine or methionine | | L |
| 184. | " | " | Proline | | L |
| 185. | " | " | Cystine | | L |
| 186. | " | " | Cystine or methionine | | L |
| 187. | " | " | Am-1 | | |
| 188. | " | " | Methionine | | L |
| 189. | " | " | Cystine | | L |
| 190. | " | " | Proline | | L |
| 191. | " | " | Leucine | | L |
| 192. | " | " | Glycine | | L |
| 193. | " | " | Histidine | | L |
| 194. | " | " | ? | | L |
| 195. | SW-163 | U.V.plates | Maltose - | | L |
| 196. | " | " | " | | |
| 197. | LT-4 (125) | U.V. Pen | Cystine or methionine | | L |
| 198. | " | " | " | | L |
| 199. | " | " | Cystine | | |
| 200. | " | " | " | | L |
| 201. | " | " | Purines | | L |
| 202. | LT-1 (84) | " | Cystine | photograph 5/14/53. | L |
| 203. | " | " | " | | L |
| 204. | LT-3 (22) | " | " | | L |
| 205. | " | " | " | | L |
| 206. | LT-5 (193) | " | " | | L |
| 207. | " | " | " | | L |
| 208. | LT-6 (205) | " | " | | L |
| 209. | " | " | " | | L |
| 210. | LT-9 (116) | " | " | | L |
| 211. | " | " | " | | L |
| 212. | SW-171 | U.V.plates | Sorbitol slow | | L |
| 213. | LT-11 (72) | U.V.Pen | Uracil | | L |
| 214. | " | " | " | | L |
| 215. | LT-12 (111) | " | Phenylalanine | | L |
| 216. | " | " | Isoleucine-valine | | L |
| 217. | " | " | Leucine | | L |
| 218. | LT-10(414) | " | Cystine | | L |
| 219. | " | " | " | | L |
| 220. | LT-14 (135) | " | Phenylalanine | | L |
| 221. | " | " | " | | L |
| 222. | LT-10 | " | Lysogenic to LT-10 | | L |
| 223. | " | " | " | | |

| SW | Source | Agent | Mutation | Preservation |
|------|--------------------|----------|--------------------------|--------------|
| 224. | LT ³ 14 | U.V. Pen | Phenylalanine | L |
| 225. | " | " | Leucine | L |
| 226. | " | " | " | |
| 227. | " | " | YNA XXXXXXXX | L |
| 228. | LT-15 (297) | " | Phenylalanine | L |
| 229. | " | " | " | L |
| 230. | LT-13 (331) | " | Leucine | L |
| 231. | " | " | Purines | L |
| 232. | LT-16 (9) | " | Phenylalanine | L |
| 233. | " | " | " | |
| 234. | LT-19 (30) | " | Isoleucine-valine | L |
| 235. | LT-20 (428) | " | Phenylalanine | L |
| 236. | " | " | " | L |
| 237. | LT-21 (192) | " | " | L |
| 238. | " | " | Histidine | L |
| 239. | " | " | Isoleucine-valine | L. |
| 240. | LT-22 (409) | " | Phenylalanine # tyrosine | L. |
| 241. | " | " | Threonine | L. |
| 242. | " | " | " | |
| 243. | " | " | Pyrimidine | L |
| 244. | " | " | " | |
| 245. | " | " | Purines | L. |
| 246. | " | " | Cystine | L. |
| 247. | " | " | " | |
| 248. | " | " | Leucine | |
| 249. | " | " | " | |
| 250. | LT-3 | " | Leucine # YNA | L |
| 251. | LT-15 (297) | " | Leucine | |
| 252. | LT-5 | " | Histidine | L |
| 253. | LT-1 (306) | " | Pantothenate | |
| 254. | " | " | Cystine or methionine | L |
| 255. | " | " | Cystine | L |
| 256. | " | " | " " | |
| 257. | " | " | " " | |
| 258. | LT-19 (2) | " | Histidine | L |
| 259. | " | " | Methionine | L |
| 260. | " | " | Cystine | L. |
| 261. | LT-20 | " | Cystine | L |
| 262. | SW-238 | " | " | L |
| 263. | SW-237 | " | Phenylalanine | L |
| 264. | " | " | Cystine | L |
| 265. | " | " | Am-3 | L |
| 266. | " | " | Tryptophane | |
| 267. | " | " | Am-1 | |
| 268. | SW-246 | " | Am-2 | L |
| 269. | " | " | Proline | L |
| 270. | " | " | Methionine | L |
| 271. | " | " | " | |
| 272. | SW-261 | " | " | L |
| 273. | SW-236 | " | Histidine | L |
| 274. | " | " | Proline | L |
| 275. | " | " | Am-1 | L |
| 276. | " | " | " | |
| 277. | " | " | " | |
| 278. | " | " | " | |

| SW | Source | Agent | Mutation | Details | Preservation |
|-------|-------------------------|-------------|--------------------------|---------|--------------|
| 279. | SW-240 | U.V. Pen | Tryptophane | | L |
| 280.✓ | " | " | " | | L |
| 281. | " | " | " | | L |
| 282. | " | " | " | | L |
| 283. | SW-251 | " | ←Purines or histidine ? | | L |
| 284. | SW-258 | " | HC | | L |
| 285. | SW-260 | " | Methionine | | |
| 286. | " | " | Leucine | | |
| 287. | LT-10 | U.V. plates | LT-10/ LT-10 | | |
| 288. | " | " | " | | L |
| 289. | " | " | " | | |
| 290. | SW-231 | U.V. Pen | Isoleucine-valine | | L |
| 291. | " | " | " | | L |
| 292.✓ | SW-229 | " | Tyrosine | | L |
| 293.✓ | " | " | HC | | L |
| 294.✓ | SW-224 | " | Am-5 | | L |
| 295. | SW-225 | " | " | | L |
| 296. | " | " | Am-4 | | L |
| 297. | SW-272 X SW-279 | Cross | Prototroph | | |
| 298. | " | " | " | | |
| 299. | SW-230 | U.V. Pen. | Isoleucine-valine | | L |
| 300. | SW-184 | " | Cystine | | L |
| 301.✓ | " | " | Vitamins | | L |
| 302.✓ | SW-168 | " | Phenylalanine # tyrosine | | L |
| 303.✓ | SW-217 | " | Yeast extract | | ↙ |
| 304. | SW-272 | U.V. plates | Maltose - | | L |
| 305. | " | " | " | | |
| 306. | " | " | " | | L |
| 307. | SW-279 | " | Galactose - | | L |
| 308. | " | " | " | | L |
| 309. | " | " | " | | |
| 310. | " | " | " | | |
| 311.✓ | " | " | " | | |
| 312.✓ | E.coli-134 Purification | Adenine | | | ↙ |
| 313. | LT-20 | U.V.Pen | Am-3 triple | | L |
| 314. | LT-16 | " | " | | L |
| 315. | " | " | " | | |
| 316. | " | " | " | | |
| 317. | LT-11 | " | Yeast extract | | L |
| 318. | " | " | " | | |
| 319. | SW-241 | " | Methionine | | L |
| 320. | " | " | " | | |
| 321. | " | " | Am-1 | | |
| 322. | SW-243 | " | Leucine | | L |
| 323. | " | " | Am-1 | | |
| 324. | SW-250 | " | ? | | L |
| 325. | SW-204 | " | YMA | | L |
| 326. | SW-178 | " | Yeast extract | | L |
| 327. | SW-306 | Azide | Az R | | L |
| 328. | " | " | " | | |
| 329. | " | " | " | | |
| 330. | SW-307 | SM | S ^r | | L |
| 331. | " | " | " | | |
| 332. | " | # | " | | |

| SW | Source | Agent | Mutation | Details | Preservation |
|------|---------------|-------------|-------------------|---------|--------------|
| 333. | SW-306 | SM | S ^r | | L |
| 334. | " | " | " | | L |
| 335. | SW-307 | Azide | Az ^r | | L |
| 336. | " | " | " | | L |
| 337. | SW-191 | U.V. Pen | Yeast extract | | L |
| 338. | " | " | " | | L |
| 339. | " | " | Purines | | L |
| 340. | SW-253 | " | Isoleucine-valine | met | L- |
| 341. | # | " | YNA | | L |
| 342. | SW-254 | " | Isoleucine-valine | | L |
| 343. | " | " | YNA | | L |
| 344. | SW-197 | " | Histidine | | L |
| 345. | SW-199 | " | Vitamins | | L |
| 346. | " | " | Leucine | | L |
| 347. | SW-306 | U.V. plates | Mannitol | - | L |
| 348. | " | " | " | | L |
| 349. | SW-327 | " | " | | L |
| 350. | " | " | " | | L |
| 351. | SW-307 | " | Xylose | - | L |
| 352. | " | " | " | | L |
| 353. | SW-330 | " | " | | L |
| 354. | " | " | " | | L |
| 355. | SW-272 | " | Galactose | - | L |
| 356. | " | " | " | | L |
| 357. | SW-279 | " | Maltose | - | L |
| 358. | " | " | " | | L |
| 359. | SW-341 | " | Galactose | - | L |
| 360. | " | " | " | | L |
| 361. | SW-342 | " | Maltose | - | L |
| 362. | " | " | " | | L |
| 363. | SW-286 | " | " | | L |
| 364. | " | " | " | | L |
| 365. | SW-284 | " | Galactose | - | L |
| 366. | " | " | " | | L |
| 367. | SW-306. | U.V. Pen | Isoleucine-valine | | L |
| 368. | " | " | HC | | L |
| 369. | " | " | Yeast extract | | L |
| 370. | " | " | Tryptophane | | L |
| 371. | " | " | HC | | L |
| 372. | " | " | Am-2 | | L |
| 373. | " | " | Tryptophane | | L |
| 374. | S.senftenberg | " | Leucine | | L |
| 375. | S.tm cop. | " | Am-2 | | L |
| 376. | " | " | Am-1 | | L |
| 377. | S. bonar. | " | Am-4 | | L |
| 378. | S.para B | " | Am-4 | | L |
| 379. | " | " | Vitamins | | L |
| 380. | S.newport | " | " | | L |
| 381. | SW-169 | " | Cystine | | L |
| 382. | " | " | " | | L |
| 383. | SW-240 | " | YNA | | L |
| 384. | SW-351 | " | Histidine | | L |
| 385. | " | " | " | | L |
| 386. | SW-299 | U.V. plates | Galactose | - | L |
| 387. | " | " | " | | L |

| SW | Source | Agent | Mutation | Details | Preservation |
|-------|--------------|-----------|----------------------------|---------|--------------|
| 388. | SW-213 | U.V.Pen | Lysine | | L |
| 389. | SW-217 | " | Am-3 triple | | L |
| 390. | " | " | " | | |
| 391.✓ | SW-215 | " | Serine or glycine | | L |
| 392. | SW-252 | " | Lysine | | L |
| 393. | " | " | " | | |
| 394. | SW-179 | " | HC | | L |
| 395.✓ | LT-11 | " | Uracil | | L |
| 396. | " | " | " | | |
| 397. | LT-9 | " | Cystine #isoleucine-valine | | L |
| 398. | " | " | Cystine | | |
| 399. | " | " | " | | |
| 400.✓ | LT-10 | " | Purines | | X |
| 401.✓ | " | " | " | | |
| 402.✓ | LT-16 | " | Cystine | | L |
| 403. | " | " | Proline | | L |
| 404. | " | " | Phenylalanine#tyrosine | | L |
| 405. | " | " | " | " | |
| 406. | SW-167 | " | HC | | L |
| 407. | " | " | " | | |
| 408. | ET-130 (306) | " | Guanine | | L |
| 409. | SW-230 | " | Purine | | L |
| 410. | LT-1 (306) | " | Cystine | | L |
| 411.✓ | SW-410 | " | Methionine | | X |
| 412.✓ | " | " | HC | | X |
| 413. | " | " | Threonine | | |
| 414.✓ | SW-172 | " | Histidine | | L |
| 415.✓ | " | " | " | | L |
| 416. | SW-175 | " | HC | | |
| 417. | " | " | Histidine | | L |
| 418.✓ | SW-168 | " | Tyrosine | | L |
| 419. | " | " | " | | |
| 420.✓ | SW-406 | " | Am-1 | | L |
| 421. | " | " | " | | |
| 422.✓ | SW-408 | " | " | | L |
| 423. | " | " | " | | |
| 424.✓ | SW-402 | " | Purines | | L |
| 425. | SW-228 | " | " | | X |
| 426.✓ | SW-216 | " | Guanine | | L |
| 427. | LT-18 (100) | " | Leucine | | L |
| 428.✓ | " | " | Cystine | | L |
| 429. | " | " | " | | |
| 430.✓ | SW-427 | " | Proline | | L |
| 431.✓ | " | " | " | | L |
| 432. | SW-428 | " | Am-2 | | X |
| 433.✓ | SW-219 | " | YMA | | X |
| 434. | SW-252 | " | Methionine # lysine | | |
| 435.✓ | SW-351 | SM (500u) | S ^r | | L |
| 436.✓ | " | " | " | | L |
| 437.✓ | SW-397 | " | " | | L |
| 438. | " | " | " | | |

| SW | Source | Agent | Mutation | Details | Preservation |
|------|--------|-------------------|-----------------------------|---------|--------------|
| 439. | SW-414 | Mixed with SW-435 | Lysogenic | | X |
| 440. | " | " | " | | |
| 441. | " | " | " | | L |
| 442. | " | " | " | | L |
| 443. | SW-435 | U.V. plates | Maltose - | | L |
| 444. | " | " | " | | X |
| 445. | " | " | " | | |
| 446. | SW-240 | U.V. Pen | Cystine | | L |
| 447. | " | " | " | | |
| 448. | " | " | " | | |
| 449. | " | " | Methionine | | L |
| 450. | " | " | " | | |
| 451. | " | " | " | | |
| 452. | " | " | Arginine | | L |
| 453. | " | " | " | | |
| 454. | " | " | " | | |
| 455. | " | " | Isoleucine-valine | | L |
| 456. | " | " | Leucine | | L |
| 457. | " | " | " | | |
| 458. | " | " | Histidine | | L |
| 459. | " | " | Threonine | | X |
| 460. | " | " | Proline | | L |
| 461. | " | " | " | | |
| 462. | " | " | Histidine | | L |
| 463. | " | " | " | | |
| 464. | " | " | " | | |
| 465. | " | " | YNA | | X |
| 466. | " | " | Purines | | L |
| 467. | " | " | HC # YNA | | L |
| 468. | " | " | Cystine # Isoleucine-valine | | L |
| 469. | LT-11 | " | Aspartic | | L |
| 470. | SW-206 | " | Purine | | L |
| 471. | SW-204 | " | Yeast extract | | |
| 472. | " | " | ? | | L |
| 473. | SW-250 | " | Am-4 | | |
| 474. | SW-250 | " | Proline | | L |
| 475. | SW-435 | " | Mannitol - | | |
| 476. | " | " | " (maltose-) | | L |
| 477. | " | " | " | | L |
| 478. | " | " | " | | |
| 479. | SW-476 | Reversion | Maltose # mannitol- | | L |
| 480. | " | " | " | | |
| 481. | SW-184 | U.V. plates | Galactose - | | L |
| 482. | " | " | " | | L |
| 483. | " | " | " | | L |
| 484. | " | " | " | | L |
| 485. | LT-7 | " | " | | L |
| 486. | " | " | " | | L |
| 487. | SW-188 | " | " | | L |
| 493. | " | " | " | | L |
| 494. | " | " | " | | L |
| 495. | " | " | " | | L |

| SW | Source | Agent | Mutation | Details | Preservation |
|------|-------------------------------|----------------------|----------------|--------------------------------|--------------|
| 503. | SW-191 | U.V. plates | Galactose - | | L |
| 504. | " | " | " | | L |
| 505. | " | " | " | | L |
| 506. | " | " | " | | L |
| 513. | LT-7 | SM | S ^R | | L |
| 514. | " | " | " | | L |
| 515. | SW-503 | " | " | | |
| 516. | D.T.B. | Mouse colony | S.typhimurium | | |
| 517. | " | " | " | | |
| 518. | SY-79 | LT-2FA | X 1 | | |
| 519. | " | " | i | | |
| 520. | LT-7FA | | ii | | |
| 521. | " | " | " | | |
| 522. | " | " | " | | |
| 523. | " | " | " | | |
| 524. | " | " | " | | |
| 525. | " | " | " | | |
| 526. | " | " | " | | |
| 527. | " | " | " | | |
| 528. | " | " | " | | |
| 529. | " | " | " | | |
| 530. | " | SW-8FA | j | | |
| 531. | " | " | ii | | |
| 532. | " | LT-2FA | Rhamnose # X | | L |
| 533. | S. para B #3 | filed with serotypes | = SW703 | | |
| 534. | SW-533 | Boulg phage C | non-motile | "para B" not detailed in notes | |
| 535. | S stanley # 15 | as SW-533 | see SW715 | probably SW546 | |
| 536. | SW-535 | Boulg phage C | non-motile | | |
| 537. | S. typhi H901 | Boulgakoff | | | |
| 538. | SW-537 | Boulg phage C | non-motile | | |
| 539. | S. typhi #383 | Boulg rough | | | |
| 540. | S. typhi | Boulg rough | | | |
| 541. | S. typhimurium v. copenhagen | "O" | F.K. 223 | - O- 1810 | |
| 542. | S. typhi 0901 | F.K. | 58 | | |
| 543. | S. para B "O" | F.K. 248 | 019 | | |
| 544. | S. typhimurium "O" | F.K. 13 | FK 3173 | | |
| 545. | " | 4937/50 | Edwards | | |
| 546. | S. para B phase II N-25- | " | 157 | su 942 | |
| 547. | S. typhimurium phase II | 191 | " | | |
| 548. | Gropp B. 2294/49 | "Ø" | " | (typhimur) | |
| 549. | " 117/51 | " | " | (typhimur) | |
| 550. | Group C 1 3012/49 | " | " | | |
| 551. | Group C 2 4608/50 | " | " | | |
| 552. | Group D 1524/51 | " | " | rough | |
| 553. | " 1520/51 | " | " | sublin | |
| 554. | Group E 1 3226/50 | " | " | | |
| 555. | S. typhi T2 Almon and Stovall | " | | | |
| 556. | S. typhi Ø901 Felix | " | | | |
| 557. | S. typhi 2V | " | | | |
| 558. | S. gallinarum 30953 | " | | | |

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142142
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| SW | Ref / | Source | | | |
|----------|------------|-------------------------------------|--------------------------|--------------------|-----------|
| 551 ✓✓ | Edwards | 4608-50 | C-2 non-motile | | |
| 552 ✓✓ | " | 1524-51 | D nm | rough | |
| ✓ 553 ✓✓ | " | 1520-51 | D nm | | S. dublin |
| 554 | " | 3226-50 | E-1 nm | | |
| 555 ✓✓ | " | S. typhi T2 Almon&Stovall | | XII ₂ - | |
| 556 ✓✓ | " | S. typhi O-901 | | | |
| 557 ✓✓ | " | S. typhi 2 (Felix Vi:El) | | | |
| 558 ✓✓ | " | S. gallinarum 30953 (stable smooth) | | | |
| 559 | | | | | |
| 560 | | | | | |
| 561 | | | | | |
| 562 | | | | | |
| ✓ 563 ✓✓ | | LT-2 —x SW553 | | gp:- | |
| 564 | | | | | |
| ✓ 565 ✓✓ | | SY-79(x- 714?) | | j? | |
| ✓ 566 ✓✓ | " | | | j? | |
| ✓ 567 ✓✓ | | SW548 x- LT-2 | | i:1,2 | |
| ✓ 568 ✓✓ | | SW549 x- LT-2 | | i:1,2 | |
| ✓ 569 ✓✓ | | SW537 x- LT-2 | | IX XII i:- | |
| 570 | | " | | " | |
| 571 | | | | | |
| 572 | | | | | |
| ✓ 573 ✓✓ | Leifson | R20 1/2 | S. typhimurium nm | (O) | |
| ✓ 574 ✓✓ | " | R20 1/4 | " | | |
| ✓ 575 ✓✓ | " | R7 3/5 | " | | |
| ✓ 576 ✓✓ | " | R7 2/4 | " | | |
| ✓ 577 ✓✓ | " | FM 57.66 | " | normal | |
| ✓ 578 ✓✓ | " | FM 61.63 | " | 90% curly | |
| ✓ 579 ✓✓ | " | FM 60.62 | " | paralyzed | |
| ✓ 580 ✓✓ | FM | FM 59.64 | " | normal | |
| 581 | | | | | |
| 582 | | | | | |
| 583 | | | | | |
| ✓ 584 ✓✓ | 541 | SW541 | EMB Gal; UV | Gal- | |
| 585 | | | | | |
| ✓ 586 ✓✓ | Leifson | R12 | S. typhimurium paralyzed | | |
| ✓ 587 ✓✓ | " | RL4 1/2 | " | " | |
| ✓ 588 ✓✓ | BADS 32 | SW534 | Selection on mot. agar | —:1,2 | |
| 589 | | | | | |
| 590 | | | | | |
| 591 | | | | | |
| 592 | | | | | |
| 593 | | | | | |
| ✓ 594 ✓✓ | | | | | |
| ✓ 595 ✓✓ | Desranleau | S. typhi Vi type | A | | |
| ✓ 596 ✓✓ | " | " | A ₁ | | |
| ✓ 597 ✓✓ | " | | C | | |
| ✓ 598 ✓✓ | " | | C ₂ | | |
| ✓ 599 ✓✓ | " | | E ₄ | | |
| 600 ✓✓ | " | | 0-901 | | |

| | | | |
|-------|---|------------------------|---------------------------|
| 601 | | | |
| 602 | | | |
| 603 | | | |
| 604 | | | |
| 605 | | | |
| 606 | | | |
| 607 | | | |
| 608 | | | |
| ✓ 609 | ✓ 543 sc | mot. ag. selection | b:- |
| 610 | | | |
| 611 | | | |
| 612 | | | |
| 613 | | | |
| 614 | | | |
| 615 | | | |
| 616 | | | |
| ✓ 617 | | | |
| ✓ 618 | ✓ SW543sc x— LT2 | | b:- |
| ✓ 619 | ✓ SW592 | G1 phage | O mutant (from slow rev.) |
| ✓ 620 | ✓ SW593 | Chi phage | O mutant |
| ✓ 621 | ✓ SW594 | " | " |
| ✓ 622 | ✓ SW588 | " | " |
| ✓ 623 | ✓ SW543sc x— LT2 | | i:- |
| ✓ 624 | | " | i:- |
| ✓ 625 | | " | i:- |
| ✓ 626 | | " | i:- |
| ✓ 627 | | " | i:- |
| ✓ 628 | | " | i:- |
| ✓ 629 | ✓ Seligmann 1908 "x-phase" [Edwards says sluggish i:1,2] S. typhimurium | | |
| ✓ 630 | " | S, newington 2922 Lac+ | |
| 631 | | | |
| 632 | | | |
| 633 | ✓ SW543sc x— SW588 | | 1,2:- |
| —650 | | | |

| | | | | |
|------|----------------------------|---|------------------------------|-----|
| 651 | | | | |
| 652 | | | | |
| ✓653 | SW541 x- | 593 [544 2-step rev.] 1,2 | slow | 1,2 |
| ✓654 | SW653 | sel. mot. agar | fast | np |
| ✓655 | SW580 | " | slow | |
| ✓656 | SW586 | " | slow | |
| ✓657 | WK Thomson S. typhi Vi: El | (tryptophane) | cystine | |
| 658 | " | 2-1-4 | v " | |
| 659 | " | S59 | " | |
| 660 | " | 47-87B | " | |
| 661 | " | 38-29B | " | |
| ✓662 | ✓ 970A2 | SW543sc x- 553 | IV V XII gp:- | |
| ✓663 | | | eh:- | |
| ✓664 | ✓ 970A8 | " x- S. sandiego SW 718 | Xyl- | |
| ✓665 | SW541 | EMB Xyl; UV | Gal- | |
| ✓666 | | EMB Gal; UV | IX XII gp:- | |
| ✓667 | 971C2 | S. typhi H901 x- SW553 | eh:- | |
| ✓668 | 971C8 | " x- SW718 | " | |
| ✓669 | " | " | " b:- | |
| ✓670 | 971C7 | " x- S. abbny SW803 | IV V XII i:- | |
| ✓671 | 974-1 | SW666x- LT7 (PLT7) | IV V XII b:1,2 | |
| ✓672 | 97LB7 | SW435 x- abony (R) SW803 | b:- | |
| ✓673 | ✓ 966F2 | SW543 spont. on mot ag. | b:- | |
| ✓674 | ✓ 971B2 | SW435 x- 553 | IV V XII gp:[gp]1,2 | |
| ✓675 | ✓ 971D3 | SW666 [x- S. altendorf SW825] in b serum | z33:- | |
| ✓676 | | SW673 / b serum | z33:- | |
| ✓677 | 971D7B | SW666 x- abony, SW803 | b:- (wk) | |
| ✓678 | 971D7B1 | SW677 / b serum | z33:- | |
| ✓679 | 971D6 | SW666 x- S. enteritidis SW 764 | IV V XII gm:- | |
| ✓680 | 971D22 | SW666 x- LT2 | i:- | |
| ✓681 | 971D22 | " " | b:- | |
| ✓682 | 974D3 | SW673x- 623 | i:- | |
| ✓683 | 971D5 | SW666 x- S. heidelberg SW 716 | r:- | |
| ✓684 | 973BLA | SW666 x- LT2 | Gal+/- unstable transduction | |
| ✓685 | 974C2 | SW618 x- SW623 | i:- | |
| ✓686 | 974C3 | SW618 x- LT2 | i:- | 22+ |
| ✓687 | 971C5 | H901 x- S. heidelberg | IX XII r:- | |
| ✓688 | | SW912 (Boyd 1504) | rough variant | |
| 689 | A. J. Weil Shigella | 66-1-410 | (inducer) | |
| 690 | " | 79-30-2 | II | |
| 691 | " | 66-1-1268 | V | |
| 692 | " | 63-143-D19 | II | |
| 693 | " | 63-143-V | XIII | |
| ✓694 | Kauffmann & Sömid 339 | S. paratyphi A, durazzo, XII ₂ | I (no I) | |
| ✓695 | 974C6 | SW609 x- 623 | i:- | |
| ✓696 | 974D5b | SW623 x- x SW666 | b:- | |
| ✓697 | 1 | " " | i:- | |
| ✓698 | 979B | LT2 x- abony enx | enx:i | 22+ |
| ✓699 | 979A | " x- abony b | b:1,2 | 22+ |
| ✓700 | ✓ 979 b | SW666 x- SW588 | b:- (no I) | |

✓701-900. NOTE: These numbers correspond to Edwards Ky. Bull. 54, Nos. 1- (164)-200,
✓704✓ respectively.

| SW | Ref | | | | | |
|------|---------------------------|---|---------------------------------------|---------------------------|---------------|-----|
| 901 | | SW666 x-- SW588 | | IV V XIII, 2:-- | | |
| 902 | 971e3 | S. typhi H901 x-- S. altendorf SW825 | | IX XII c:-- | | |
| 9034 | 974DD5b | SW666 x-- SW623 | | i:-- | | 22s |
| 9045 | W. Hirsch 2859 | | S. paratyphi B | | | |
| 9056 | " 1415(1) | | paralysed | b:1,2 | | |
| 9057 | " 1415(2) | | " | b: 1,2 | | |
| 9078 | " 2859-0 | | non-motile | | | |
| 9089 | SW666 rough | 22r | stable susp from aged broth | "VR" | | |
| 910 | " " | " | autoaggl. | R | | |
| 911 | " " | " | " | VR | | |
| 912 | Boyd TM 1404 | | TM indicator | | | |
| 913 | TM 1411 | | TM indicator | | | |
| 914 | 068 | | lysogenic... | | | |
| 915 | 29929 | | | | | |
| 916 | 822 | | | | | |
| 917 | 026 | | | | | |
| 918 | 1404/B2 | | | | | |
| 919 | 073 | | | | | |
| 920 | 020 | | | | | |
| 921 | 080 | | | | | |
| 922 | 1404/A1 | | | | | |
| 923 | 041 (indicator for SW912) | | | | | |
| 924 | 979G1 | S. abony x-- TM2 | | IV V XII i:enx | | 22r |
| 925 | 989A1 | S. sendai x-- S. abony | | IX XII a:enx | | 22s |
| 926 | 991H3 | SW546 x-- S. abony(2) | | IV V XII 1,2:enx | | 22s |
| 927 | 986 E1 | TM2 + P22 lysogenic | | | | |
| 928 | E2 | SW666 + P22B | " | | | |
| 929 | 986 D2 | | "Lp.v" | | | |
| 930 | ✓ 989 E1 | S. typhi H901 x-- SW588 | | IX XII 1,2:-- | | |
| 931 | 97304(19) | SW618 x-- TM2 | | i:-- (2-step) | | 22s |
| 932 | ✓ 979K2 | S. abony x-- TM2 | | IV V XII b:1,2 | | 22s |
| 933 | 991L1 | SW926 x-- TM2 (1) | | i:enx | | 22s |
| 934 | 991F1 | TM2 (1) --x SW546 | | IV V XII i:-- | | 22s |
| 935 | 974e3b1 | TM2 --x SW618 | | i:-- | | 22s |
| 936 | " | " | | i:-- | | 22s |
| 937 | 991H1 | S. abony --x SW546 | | b:-- | | |
| 938 | 992A7 | SW546 --x abony | | 1,2:enx | | 22s |
| 939 | 991G1 | SW618 --x SW546 | | b:-- | | 22r |
| 940 | 971D39 | S. sendai (SW771) --x SW666 | | a:-- | | 22s |
| 941 | 979J- | TM2 --x abony | | i:enx | | 22s |
| 942 | Edwards N25 | S. paratyphi B, java, parent of SW857 (546) | | | | |
| 943 | 979L1 | TM2 --x SW932 (abony x--TM2) | | i:12 | | 22+ |
| 944 | 999-16 | SW 609 + P22B (FA21) | Gal + H ^b Fla ⁺ | lysogenic | I IV XII b: - | |
| 945 | 1000-A4 | SW588 --x SW942 | | 1,2:-- | | |
| 946 | Dienes | S. typhimurium "3" | | | | |
| 947 | " | Proteus 52 | | | | |
| 948 | Stocker SL15 = Sal | 25/52 | S. paratyphi A O form | | I X 2 | |
| 949 | " SL14 | 26/52 | " | | | |
| 950 | ✓ -1-- | SW414 | UV, EMB | TM2 Gal- M- H- f.v.h.t. I | | |

| SW | Ref. | Source | Agency | Remarks |
|--------|----------------------|---|---|--------------------------------------|
| ✓ 951 | ✓ 1010 | SW414 | UV EMB | Mal- (slow) |
| ✓ 952 | ✓ 1010 | SW950 | " | Gal- Mal- (sl) |
| ✓ 953 | | | | |
| ✓ 954 | ✓ 101601 | TM2 | Felix O-phage | O1-immune |
| ✓ 955 | | SW950 | P22 | lysogenic |
| ✓ 956 | ✓ | SW948 | Felix O phage | O1-immune |
| ✓ 957 | Felix | S. typhi | O-901 #1 | |
| ✓ 958 | 1020 D1 | SW961 | selected in immunized paraA 15 serum | O:-- |
| ✓ 959 | 1024 Edwards | "Hines VAH" | IV V XII () :1,2 | |
| ✓ 960 | 1024 | Edwards 5594-51 | " 1,2 (phagetype paraB) | :1,10 |
| ✓ 961 | 1020A | Edwards S. cholerae suis-kunzendorf | 6145/52 (c):1,5 | |
| ✓ 962 | 1024 | " Nonmotile | 1568-51 | --(1:12) |
| ✓ 963 | | | 4936-50 | " |
| ✓ 964 | | | 4937-50 | " |
| ✓ 965 | | | ? Zelly-50 | i:-- |
| ✓ 966 | | | 3010-49 | b:12 |
| ✓ 967 | | D Nonmotile | 1521-51 (Guatemala: cf SW553) | gp |
| ✓ 968 | " | | 1522 | gp |
| ✓ 969 | " | | 1525 | gp |
| ✓ 970 | | | 3821-51 | (gm) |
| ✓ 971 | | | 5465-52 | gm |
| ✓ 972 | | | 1553-52 (Kauffmann) | (gm) |
| ✓ 973 | 1023M | SW857 --x S. miami | | IX XII 1,2:1,5 |
| ✓ 974 | 1023J | S. zega --x SW891 | | d:1,2 |
| ✓ 975 | 1023D | S. sendai --x SW953 | | IV V XII a:enx |
| ✓ 976 | 1023K | SW 959 /1,2 | | l.... |
| ✓ 977 | 1023K | S. zega --x SW959 | | |
| ✓ 978 | 1023L | S. zega --x SW960 | | no reaction |
| ✓ 979 | - Edwards | 732-49 S. javiana | | d:12 |
| ✓ 980 | 1028N1 | SW979 x-- abony(2) | | IX XII Lz28:1,5 |
| ✓ 981 | 979K16 | (--x)abony /b:enx | | lz28:enx ✓ 22r |
| ✓ 982 | SW972 | --x SW666 | | IV V XII z33:enx ✓ 22r |
| ✓ 983 | SW970 | --x SW666 | | gm:- |
| ✓ 984 | SW979 | --x SW666 | | gm:- |
| ✓ 985 | SW726 (abortus-equi) | --x SW666 | 1026F | lz28:-- ✓ |
| ✓ 986 | 1026G2 | SW726 --x SW950 | | a:-- ✓ |
| ✓ 987 | 1031E | S. zega --x SW666 | | IV V XII (enx) → enx (sic) ✓ 22r |
| ✓ 988 | 99102 | SW546 /1,2 | | IV V XII d:-- |
| ✓ 989 | Stocker | SL15 TM O-form Fla7- | | inagg. IV V XII induced phase 1,10 ? |
| ✓ 990 | 1028D1 | TM2 --x SW980 | | IX XII i:enx ✓ 22r |
| ✓ 991 | 102701 | TM2 --x SW953 | | IX XII i:-- |
| ✓ 992 | 1031 Ko | SW959 / 1,2. | | (bz33...) |
| ✓ 993 | 102702 | TM2--x SW967 | | gp:-- |
| ✓ 994 | 1026-0 | SW726 (abortus-equi) --x SW960 | | a:12 |
| ✓ 995 | 1031K3 | S. abony(2) --x SW959 | | IV V XII b:--(z33) ✓ 22r |
| ✓ 996 | 1028F2 | SW980 x-- SW703(1) (paratyphi B) | | |
| ✓ 997 | 1031 B | Edwards 3550-51 S. paratyphi B monophasic | | |
| ✓ 998 | 1026T | S. sendai(2) --x SW726 | | b:--(z33) a:1,5 |
| ✓ 999 | 1023S | S. zega --x SW959 | | --:z6 (:1,5, z6,...) a:1,5 |
| ✓ 1000 | 1026V | SW 959 --x SW726 | | --:1,2 |

no such v3 (15)

DATE:

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------|-----------------|---------------|-----------------------------|--------------------|-----------|---------------------|----------------------------|-----------------|-----------------|
| ✓ SW | Ref | Source | Agency | | | | Remarks | | |
| ✓ 1001 | 1026D | SW 726 | x--SW703 ⁽¹⁾ | | | | 1,2:-- | | |
| ✓ 1002 | 1026D | Sw726 | x--(FA18 LT2 ²) | | | | a:enx diphagie (rough | | |
| ✓ 1003 | 1026E | SW726 | x-- (FA22 LT22) | | | | IV, V, XII! a:enx diphagie | | |
| ✓ 1004 | Edwards | S. Miami | 6500-51 | | | | IX XII a:1,5 | | |
| ✓ 1005 | 1025 | SW803 (abony) | b:enx 5 days plate | | IV, V, II | | | | |
| ✓ 1006 | 1036A | Edwards | 7-119 para b non sp monoph | - almost nonmotile | | | z33:enx | | |
| ✓ 1007 | 1036B | N97 " | S. paratyphi b java | | | | | | |
| ✓ 1008 | 1036C | N97 (3) | S. paratyphi b java | | non sp | | | | |
| ✓ 1009 | 1036B1 | SW1007 | b serum | | | | 1,2:bz33 | | |
| ✓ 1010 | 1023G | | S abony (x--) | | | IV, V, XII | cf SW981 | z33:enx/ | |
| ✓ 1011 | | SW1004 | x--FA10 b | | | IX, XII | b:1,5 | | 22 ^s |
| ✓ 1012 | 1023G | " | x--FA3 e | | | IX, XII | c:1,5 | | |
| ✓ 1013 | 1023G | " | x--FA54 d | | | " | d:1,5 | | |
| ✓ 1014 | " | " | x--FA8 eh | | | " | eh:1,5 | | |
| ✓ 1015 | " | " | x--FA22 i | | | " | i:1,5 | | |
| ✓ 1016 | " | " | x--FA60 gp | | | " | gp:1, ^s | | |
| ✓ 1017 | " | " | x--FA50 1z28 | | | " | 1z28:1,5 | | |
| ✓ 1018 | " | " | x--FA5 r | | | " | r:1,5 | | |
| ✓ 1019 | " | " | x--FA18 1,2 | | | " | a:1,2 | | |
| ✓ 1020 | " | " | x--FA71 1,2 (SW1009) | | | " | 1,2:15 | | |
| ✓ 1021 | " | " | x--FA3B 1,7 | | | " | l:a | | |
| ✓ 1022 | " | " | x--FA15c enx | | | " | enx:a | | |
| ✓ 1023 | " | " | x--FA54 z6 | | | " | a:1,5 | | |
| ✓ 1024 | -- | S. abony | x--S. zega | | | | d:enx | | |
| ✓ 1025 | -- | TM SW950 | x-- SW1010 | | | IV, V, XII | z33:1,2 | | |
| ✓ 1026 | 1036EI | SW1009 | x--FA12 | | | IV, V, XII | i:b sic. | | |
| ✓ 1027 | 1036G1b | TM2 | x--(SW1009b; FA74) | | | | b:1,2 | | |
| ✓ 1028 | 1038B | SW1004 | x-- SW1007 (FA73) | | | | b:1,5 | | |
| ✓ 1029 | | SW1004 | x--SW726 | | | | --:enx | | |
| ✓ 1030 | 1038E1 | SW1007 | x--FA22 | | | | i:b | | 22 ^s |
| ✓ 1031 | 1038F2 | SW1026I | X--FA40 (Sendai ph 1) | | | IV, V, XII | a:b | | |
| ✓ 1032 | Edwards | 2479-50 | S. pullorum Mal+ | XII2 | | | | | |
| ✓ 1033 | " | | S abortus-equii | | | | enx: | | |
| ✓ 1034 | " | | S abortus-equii | | | | a: | | |
| ✓ 1035 | " | | " | | | | NH2 a: | | |
| ✓ 1036 | 1025 | SW703 | b:1,2 | | | IV, V, XII | z33:1,2 | | |
| ✓ 1037 | Zinder | SR-8 SW558 | | | | | | | |
| ✓ 1038 | 1044C5 | SW1004 | #-- S abony | | | IX, XII | b:1,5 | | |
| ✓ 1039 | | S typhi H901 | x-- SW666 | | | IX, XII | b:-- | | |
| ✓ 1040 | " | " | x-- S sendai | | | " | a:-- | | |
| ✓ 1041 | 1043A1 | SW1040 | X-- S gallinarum | SW774 | | | gm | | |
| ✓ 1042 | 1042 | | S abortus equi | | 41-D-1 | | | | |
| ✓ 1043 | Edwards | N97b | | | | | b:1,2 | | |
| ✓ 1044 | 1044-05-7 | SW1004 | x--S abony | | | | b:1,5 | | PLT10s |
| ✓ 1045 | 1033-4 | SW967 | x--SW666 | | | | gm Flat+ | 22 ^s | |
| ✓ 1046 | Stocker: | SL46 | | | | TM binns | NCTC 73 | | |
| ✓ 1047 | 104551 | SW694 | x--SW944 | | | I, II | b:-- | | |
| ✓ 1048 | 1045 (1033G2-2) | SW948 | x--Track, SW | | | No XII ₂ | no I | | |
| ✓ 1049 | 1046cl.2 | SW1043 | x--TM | | | | i:1,2 | | |
| ✓ 1050 | 1023G. | SW1022 | x-- S altendorf | | | IX, XII | c:enx | Lp | |

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------|----------|--------------------|----------------------------|---------------------------|----------|------------|---|-----------------|-----------------|
| | SW | H&F | Source | Agency | | | | | |
| ✓1051 | 1046K1 | 1042B2.2(N971022) | x-- S abony | | | | | 1,2:enx | Lp ^r |
| ✓1052 | 1049A | SW1031 | x--S altendorf | a:b | | IV, V, XII | | c:b | |
| ✓1053 | 1049B2 | SW1031 | x-- " | a:b | | " | | c:a | |
| ✓1054 | 1051G1 | SW1053 | x-- Sabony (enx) | a:c | | " | | a:enx | |
| ✓1055 | 1051H1 | SW1053 | x-- S abony (enx) | a:c | | " | | c:enx | bovis |
| ✓1056 | 1052M | Moran (Ky) | "S abortus equi" | 1966 | | | | enx:b abortus/ | |
| ✓1057 | 1051R2 | TM | 24-SW1055 | | | | IV, V, XII | c:l,2 | |
| ✓1058 | 1052B | Edwards | Peru 818 | | | | | | |
| ✓1059 | 1050 | SW1022 | x-- Type 1 S abortus equi | | | D | | b:enx | |
| ✓1060 | Edwards | 302-50 | S cholerae-suis kunzendorf | (Susc Beccles, Tauton, p) | | | | | |
| ✓1061 | # | TM2 | 14mophasic derivative. | | | stable ph2 | 53-2034 CDC | | |
| ✓1062 | Spicer | 14/45 | | | | | S paratyphi C NM | 3/10/52 | |
| ✓1063 | Pre 3011 | 49 | | | | | C1 NM | | |
| ✓1064 | | 2963-51 | | | | | C1 NM | | |
| ✓1065 | | 2692-49 | | | | | C1 NM | | |
| ✓1066 | | 5993-50 | | | | | C1 NM | | |
| ✓1067 | | 2806-51 | | | | | C2 NM | | |
| ✓1068 | | 4608-50 | | | | | C2 NM | | |
| ✓1069 | 1069 | 4609-50 | | | | | C2 NM | | |
| ✓1070 | | 232-52 | | | | | I, XII, XXIII | | |
| ✓1071 | | 4519-52 | | | | | E1 | | |
| ✓1072 | | 2715-49 | | | | | B (I, IV, V, XII) | i:1,2 see 107 1 | |
| ✓1073 | 1071A3-1 | SW666 | x-- S typhi A | | | | d: - | | |
| ✓1074 | NCTC 73 | TM 24 "binns" = 26 | McNee, France 1917 | | | | =SW1046 | | |
| ✓1075 | Stecker | 5710 | " | | | | IV, V | | |
| ✓1076 | " | 5711 | " | | | | I, IV, V | | |
| ✓1077 | " | 5712 | " | | | | IV | | |
| ✓1078 | " | 5713 | " | | | | I, IV | | |
| ✓1079 | " | 5715 | " | | | | IV V | | |
| ✓1080 | " | 4787 | " "binns" | | | | | | |
| ✓1081 | " | 6817 | " | | | | IV, V, XII | mixes | |
| ✓1082 | " | SL 100 | T 35/52 | | | | Le Minor and Grabar S typhi O | | |
| ✓1083 | " | 101 | 232-52 T1/53 | | | | Roschka | " | |
| ✓1084 | " | 102 | T39/52 | | | | Moser | " | |
| ✓1085 | " | 103 | A205BL | S para A | LeMinor | | H | " | |
| ✓1086 | " | 104 | A205IR | S para A | LeMinor | | paral | | |
| ✓1087 | " | 105 | A205IM | " | " | | O | | |
| ✓1088 | " | 106 | A205J | " | " | | weak | | |
| ✓1089 | " | SL 43 | SW573 | x--SW548 | | | H, paralysed | | |
| ✓1090 | " | J. T. Sal | 1231/52 | | | | III, X 0 | | |
| ✓1091 | " | SL 18 | | | | | IV, V, XII TM-0 2a see SW989 | | |
| ✓1092 | " | SL28 | | | | | IV, V, XII (a:l,5) S heidelberg | | |
| ✓1093 | " | SL55 | | | | | TM-0 β ^γ 64 | | |
| ✓1094 | " | SL54 | | | | | TM-0 β ^γ 2 | | |
| ✓1095 | " | SL51 | | | | | IV, V, XII (b:l,2) β ^γ 2 PB-0 | | |
| ✓1096 | 1073A-0 | H901/d | | | | | J | | |
| ✓1097 | 1073A1 | | S gallinarum | 74 | 0-x H901 | | gm | | |
| ✓1098 | Anderson | | | | | | S newport puerto rico | | |
| ✓1099 | " | | | | | | S fayed | | |
| ✓1100 | " | | | | | | S cholerae-suis 1348 | | |

| Date | S.L. | Ref. | Source - Remarks. |
|---------|-------|-------------------|--|
| 1/10/54 | ✓1101 | AB 4/1 | Manchester 56488/52 TH - o' |
| 1/10/54 | ✓1102 | AB 4/1 | Manchester 29718/53 TH - o' |
| 4/11/54 | ✓1103 | AB 6/1/26 | F.A. 22 - x S. wien (CDC 281) → IV. XII : i : l.w. |
| 5/7/54 | ✓1104 | AB 6/1/26 | F.A. 39 - x S. daso palaeam (54771) → III. XII : a : ex 308 |
| 5/11/54 | ✓1105 | AB 6/1/26 | i. F.A. 39 - x S. wien (CDC 281) → IV. XII : a : l.w. |
| 7/28/54 | ✓1106 | Edwards | ✓ 4849/53 |
| | ✓1107 | | 4950/53 |
| " | ✓1108 | | D XII |
| " | ✓1109 | | D XII |
| " | ✓1110 | | |
| " | ✓1111 | | |
| " | ✓1112 | | |
| " | ✓1113 | | |
| " | ✓1114 | | |
| " | ✓1115 | | |
| " | ✓1116 | | |
| " | ✓1117 | | |
| " | ✓1118 | | |
| " | ✓1119 | | |
| " | ✓1120 | | |
| " | ✓1121 | | |
| " | ✓1122 | | |
| " | ✓1123 | | |
| " | ✓1124 | | |
| " | ✓1125 | | |
| " | ✓1126 | | |
| " | ✓1127 | | |
| " | ✓1128 | | |
| " | ✓1129 | | |
| " | ✓1130 | | |
| 7/28/54 | ✓1131 | K 1071C8 | K → SW 1072 → i++ , ② + ④ + |
| | ✓1132 | Edwards (CDC 268) | S. ball |
| | ✓1133 | " 281) | S. wien |
| | ✓1134 | " 290) | S. wayeria |
| | ✓1135 | " 317) | S. zea |
| | ✓1136 | " 208) | S. orocochit |
| | ✓1137 | " 929) | S. peruviana (XII). |
| 2/12/55 | 1138 | J.L. | SW 967 gal |
| " | 1139 | J.L. | SW 967 gal |
| 2/13 | 1140 | Edwards | 55-207 S. typhi Paralysed |
| 4/13 | 1141 | - | 212 S. manchuriae (original) XXXV : m.t. :- |
| " | 1142 | - | 325 S. alachua (original) XXXV : Z. Z. 23 : - |
| " | 1143 | - | 170 S. adelaide (original) XXXV : f. g. :- |
| " | 1144 | - | 390 S. spp. (J. Taylor) XXXV : — a. :- |
| " | 1145 | - | 228/53 S. adelaide (J. S. SHD.) XXXV : f. g. :- |
| " | 1146 | - | 994/54 S. alachua (Cal SHD) XXXV : 24. Z. 23 : - |
| " | 1147 | - | 1003/53 S. alachua (Cal SHD) XXXV : Z. 24. Z. 23 : - |
| " | 1148 | - | 1287/54 S. alachua (J. Taylor) XXXV : Z. 24. Z. 23 : - |
| " | 1149 | - | 2212/53 S. alachua (Cal SHD) XXXV : Z. 24. Z. 23 : - |
| " | 1150 | - | 1017/54 S. spp. (Cal SHD) XXXV : m. m. |
| 5/17 | 1151 | Edwards | S. virginica (VII) : d. :- |

22^s
22^t

SW

| | | | | | | | |
|--------|------|---------|--------------------|-------------------------------------|---------------------------------|---------------------------------------|-------|
| 118/55 | 1151 | Edwards | S. virginica | | | | |
| 118/56 | 1152 | | S. typhimurium | "H ₂ S - " | PRE | | |
| 118/56 | 1153 | V | T.I.-50 | 7772 | U.V. | Fla | |
| " | 1154 | V | " | " | " | " | |
| " | 1155 | V | " | " | " | " | |
| " | 1156 | V | " | " | " | " | |
| " | 1157 | V | T.I.-52 | " | " | " | |
| 119/56 | 1158 | V | Edwards Col 529-55 | | | 4, 12 : r(i)-lw. | |
| 119/56 | 1159 | V | T.I.-82756 | Sw 726-X | 7772 | 40 : ext monophasic PLT22° | |
| " | 1160 | V | T.I. 11/10/56 | Sw 1061-X | Sw 1092 | T1 : 1.2 monophasic | |
| " | 1161 | V | T.I. 9/1-56 | Sw 1061-X | Sw 803# | - : b monophasic | |
| " | 1162 | V | 1/6/56 | 3w 1161-X | 7772 | i : b | |
| 119/57 | 1163 | V | from Taylor | S. africana | | 4, 12 : r(i)-lw. | |
| 119/57 | 1164 | V | Edwards | S. para B. monophasic b | 4259-50 | | |
| 119/57 | 1165 | V | Edwards | monophasic | 5222-51 | stable & phase | |
| 119/57 | 1166 | V | Edwards | 192-53, S. typhimurium monophasic i | | | |
| 119/57 | 1167 | V | " | 5249-52, | " | " | |
| 119/57 | 1168 | V | " | 8065-50, | " | " | |
| 119/57 | 1169 | V | " | 2802-51 | " | " | |
| 119/57 | 1170 | V | " | 1370-52 | " | " | |
| " | 1171 | V | " | 1385-51 | I. paratyphi B. monophasic b | | |
| " | 1172 | V | " | 3514-50 | " | " | |
| " | 1173 | V | " | 5080-50 | " | 4 | |
| " | 1174 | V | " | 2324-50 | " | " | |
| " | 1175 | V | " | 35-86-50 | " | " | |
| " | 1176 | V | " | 5317-50 | " | " | |
| 119/57 | 1177 | V | " | 1339-58 | VT | 4, 5, 12 : 1.2 mono | |
| " | 1178 | V | " | 1573-53 | Wash | 4, 5, 12 : i & mono | |
| " | 1179 | V | " | 4398-55 | Alaska | 4, 5, 12 : i mono | |
| " | 1180 | V | " | 3855-55 | Rhode Island | 4, 5, 12 : i mono | |
| " | 1181 | V | " | 1673-54 | Minn | 4, 5, 12 : i mono | |
| " | 1182 | V | " | 1996-56 | Oregon | 4, 5, 12 : i mono | |
| " | 1183 | V | " | 120-54 | Oregon | 4, 5, 12 : i mono | |
| " | 1184 | V | " | 331-57 | La | 4, 5, 12 : i mono | |
| " | 1185 | V | " | 4887-53 | Gp D | n motile | |
| " | 1186 | V | " | 5458-54 | Gp B | n motile | |
| " | 1187 | V | " | 1467-55 | Canada | S. dublin, mucoid nm | |
| " | 1188 | V | " | 2394-55 | Col | Gp B. n motile | |
| " | 1189 | V | " | 1251-55 | Del | Gp B (4, 12) : n motile | |
| " | 1190 | V | " | 4122-55 | Gp B | nm — | |
| " | 1191 | V | " | 5042-55 | Wash | nm — | |
| " | 1192 | V | " | 431-56 | Va | Gp B | nm — |
| " | 1193 | V | " | 327-57 | Iow (prob. S. para B) | Gp B | n.m — |
| " | 1194 | V | " | 1259-57 | Cals | Gp B | nm — |
| " | 1195 | V | " | 2026-52 | Iowa | 4, 5, 12 : eh mono | |
| " | 1196 | V | " | 7092-55 | Texas | 4, 12 : eh mono | |
| " | 1197 | V | " | 4392-55 | Texas | 9, 12 : l E28 | |
| " | 1198 | V | " | 3773-55 | Ga | 9, 12 : l E28 | |
| " | 1199 | V | " | 4303-56 | Ariz | 9, 12 : l E28 | |
| " | 1200 | V | " | 4480-53 | ala | 9, 12 : l E28 | |
| " | 1201 | V | " | 3593-55 | Ga | 9, 12 : l E28 | |
| " | 1202 | V | " | 4914-55 | Ga | 9, 12 : l E28 | |
| " | 1203 | V | F14 C 1473 | b monophasic | (obtained from C.G.C. Fla 1953) | | |
| " | 1204 | V | | Ja Wilkerson | b monophasic | | |

1957-1959

SW 1201-125°

| Date | SW | Ref. | Source and Remark |
|-----------|----------|----------------------------|---|
| 3/20/59 | 1201 ✓ | Elmwood | 3593-55 Ga. 9, 12. l, E ₂₂ |
| " | 1202 ✓ | " | 4914-55 Ga. 9, 12. l, E ₂₂ |
| " | 1203 ✓ | " | Fla C 1483, b monospadic (obtained from C. O. C. Feb. 1953). |
| " | 1204 ✓ | " | Va Wilkerson b monospadic (" "). |
| 3/20/59 | 1205 ✓ | " | 2495-57 (Colif) non motile group B Tartrate - |
| " | 1206 ✓ | " | 2591-57 (Mura.) " Tartrate - |
| " | 1207 ✓ | " | 2495-57 9, 12. 2nd 10 ⁸ : 1, 5, 7 |
| 11/23/59 | 1208 ✓ | T. 1. 10/21/59 | SW 803 bi: and x/w 1159 anti \rightarrow 2: (end) monospadic |
| 1/24/59 | 1207 ✓ | T. 1. 1/9/59 | SW 1061 acriflavin, weak motile - 1, 2 |
| " | 1210 ✓ | T. 1. 10/21/59 | SW 629 + SW 1092 (7): L ₂ (A ₁₂ H ₁ H ₂ L ₂) |
| 3/4/59 | 1211 | FREDERIGO SA 118 | S. bareilly chicken Ch+ |
| " | 1212 | " SA 211 | S. TM man Ch+ |
| 3/24/59 | 1213 ✓ | T. 1. | TH2 PLT 22 + FA(T 172 11. 2) \rightarrow PLT 22 |
| 9. 15. 58 | 1214 ✓ | Baron | S. TM ETS9-SR |
| 9. 26. 58 | 1232 ✓ | " | ET89-S |
| " | 1233 ✓ | " 951-2 W/1214 UV | Fatal with colic HPr. |
| " | 1215 ✓ | EMI | SW 1214 spont. Ara- |
| " | 1216 ✓ | " | " inf. p ₂₂ single plaque (p ₂₂) |
| " | 1217 ✓ | " | WSW 1214. UV: B gal. Ara-Gel-m (1) |
| " | 1218 ✓ | " | (2) |
| " | 1219 ✓ | " | (3) |
| " | 1220 ✓ | " | (4) |
| " | 1221 ✓ | " | (5) |
| " | 1222 ✓ | " | (6) |
| " | 1223 ✓ | SW 1214 UV Baral | Ara- (11) |
| " | 1224 ✓ | " | (12) |
| " | 1225 ✓ | " | (13) |
| " | 1226 ✓ | " | (14) |
| " | 1227 ✓ | " | (15) |
| " | 1228 ✓ | " | (16) |
| " | 1229 ✓ | " | (17) |
| " | 1230 ✓ | SW 1224 UV/B gal | Gel- (1) |
| " | 1231 ✓ | UV MEL | " (5) st |
| 8/10 | ✓ 1234 ✓ | SW 1231 | Arg (Ara- Gel Mels) SR |
| " | ✓ 1235 ✓ | SW 1234 | Ser (Arg- " " " ") SR |
| " | ✓ 1236 ✓ | SW 1234, UV: mal. | Mel- (Arg-Ser- Gel Mels Ara-SR) |
| " | ✓ 1237 ✓ | SW 1215 spont. | Arg-Ser- [Gel+ Ara-SR Mel(?)] |
| " | ✓ 1238 ✓ | SW 1236 UV: mal | Mel+ |
| " | ✓ 1239 ✓ | SW 1214 protod- penicillin | Val- |
| " | ✓ 1240 ✓ | EMI | Gel- st. (Arg Ser Ara S ^R) |
| " | ✓ 1241 ✓ | " 34A4 | 1237 x W 1895 hybridy. |
| " | ✓ 1242 ✓ | " 32 A15 | Lac + p ₂₂ S ^R proto: 75 ^s l ₂ R Gel- S ^R Ara+ |
| " | ✓ 1243 ✓ | " 32 B30 | M- S ^s l ₂ R Ara- \rightarrow SW 1237 except Gel- > mixed? |
| " | ✓ 1244 ✓ | " B2 | \rightarrow SW 1237 except M- sugar + S ^s l ₂ R p ₂₂ R proto \approx 1895 M+ |
| " | ✓ 1245 ✓ | " AC | Gel- # 1. |
| " | ✓ 1246 ✓ | " | Prot |
| " 1/18/59 | ✓ 1247 ✓ | WINICOV #1 | M |
| " | ✓ 1248 ✓ | " #2 | Cyst |
| " | ✓ 1249 ✓ | " #3 | Tyros |
| " | ✓ 1250 ✓ | " #5 | |

1959

REF

1959

REF:

| | ¹ date | ² S # | ³ Ref | ⁴ Source | ⁵ Agent | ⁶ | ⁷ Mutation & Characteristics | ⁸ | ⁹ | ¹⁰ |
|---|----------------------|---------------------|---------------------|------------------------------|-------------------------------------|--|--|--------------|--------------|---------------|
| 1 | 5/10 | ✓ 1301 ✓ | EML.59529 | WS6 x SW1215 recomb. w. F+ ♂ | Lac + pro ⁵ proto: donor | F to Coli | # 6 | | | |
| 2 | | ✓ 1302 ✓ | " | | | | Am + Gal - m. | | | " |
| 3 | | ✓ 1303 ✓ | " | | | | | | | 14 |
| 4 | | ✓ 1304 ✓ | " | | | | | | | 18 |
| 5 | 6/22 | ✓ 1305 ✓ | " | SW 1263 UV: B type | Xyl - | # 9 (sector) | | | | |
| 6 | | ✓ 1306 ✓ | " | | | # 3 (pinkish; huge) | | | | |
| 7 | | ✓ 1307 ✓ | " | | | # 4 | | | | |
| 8 | | ✓ 1308 ✓ | " | | | 5 | | | | |
| 9 | | ✓ 1309 ✓ | " | | | 6 | | | | |
| 0 | | ✓ 1310 ✓ | " | | | 8 | | | | |
| 1 | 6/23 | ✓ 1311 ✓ | " | SW 1305 UV: B type | Rlm - (scrch) | # 1 | | | | |
| 2 | 6/26 | ✓ 1312 ✓ | " | SW 1300 penicillin | # 18. tryp | (F+ donor; Gal - Lac + pro ⁵) | | | | |
| 3 | | ✓ 1313 ✓ | " | | # 51 glycerose | WS6 S1 Am - | | | | |
| 4 | | ✓ 1314 ✓ | " | | # 67 cyst | SW 1215 | | | | |
| 5 | | " ✓ 1315 ✓ | " | | # 70. Am + ibu | | | | | |
| 6 | 7/1 | ✓ 1316 ✓ | S. 1312 | | # 18. 2 try + threo | | | | | |
| 7 | | ✓ 1317 ✓ | S. 1314 | | 67. 1 cyst + amylc. | | | | | |
| 8 | | ✓ 1318 ✓ | S. 1312 | | 18. 1 C + M (try) | | | | | |
| 9 | | ✓ 1319 ✓ | S. 1314 | | 67. 2 try (C) | | | | | |
| 0 | | ✓ 1320 ✓ | " | | 67. 3 Am (C) | | | | | |
| 1 | | ✓ 1321 ✓ | " | | 67. 8 Am (C) | | | | | |
| 2 | | ✓ 1322 ✓ | S. 1312 | | 18. 17 Am (try) Gal - m | | | | | |
| 3 | 7/21 | ✓ 1323 ✓ | SW 1313 | | 51. 6 T (gal) | | | | | |
| 4 | | ✓ 1324 ✓ | " | | 51. 1 P (") | | | | | |
| 5 | | ✓ 1325 ✓ | " | | 51. 2 Am L (") | | | | | |
| 6 | | 1326 | . | | 18. P (try) | | | | | |
| 7 | | 1327 | | | HIST | | | | Gal + | |
| 8 | | 1328 | | | | | | | Gal + | |
| 9 | | 1329 | | | | | | | | |
| 0 | | 1330 | | | | | | | | |
| 1 | 7/25 | 1331 | | SW 1259 | inf. F8 W4520 | F8 | | | | |
| 2 | | 1332 | | SW 1311 | " | | | | | |
| 3 | | 1333 | | SW 1320 | " | | | | | |
| 4 | | 1334 | | | " | | | | | |
| 5 | | 1335 | | | " | | | | | |
| 6 | | ✓ 1336 ✓ | | SW 1259 | { inf. F13 W3747 | F+ / Gal + | | | | |
| 7 | | 1337 | | SW 1262 | | | | | | |
| 8 | 9/6/59 | ✓ 1338 ✓ | Noosa | Salmonella adelaide | (cf. Noosa & Leiberman 1958) | F' | | | | |
| 9 | 10/26/59 | ✓ 1339 ✓ | Baron | ST-2 x LT-2 | | 52 | H - M - gal - | | | |
| 0 | 11/1/59 | ✓ 1340 ✓ | H. K. C. C. | SW 1350 | SW | | | | | |
| 1 | 11/13/59 | ✓ 1341 ✓ | " | SW 803 | SW | S2 | | | | |
| 2 | 11/13/59 | ✓ 1342 ✓ | " | TM 2 (85) | SW | S2 | | | | |
| 3 | 11/13/59 | ✓ 1343 ✓ | " | SW 685 x W3747 FB | Lac + rel. | S2 | | | | |
| 4 | 11/13/59 | ✓ 1344 ✓ | " | SW 80 | SW | S2 | C - M - | | | |
| 5 | 12/18/60 | ✓ 1345 ✓ | " | SW 685 x SW 1339 | Lac + rel. | S2 | | | | |
| 6 | 12/18/60 | ✓ 1346 ✓ | " | TM 2 (85) x W3747 | Lac + rel. | S2 | | | | |
| 7 | 4/28/60 | ✓ 1347 ✓ | " | SW 1340 x SW 1346 | Lac + rel. | S2 | | | | |
| 8 | | ✓ 1348 ✓ | " | SW 1340 x SW 1352 | Lac + rel. | S2 | | | | |
| 9 | | ✓ 1349 ✓ | " | TA 2 (85) x SW 136 Y | Lac + rel. | S2 | | | | |
| 0 | | ✓ 1350 ✓ | " | SW 803 reinfection F vehicle | F+ "pink" | S2 | | | | |
| 1 | | | | | F - "white" | | | | | |

1960

REF:

| | ¹ date | ² SW | ³ Ref. | ⁴ Source | ⁵ Agent | ⁶ | ⁷ Mutation | ⁸ Characteristics | ⁹ | ¹⁰ |
|---|-------------------|-----------------|-------------------|---------------------------------------|--------------------------------------|--------------|---|------------------------------|--------------|---------------|
| 1 | 4/28/60 | ✓ 1357 ✓ | H. Makoda | SW 1350 × SW 1362 | | | F+ "pink" | | | |
| 2 | | ✓ 1352 ✓ | " | SW 803 × W 3797 Lac ⁺ rel. | | | Lac ⁻ F ₁₃ | | | |
| 3 | | ✓ 1353 ✓ | " | SW 1341 | revert. white col. | | F- white | (S R) | | |
| 4 | | ✓ 1354 ✓ | " | SW 1341 | revert. pink col. | | F+ pink | (S R) | | |
| 5 | | ✓ 1355 ✓ | " | SW 1341 | UV, penis. rel; white | | P-F- white | (S R) | | |
| 6 | | ✓ 1356 ✓ | " | SW 1341 | UV, penis. rel; white | | F+ pink | (P-S R) | | |
| 7 | | ✓ 1357 ✓ | " | SW 1355 | W ₃₇₉₇ rel. for pink col. | | Bug ⁻ (P-S R white) | | | |
| 8 | | ✓ 1358 ✓ | " | SW 1357 × SW 1357 | UV, penis. | | F+ pink (P-Bug ⁻ S ⁺) | | | |
| 9 | | ✓ 1359 ✓ | " | SW 1357 × SW 1352 | Lac ⁺ rel. | | Lac ⁻ F ₁₃ (P-Bug ⁻ S ⁺) | | | |
| 0 | | ✓ 1360 ✓ | " | SW 1357 | UV, penis. | | H- (P-Bug ⁻ S ⁺ white) | | | |
| 1 | | ✓ 1361 ✓ | " | SW 1341 | UV, penis, reform | | M- (F- white S ⁺) | | | |
| 2 | | ✓ 1362 ✓ | " | SW 1341 | UV, penis rel. for P | | F+ pink (M-S R) | | | |
| 3 | | ✓ 1363 ✓ | " | SW 1361 | UV, penis | | Aromatic α -acids (M-S R F-white) | | | |
| 4 | | ✓ 1364 ✓ | " | SW 1363 × SW 1357 | | | F+ pink (M-Arom-S R) | | | |
| 5 | | ✓ 1365 ✓ | " | SW 1363 × SW 1352 | Lac ⁺ rel. | | Lac ⁻ F ₁₃ (M-Arom-S R) | | | |
| 6 | | ✓ 1366 ✓ | " | SW 1350 | UV, penis. | | H- (F-white) | | | |
| 7 | | ✓ 1367 ✓ | " | SW 1366 × W 4772 | proto. rel. | | F' for H (proto.) | | | |
| 8 | | ✓ 1368 ✓ | " | SW 1340 | single col. isolate | | best female strain with SW 1346, 1352 | | | |
| 9 | | ✓ 1369 ✓ | " | SW 1340 | " | | peculiar in regard to T ₄ infection | | | |
| 0 | | ✓ 1370 ✓ | " | SW 1369 × SW 1346 | Lac ⁺ rel. | | Lac ⁻ F ₁₃ (Gal-H-M-S R) | | | |
| 1 | | ✓ 1371 ✓ | " | SW 1369 × SW 1346 | Lac ⁺ rel. | | Lac ⁻ F ₁₃ (—) | | | |
| 2 | | ✓ 1372 ✓ | " | SW 1259 × W 3797 | Lac ⁺ rel. | | Lac ⁻ F ₁₃ (T-Tyrosine S R, TMG) | | | |
| 3 | | ✓ 1373 ✓ | " | SW 803 | UV, penicillin | | L (F-white) | | | |
| 4 | | ✓ 1374 ✓ | " | SW 803 | UV | | Gly or Ser (F-white) | | | |
| 5 | | ✓ 1375 ✓ | " | SW 803 | UV | | Ser (F-white) | | | |
| 6 | | ✓ 1376 ✓ | " | SW 1355 | UV | | Isoleucine- (P-S R F-white) | | | |
| 7 | | ✓ 1377 ✓ | " | SW 1355 | UV | | M- (P-S R F-white) | | | |
| 8 | | ✓ 1378 ✓ | " | SW 1361 | UV | | P- (M-S R F-white) | | | |
| 9 | | ✓ 1379 ✓ | " | TM2 (85) | UV, alkyl | | alkyl- | | | |
| 0 | | ✓ 1380 ✓ | " | SW 1379 | UV, penicillin | | P- (alkyl-) | | | |
| 1 | | ✓ 1381 ✓ | " | SW 1379 | " | | M- (alkyl-) | | | |
| 2 | | ✓ 1382 ✓ | " | SW 1344 | " | | H- (no other requirements, S R) | | | |
| 3 | | ✓ 1383 ✓ | " | SW 1382 | " | | T- (H-S R) | | | |
| 4 | | ✓ 1384 ✓ | " | SW 1382 | " | | C- (H-S R) | | | |
| 5 | | ✓ 1385 ✓ | " | SW 1344 | " | | M- (no other requirements, S R) | | | |
| 6 | | ✓ 1386 ✓ | " | SW 1344 | " | | chain- | | | |
| 7 | | ✓ 1387 ✓ | " | SW 1340 × SW 1339 | Lac ⁺ rel. | | Lac ^{+F'} (Gal-H-M-S R) | | | |
| 8 | | ✓ 1388 ✓ | " | SW 334 × SW 1339 | Lac ⁺ rel. | | Lac ^{+F'} (Gal-H-M-S R) | | | |
| 9 | | ✓ 1389 ✓ | " | SW 1379 | UV, penicillin | | Panthothentic acid- (alkyl-) | | | |
| 0 | | ✓ 1390 ✓ | " | SW 685 | Sm | | S R | | | |
| 1 | | ✓ 1391 ✓ | " | SW 1364 | UV | | Hfr high for d, P | | | |
| 2 | | ✓ 1392 ✓ | " | SW 1366 | Sm | | S R, (H-white) | | | |
| 3 | | ✓ 1393 ✓ | " | SW 1339 × SW 1363 | | | Lac ^{+F'} (M-Arom-S R) | | | |
| 4 | | ✓ 1394 ✓ | F. Doster | (detected 25/5/1960) | | | N: 0.5 S. java 4, 5, 12: 6: - (female to W 3262) | | | |
| 5 | | ✓ 1395 ✓ | " | (—) | | | N: 189 S. V. aurum 1, 9, 12: a: 1, 5 (—) | | | |
| 6 | | ✓ 1396 ✓ | H. Makoda | SW 803 infected from W 6 | | | F+ | | | |
| 7 | | ✓ 1397 ✓ | " | SW 1355 | UV, pen. | | H- (P-S R) | | | |
| 8 | | ✓ 1398 ✓ | " | SW 803 infected from SW 1364 | | | F+ | | | |
| 9 | | ✓ 1399 ✓ | " | SW 1360 | UV, mal | | Mal- (P-Ala- H-S R) | | | |
| 0 | | ✓ 1400 ✓ | " | SW 1366 × W 4778 | rel. for H ⁺ | | proto, apparently also F ⁺ | | | |

1960

REF:

| | date | 2 | 3 | Ref | Source | Agent | 6 | 7 | 8 | Characteristics ¹⁰ |
|---|---------|---|-----------|------------|--|-----------------------|---|---|---|-------------------------------|
| 1 | 7/7/60 | ✓ | SW 1401 ✓ | H. Makiela | SW 779 | Sm | | | | |
| 2 | | ✓ | 1402 ✓ | " | SW 1401 | inf. from SW 1364 | | | | |
| 3 | | ✓ | 1403 ✓ | " | SW 1364 | UV, " | | | | |
| 4 | | ✓ | 1404 ✓ | " | SW 1394 | UV, " | | | | |
| 5 | 8/30/60 | ✓ | 1405 ✓ | " | SW 1373 | Sm | | | | |
| 6 | | ✓ | 1406 ✓ | " | SW 1355 | UV, pen | | | | |
| 7 | | ✓ | 1407 ✓ | " | SW 1396 | UV, selection pattern | | | | |
| 8 | | ✓ | 1408 ✓ | " | SW 1398 | — " — | | | | |
| 9 | | ✓ | 1409 ✓ | " | SW 1357 × SW 1391 on DO + Agg | | | | | |
| 0 | | ✓ | 1410 ✓ | " | SW 1376 × SW 1391 on DO + J | | | | | |
| 1 | | ✓ | 1411 ✓ | " | SW 1406 × SW 1391 on DO + YE | | | | | |
| 2 | | ✓ | 1412 ✓ | " | SW 1392 × P22/SW 943 | | | | | |
| 3 | | ✓ | 1413 ✓ | " | SW 1412 × P22/SW 943 | | | | | |
| 4 | | ✓ | 1414 ✓ | " | SW 1355 UV, penicillin | | | | | |
| 5 | | ✓ | 1415 ✓ | " | SW 1355 | — " — | | | | |
| 6 | | ✓ | 1416 ✓ | " | SW 1355 | — " — | | | | |
| 7 | | ✓ | 1417 ✓ | " | SW 1404 × 1391 on DO | | | | | |
| 8 | | ✓ | 1418 ✓ | " | SW 1356 selection for Hfr | | | | | |
| 9 | | ✓ | 1419 ✓ | " | SW 1404 × 1399 on B-Lac Sm | | | | | |
| 0 | | ✓ | 1420 ✓ | O'Malley | American Type Cult. Coll. 8392 | | | | | |
| 1 | | ✓ | 1421 ✓ | H. Makiela | SW 1403 motility selection | | | | | |
| 2 | | ✓ | 1422 ✓ | " | SW 1421 infected from 1398 | | | | | |
| 3 | | ✓ | 1423 ✓ | " | SW 1355 — " — | | | | | |
| 4 | | ✓ | 1424 ✓ | " | H. SW 1413 × SW 1391, rel. for H ⁺ | | | | | |
| 5 | | ✓ | 1425 ✓ | " | — " — | | | | | |
| 6 | | ✓ | 1426 ✓ | " | — " — | | | | | |
| 7 | | ✓ | 1427 ✓ | " | — " — | | | | | |
| 8 | | ✓ | 1428 ✓ | " | — " — | | | | | |
| 9 | | ✓ | 1429 ✓ | " | # W 3462 × SW 1391, rel. for H ⁺ , X ⁺ | | | | | |
| 0 | | ✓ | 1430 ✓ | " | — " — | | | | | |
| 1 | | ✓ | 1431 ✓ | " | — " — | | | | | |
| 2 | | ✓ | 1432 ✓ | " | — " — | | | | | |
| 3 | | ✓ | 1433 ✓ | " | — " — | | | | | |
| 4 | | ✓ | 1434 ✓ | " | — " — | | | | | |
| 5 | | ✓ | 1435 ✓ | " | — " — | | | | | |
| 6 | | ✓ | 1436 ✓ | " | # 3462 × SW 1391 rel. for H ⁺ | 5 | | | | |
| 7 | | ✓ | 1437 ✓ | " | SW 1436, selection NG A + antis. H ² | | | | | |
| 8 | | ✓ | 1438 ✓ | " | # 3462 × SW 1391, rel. for H ⁺ | 12 | | | | |
| 9 | | ✓ | 1439 ✓ | " | SW 1438, rel. NG A + antis. H ² | | | | | |
| 0 | | ✓ | 1440 ✓ | " | SW 1355 UV, penicillin | | | | | |
| 1 | | ✓ | 1441 ✓ | " | SW 1355 | — " — | | | | |
| 2 | | ✓ | 1442 ✓ | " | SW 1404 UV | | | | | |
| 3 | | ✓ | 1443 ✓ | " | SW 1398 UV | | | | | |
| 4 | | ✓ | 1444 ✓ | " | SW 1391 Hfr recombination after NG | | | | | |
| 5 | | ✓ | 1445 ✓ | " | SW 1361 UV, pen | | | | | |
| 6 | | ✓ | 1446 ✓ | " | SW 1398 UV, sel. for Hfr | | | | | |
| 7 | | ✓ | 1447 ✓ | " | — " — | | | | | |
| 8 | | ✓ | 1448 ✓ | " | — " — | | | | | |
| 9 | | ✓ | 1449 ✓ | " | — " — | | | | | |
| 0 | | ✓ | 1450 ✓ | " | — " — | | | | | |
| 1 | | ✓ | 1451 | " | — " — | | | | | |
| 2 | | ✓ | 1452 | " | — " — | | | | | |
| 3 | | ✓ | 1453 | " | — " — | | | | | |
| 4 | | ✓ | 1454 | " | — " — | | | | | |



1960

REF:

| C | date | 1 st 1960 | 2 nd SIN | 3 rd Ref | 4 th Source | 5 th Origin | 6 th | 7 th Infection | 8 th Characteristics ¹⁰ |
|----------|------|-------------------------|------------------------|------------------------|---|---------------------------|--|---------------------------------------|--|
| 12/27/60 | 1960 | V1457 | ✓ | H. Nukari | SW 1398 | UV, Hfr, rel. | | Hfr major Rba-His (re comb) | |
| 1 | | V1452 | ✓ | " | " | " | | Hfr major for YE, Pro | " |
| 2 | | V1453 | ✓ | " | " | " | | " YE | " |
| 3 | | V1454 | ✓ | " | " | " | | " His, Gal.. | " |
| 4 | | V1455 | ✓ | " | " | " | | " | " |
| 5 | | V1456 | ✓ | " | " | " | | " | " |
| 6 | | V1457 | ✓ | " | " | " | | Hfr major for His, Arom... | " |
| 7 | | V1458 | ✓ | " | " | " | | " | " |
| 8 | | V1459 | ✓ | " | " | " | | " | " |
| 9 | | V1460 | ✓ | " | " | " | | " | " |
| 0 | | V1461 | ✓ | " | " | " | | " | " |
| 1 | | V1462 | ✓ | " | " | " | | " | " |
| 2 | | V1463 | ✓ | " | SW 543 inf from SW 1364 | | F+ | (S. i : 1.2 aro rough) | |
| 3 | | V1464 | ✓ | " | SW 1413 UV | | Gal- | (His i : 1.2 SR) | |
| 4 | | V1465 | ✓ | " | " " | | Mal- | (- ") | |
| 5 | | V1466 | ✓ | " | " " | | Mtl- | (- ") | |
| 6 | | V1467 | ✓ | " | SW 1466 | | Mal- | (Ml - His - S ^R i : 1.2) | |
| 7 | | V1468 | ✓ | " | SW 1248 | | Mal- | (Ml - S ^R i : TM9) | |
| 8 | | V1469 | ✓ | " | SW 1355 × D22 (SW 943) | | i (P-82) | | |
| 9 | | V1470 | ✓ | " | SW 1376 | | i (P-Tml-SR) | | |
| 0 | | V1471 | ✓ | " | SW 1377 | | i (P-Ml-SR) | | |
| 1 | | V1472 | ✓ | " | SW 1378 | | i (Ml-P-SR) | | |
| 2 | | V1473 | ✓ | " | SW 1397 | | i (P-H-SR) | | |
| 3 | | V1474 | ✓ | " | SW 1441 | | 1.2 (P-H-SR) | | |
| 4 | | V1475 | ✓ | " | SW 943 UV | | Mal- (i : 1.2) | | |
| 5 | | V1476 | ✓ | " | SW 1444 | N: A reductio | F-, F resistant | | |
| 6 | | V1477 | ✓ | " | SW 1448 | | F- | | |
| 7 | | V1478 | ✓ | " | SW 1452 | | F- | | |
| 8 | | V1479 | ✓ | " | SW 1462 | | F- | | |
| 9 | | V1480 | ✓ | " | 1477 inf. from SW 1364 | | Hfr like SW 1448 | | |
| 0 | | V1481 | ✓ | " | SW 1478 | | SW 1452 | | |
| 1 | | V1482 | ✓ | " | SW 1479 | | " SW 1462 | | |
| 2 | | V1483 | ✓ | " | SW 1001 UV, Sm reductio | | S ^R (1.2 : -) (S. abortus agalactiae) | | |
| 3 | | V1484 | ✓ | " | " | | " | | |
| 4 | | V1485 | ✓ | " | SW 803 inf. from W 3747 | | F ₁ 3 ⁺ lac ^v | | |
| 5 | | V1486 | ✓ | " | " | | F ₁ 3 ⁺ lac ^v | | |
| 6 | | V1487 | ✓ | " | " | | lac ^v Hfr Baron | | |
| 7 | | V1488 | ✓ | " | SW 1034 UV, Sm | | SR (a : -) (S. abortus agalactiae) | | |
| 8 | | V1489 | ✓ | " | SW 1353 spont. | | lac ^v (SR) | | |
| 9 | | V1490 | ✓ | " | SW 1473 × 1403, P ^r rel. | | Arom. P ^r His- i : env S ^R) | | |
| 0 | | V1491 | ✓ | " | " | | " | | |
| 1 | | V1492 | ✓ | " | " | | Hum- P ^r His ^r (i : env S ^R) | | |
| 2 | | V1493 | ✓ | " | SW 1442 × SW 1463 | | P ^r lac ^v ; rose mchng, Acrbcl (lac ^r -S ^R) | | |
| 3 | | V1494 | ✓ | " | " | | LT2 wild-type | | |
| 4 | | V1495 | ✓ | STOCKER | LISTER | " | LT2 gal-sensitive (epim-) | | |
| 5 | | V1496 | ✓ | " | FUKASAWA & MIKABO's LT2-M10 | | LT2 adeG7 proA46 H ₁ m10 lac ^r S ^R | | |
| 6 | | V1497 | ✓ | " | LISTER M10 | | m10 gal-sensitive | | |
| 7 | | V1498 | ✓ | " | " M10 gal-sens | | | | |
| 8 | | V1499 | ✓ | Nossal | Edwards, S. habana (O: 1, 13, 23; H: f, f-) | | | | |
| 9 | | V1500 | ✓ | " | " S. morehead (O: 30; H: i, f, f-) | | | | |

SOM/50/-50

1961

REF:

| | date | SW ⁵ | Ref | Source | 5 | Agent ⁶ | Mutation ⁷ | Chars. ⁸ | 9 | 10 |
|---|-----------|-----------------|-----------------------|---|--------------------------|---|-----------------------------------|---------------------|---|----|
| 1 | 7-19. | ✓ 1501 ✓ | Red. Browne, AS. | S. Hittingfoss | | | 16: b-enz | | | |
| 2 | | ✓ 1502 ✓ | (Engel & Norad) | S. Horskam | (1) 6, 14, 25: b-enz | | 21: b-enz | | | |
| 3 | | ✓ 1503 ✓ | " | S. minnesota | 30: b-enz | | 6, 8: 1, 2- d | | | |
| 4 | | ✓ 1504 ✓ | " | S. urbana | 1, 4, 12: f.g. | | 4, 12: f.g. | | | |
| 5 | | ✓ 1505 ✓ | Engel from Roentree | S. muenchen | 1, 4, 12: f.g. | | 1, 4, 12: f.g. | | | |
| 6 | | ✓ 1506 ✓ | Engel from B. Stocker | NCCL 5722 | S. Derby | HIS- gal ^A hisin ^A Uba15 ^A chlorate ^A | " " " " | " " " " | | |
| 7 | | ✓ 1507 ✓ | " | NCCL 5721 | S. Derby | " " " " | " " " " | " " " " | | |
| 8 | | ✓ 1508 ✓ | " | BAL 2212-59 | S. Derby | " " " " | " " " " | " " " " | | |
| 9 | III/19/71 | 1509 | B. Ames | TA 1530 | | | | | | |
| 0 | " | 1510 | " | TA 1531 | | | | | | |
| 1 | " | 1511 | " | TA 1532 | | | | | | |
| 2 | IV/2/71 | 1512 | " | TA 1724 (path.) pr 1534 | | | | | | |
| 3 | | 1513 | Spofford (letter) | SL K76472 | | | | | | |
| 4 | IV/24/71 | LT-2 | " | big colony | | | | | | |
| 5 | " | 1515 | " | small colony | | | | | | |
| 6 | X/2/72 | 1516 | " | SL 1670 | | | | | | |
| 7 | " | 1517 | LT77 | SL 3613 | | | | | | |
| 8 | X/10/72 | SW 1518 | " | EL 199 | | | | | | |
| 9 | | | | | | | | | | |
| 0 | | | | | | | | | | |
| 1 | X/16/72 | SW 1519 | " | SL 1027 | | | | | | |
| 2 | II/12/73 | SW 1520 | " | TA 1659 | | | | | | |
| 3 | " | SW 1521 | " | SL 1694 | | | | | | |
| 4 | I/29/73 | SW 1522 | Wainik | Pro C90 | | | | | | |
| 5 | " | SW 1523 | " | ST Ray 59 (P22 C ₂ ²⁹) 25V | | | | | | |
| 6 | II/28/73 | SW 1524 | Stockler | SL N81 | | | | | | |
| 7 | II/73 | SW 1525 | " | SL 1542 | | | | | | |
| 8 | " | SW 1526 | " | SL 1667 | | | | | | |
| 9 | " | SW 1527 | " | TA 1674 | | | | | | |
| 0 | " | 1528 | " | TA 1901 | | | | | | |
| 1 | " | 1529 | " | TA 1656 | | | | | | |
| 2 | " | 1530 | " | SL 1102 | | | | | | |
| 3 | " | 1531 | " | SL 3759 | | | | | | |
| 4 | " | 1532 | " | TA 1657 | | | | | | |
| 5 | " | 1533 | " | TA 1701 | | | | | | |
| 6 | " | 1534 | " | SL 1746 | | | | | | |
| 7 | " | 1535 | " | SL 1757 | | | | | | |
| 8 | " | 1536 | " | SL 1747 | | | | | | |
| 9 | " | 1537 | " | SL 1752 | | | | | | |
| 0 | " | 1538 | " | LT2-M1 | | | | | | |
| 1 | " | 1539 | " | SL 1716 | | | | | | |
| 2 | X/16/73 | SW 1540 | Baron WR 4255 | Clt-S. Thyphim hybrid | cys- tya- met- str R | | | | | |
| 3 | VII/11/73 | 1541 | Stockler | SL 1657 | gal-(xanth) restriction- | | | | | |
| 4 | " | 1542 | " | SL 1654 (CL 4419) | smooth | | | | | |
| 5 | 4-1-75 | SW 1543 | B. Cohen | Galvez Stream, Stanford | Sw 1543h wild | tiny gram rods, motile | | | | |
| 6 | 4-1-75 | SW 1544 | " | SW 1543 | MTG de- | Threonine R.F. day 3 = 1.3×10^6 black/grown | | | | |
| 7 | 4-1-75 | SW 1545 | " | 1543 | slanted | R.F. day 5 = 1.99×10^8 | | | | |
| 8 | " | SW 1546 | " | 1543 | from | R.F. day 5 = 0.38×10^{-8} | | | | |
| 9 | " | SW 1547 | " | 1543 | heavily | R.F. day 5 = 3.4×10^{-8} | | | | |
| 0 | " | SW 1548 | " | 1543 | streaked | R.F. day 5 = 0.65×10^{-9} | | | | |
| 1 | " | SW 1549 | " | 1543 | area of | R.F. day 5 = 0.51×10^{-9} | | | | |
| 2 | " | SW 1550 | " | 1543 | plate) | R.F. day 5 = 0.14×10^{-9} | | | | |
| 3 | " | SW 1551 | " | 1543 | | Threonine methionine | R.F. day 5 = 1.5×10^{-8} | | | |

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REF: