

HARLAN ANIMAL COLONIES
HEALTH EVALUATION SUMMARY

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March 24, 2008
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CONTRACT N01-AG-5-0006

RATS Barrier 218A

| ANIMAL FACILITY | STRAIN | NO./SEX | AGE | TESTING LABORATORY/DATES |
|--|-----------------|---------|-----------|---|
| Location: Prattville, AL Barrier/Building: 218A | BN/BiRijNNiaHsd | 2M/2F | 4 months | University of Missouri UMRADIL, Columbia, MO |
| | | 1M/2F | 10 months | |
| Ship Date: 1/13/08 | F344 x BN F1 | 2M/2F | 4 months | Receipt Date: 1/14/08 Report Date: 3/13/08 |
| | | 2M/1F | 10 months | |

EVALUATION

NIA rats submitted for this health monitoring were obtained from NIA-NIH aging colonies maintained in a barrier by Harlan Sprague Dawley, Inc. All rats examined were considered to be in a good state of health.

SEROLOGY

| Agent | Assay | No. Pos./ No. Tested | Comments |
|---------------------|-------|----------------------|----------|
| Sendai | MFI | 0/14 | |
| RCV/SDAV | MFI | 0/14 | |
| Parvoviruses NS-1 | MFI | 0/14 | |
| RMV | MFI | 0/14 | |
| RPV | MFI | 0/14 | |
| KRV | MFI | 0/14 | |
| H-1 | MFI | 0/14 | |
| PVM | MFI | 0/14 | |
| <i>M. pulmonis</i> | MFI | 0/14 | |
| Reo 3 | MFI | 0/4 | |
| TMEV-like virus | MFI | 0/4 | |
| MAD | MFI | 0/4 | |
| LCM | MFI | 0/4 | |
| <i>E. cuniculli</i> | MFI | 0/4 | |
| Hantaan | MFI | 0/4 | |
| Tyzzers | MFI | 0/4 | |

BACTERIOLOGY

| Agent | No. Pos/No. Tested | Comments |
|----------------------------------|--------------------|----------------------------|
| <i>Salmonella spp.</i> | 0/14 | Nasopharynx/cecum cultures |
| <i>Pasteurella pneumotropica</i> | 0/14 | |
| <i>Pseudomonas aeruginosa</i> | 0/4 | |
| <i>Corynebacterium kutscheri</i> | 0/14 | |
| <i>Klebsiella pneumoniae</i> | 0/4 | |
| <i>Klebsiella oxytoca</i> | 0/4 | |
| <i>Staphylococcus aureus</i> | 0/4 | |
| <i>Streptococcus pneumoniae</i> | 0/14 | |

PCR

| | Results | Comments |
|----------------------------|--------------------|----------|
| | No. Pos/No. Tested | |
| <i>Mycoplasma pulmonis</i> | 0/14 | |
| <i>Helicobacter spp</i> | 0/14 | |

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RATS Barrier 218A

| PARASITOLOGY | | |
|--|-----------------------------|--|
| Type and Test | Results | Comments |
| Ectoparasites Test: Direct pelage | No. Pos./No. Tested 0/14 | External parasites were not observed in any rat. |
| Endoparasites Test(s): Direct, Gross, and Microscopic | No. Pos./No. Tested 0/14 | |

| PATHOLOGY | | |
|---|---------------------------|--|
| Gross: | No Gross Lesions Detected | Lesions are incidental and/or consistent with normal aging process and are not indicative of infection with murine adventitious pathogens. |
| Histologic: | | |
| Mild hydronephrosis | 1/4 | |
| Mesangioproliferative glomerulopathy | 1/4 | |
| Peribronchiolar lymphoid hyperplasia - lung | 11/14 | |
| Interstitial pneumonia with giant cells | 2/14 | |
| A few incidental lesions were also noted. | | |

| AVAILABILITY | | |
|---|--|-------|
| Rats obtained from NIA-NIH aging colonies maintained in one maximum security barrier by Harlan Sprague Dawley, Inc., (Harlan) in Prattville, Alabama. The combined census of these colonies, at the time of the referenced monitoring is tabulated below: | | |
| Virgin Male (1 - 11 months of age) | | 3,483 |
| Virgin Female (1 - 11 months of age) | | 688 |
| Total Census: | | 4,171 |

For information, contact:
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Karla A. Stevens, D.V.M.
Principal Investigator

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RATS Barrier 236A

| ANIMAL FACILITY | STRAIN | NO./SEX | AGE | TESTING LABORATORY/DATES |
|---|-------------------------------------|--------------|-----------|---|
| Location: Oregon, WI Barrier/Building: 236A Ship Date: 3/02/08 Ship Date: 1/13/08 | BN/BiRijNNiaHsd F344 x BN F1 | 2M/2F | 4 months | University of Missouri UMRADIL, Columbia, MO Receipt Date: 03/03/08 Receipt Date: 1/14/08 Report Date: 3/13/08 |
| | | 2M/2F | 12 months | |
| | | 2M/1F | 15 months | |
| | | 2M/2F | 4 months | |
| | | 2M/2F | 12 months | |
| | | 1M/1F | 15 months | |

EVALUATION

NIA rats submitted for this health monitoring were obtained from NIA-NIH aging colonies maintained in barriers by Harlan Sprague Dawley, Inc. All rats examined were considered to be in a good state of health.

SEROLOGY

| Agent | Assay | No. Pos./ No. Tested | Comments |
|--------------------|-------|----------------------|----------|
| Sendai | MFI | 0/21 | |
| RCV/SDAV | MFI | 0/21 | |
| Parvoviruses NS-1 | MFI | 0/21 | |
| RMV | MFI | 0/21 | |
| RPV | MFI | 0/21 | |
| KRV | MFI | 0/21 | |
| H-1 | MFI | 0/21 | |
| PVM | MFI | 0/21 | |
| <i>M. pulmonis</i> | MFI | 0/21 | |
| Reo 3 | MFI | 0/6 | |
| TMEV-like virus | MFI | 0/6 | |
| MAD | MFI | 0/6 | |
| LCM | MFI | 0/6 | |
| <i>E. cuniculi</i> | MFI | 0/6 | |
| Hantaan | MFI | 0/6 | |
| Tyzer's | MFI | 0/6 | |

BACTERIOLOGY

| Agent | No. Pos./No. Tested | Comments |
|----------------------------------|---------------------|----------------------------|
| <i>Salmonella spp.</i> | 0/21 | Nasopharynx/cecum cultures |
| <i>Pasteurella pneumotropica</i> | 0/21 | |
| <i>Pseudomonas aeruginosa</i> | 0/6 | |
| <i>Corynebacterium kutscheri</i> | 0/21 | |
| <i>Klebsiella pneumonia</i> | 0/6 | |
| <i>Klebsiella oxytoca</i> | 0/6 | |
| <i>Staphylococcus aureus</i> | 0/6 | |
| <i>Streptococcus pneumoniae</i> | 0/21 | |

PCR

| | No. Pos./No. Tested | Comments |
|----------------------------|---------------------|----------|
| <i>Mycoplasma pulmonis</i> | 0/21 | |
| <i>Helicobacter spp</i> | 0/21 | |

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RATS Barrier 236A

| PARASITOLOGY | | |
|---|-----------------------------|--|
| Type and Test | Results | Comments |
| Ectoparasites Test: Direct pelage | No. Pos./No. Tested 0/21 | External parasites were not observed in any rat. |
| Endoparasites Test(s): Direct, Gross, and Microscopic | No. Pos./No. Tested 0/21 | |

| PATHOLOGY | | |
|--|------------------------------|--|
| Gross: | No Gross Lesions Detected | Lesions are incidental and/or consistent with normal aging process and are not indicative of infection with murine adventitious pathogens. |
| Histologic: | | |
| Alveolar histiocytosis | 2/21 | |
| Peribronchiolar lymphoid hyperplasia | 19/21 | |
| Perivascular lymphoid infiltrate - lung | 4/21 | |
| Mild hydronephrosis | 3/6 | |
| Interstitial pneumonia with giant cells | 2/21 | |
| A few additional incidental lesions were also noted. | | |

| AVAILABILITY | |
|---|-------|
| Rats obtained from NIA-NIH aging colonies maintained in one maximum security barrier by Harlan Sprague Dawley, Inc., (Harlan) in Oregon, Wisconsin. The combined census of these colonies, at the time of the referenced monitoring is tabulated below: | |
| Virgin Male (1 - 40 months of age) | 7,844 |
| Virgin Female (1 - 39 months of age) | 1,258 |
| Total Census: | 9,102 |

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RATS Barrier 208A

| ANIMAL FACILITY | STRAIN | NO./SEX | AGE | TESTING LABORATORY/DATES |
|---|----------------|---------|-----------|--|
| Location: Frederick, MD Barrier/Building: 208A Ship Date: 3/2/08 | BN/BIrjNNiaHsd | 3M/2F | 15 months | University of Missouri UMRADIL, Columbia, MO Receipt Date: 3/3/08 Report Date: 3/13/08 |
| | F344 x BN F1 | 2M/3F | 15 months | |

EVALUATION

NIA rats submitted for this health monitoring were obtained from NIA-NIH aging colonies maintained in a barrier by Harlan Sprague Dawley, Inc. All rats examined were considered to be in a good state of health.

SEROLOGY

| Agent | Assay | No. Pos./ No. Tested | Comments |
|---------------------|-------|----------------------|----------|
| Sendai | MFI | 0/10 | |
| RCV/SDAV | MFI | 0/10 | |
| Parvoviruses NS-1 | MFI | 0/10 | |
| RMV | MFI | 0/10 | |
| RPV | MFI | 0/10 | |
| KRV | MFI | 0/10 | |
| H-1 | MFI | 0/10 | |
| PVM | MFI | 0/10 | |
| <i>M. pulmonis</i> | MFI | 0/10 | |
| Reo 3 | MFI | 0/3 | |
| TMEV-like virus | MFI | 0/3 | |
| MAD | MFI | 0/3 | |
| LCM | MFI | 0/3 | |
| <i>E. cuniculli</i> | MFI | 0/3 | |
| Hantaan | MFI | 0/3 | |
| Tyzzers | MFI | 0/3 | |

BACTERIOLOGY

| Agent | No. Pos/No. Tested | Comments |
|----------------------------------|--------------------|--|
| <i>Salmonella spp.</i> | 0/10 | Nasopharynx/cecum cultures The bacteria isolated from the nasopharynx and cecum are opportunistic or normal flora of the rat. |
| <i>Pasteurella pneumotropica</i> | 0/10 | |
| <i>Pseudomonas aeruginosa</i> | 0/3 | |
| <i>Corynebacterium kutscheri</i> | 0/10 | |
| <i>Klebsiella pneumonia</i> | 0/3 | |
| <i>Klebsiella oxytoca</i> | 0/3 | |
| <i>Staphylococcus aureus</i> | 0/3 | |
| <i>Streptococcus pneumoniae</i> | 0/10 | |

PCR

| | Results | Comments |
|----------------------------|---------------------|----------|
| | No. Tested/No. Pos. | |
| <i>Mycoplasma pulmonis</i> | 0/10 | |
| <i>Helicobacter spp</i> | 0/10 | |

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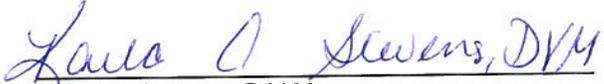
RATS Barrier 208A

| PARASITOLOGY | | |
|---|-----------------------------|---|
| Type and Test | Results | Comments |
| Ectoparasites Test: Direct pelage | No. Pos./No. Tested 0/10 | External parasites were not observed in any rat. |
| Endoparasites Test(s): Direct, Gross, and Microscopic (intestine & bladder) | No. Pos./No. Tested 0/10 | Enteric and urinary bladder parasites were not observed in any rat. |

| PATHOLOGY | | |
|---|------------------|--|
| Gross: | None Significant | Overall frequency of lesions in these rats is low. |
| Histologic: | | |
| Peribronchiolar lymphoid hyperplasia | 8/10 | Lesions are incidental and/or consistent with normal aging process and are not indicative of infection with murine adventitious pathogens. |
| Alveolar histiocytosis | 1/10 | |
| A few incidental lesions were also noted. | | |

| AVAILABILITY | |
|---|-------|
| Rats obtained from NIA-NIH aging colonies maintained in one maximum security barrier by Harlan Sprague Dawley, Inc., (Harlan) in Frederick, Maryland. The combined census of these colonies, at the time of the referenced monitoring is tabulated below: | |
| Virgin Male (9 - 39 months of age) | 3,780 |
| Virgin Female (12 - 35 months of age) | 656 |
| Total Census: | 4,436 |

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