Table 2: **p24**

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 30 | 3A6 | p24(1–17) | p24(122–149 BH10) | TGHSSQVSQNYPIVQNI-QGQMVHQAISP | no | HIV-1 infection | human($IgG_1\kappa$) |
| | **References:** [Buchacher (1992), Buchacher (1994)] | | | | | | |
| | • 3A6: The reactive peptide spans the p17/p24 border of gag –Buchacher94 | | | | | | |
| | • 3A6: Human MAbs against HIV generated by electrofusion of PBL from HIV-1 positive volunteers with CB-F7 cells –Buchacher94 | | | | | | |
| 31 | 111/182 | p24(1–20) | p24(134–153 IIIB) | PIVQNIQGQMVHQAISP-RTL | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)] | | | | | | |
| | • 111/182: Test specific evidence of cross-reactivity between HIV-1, HIV-2 and SIV MAC –Niedrig91 | | | | | | |
| 32 | 112/021 | p24(1–20) | p24(134–153 IIIB) | PIVQNIQGQMVHQAISP-RTL | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)] | | | | | | |
| | • 112/021: Test specific evidence of cross-reactivity between HIV-1, HIV-2 and SIV MAC –Niedrig91 | | | | | | |
| 33 | 112/047 | p24(1–20) | p24(134–153 IIIB) | PIVQNIQGQMVHQAISP-RTL | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)] | | | | | | |
| | • 112/047: Test specific evidence of cross-reactivity between HIV-1, HIV-2 and SIV MAC –Niedrig91 | | | | | | |
| 34 | ID8F6 | p24(11–25) | p24(143–157 BRU) | VHQAISPRTLNAWVK | no | Inact CBL-1 | murine($IgG_1$) |
| | **Donor:** R. B. Ferns and R. S. Tedder | | | | | | |
| | **References:** [Ferns (1987), Ferns (1989)] | | | | | | |
| | • ID8F6: Reacted with both p55 and p24 – showed less than 75% homologous inhibition –Ferns87 | | | | | | |
| | • ID8F6: UK Medical Research Council AIDS reagent: ARP348 | | | | | | |
| 35 | F5-2 | p24(14–23) | p24(14–23 HXB2) | AISPRTLNAW | no | ? | murine() |
| | **References:** [Kusk (1988), Kusk (1992)] | | | | | | |
| | • F5-2: In HIV-1+ individuals, antibody to AISPRTLNAW is associated with CD4 T-cell decline –Kusk88,Kusk92 | | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 36 | CB-13/5 | p24(21–25) | p24(152–156) | NAWVK | no | ? | murine($IgG_1\kappa$) |

**References:** [Grunow (1990), Franke (1992), Kuttner (1992), Glaser & Hausdorf(1996)]

- CB-13/5: It is not clear whether the MAbs CD-13/5 and CB-mab-p24/13-15 are the same, but from the shared references in the primary articles they seem to be (database note)
- CB-13/5: Called CB-mab-p24/13-15 – the VDJ H and VJ L regions of CB-mab-p24/13-15 were sequenced –Kuttner92
- CB-13/5: Inhibits spread of HIV-1 in cell cultures –Franke92
- CB-13/5: Epitope described as VHQAISPRTLNAWVK – binding not affected by bound MAb CB-4/1 –Glaser96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 37 | 3D3 | p24(45–50) | p24(177–182 LAI) | EGATPQ | | Inact CBL-1 | murine($IgG_{2b}$) |

**Donor:** R. B. Ferns and R. S. Tedder

**References:** [Ferns (1987), Ferns (1989)]

- 3D3: Most broadly reactive of all the antibodies in this study–Ferns87
- 3D3: UK Medical Research Council AIDS reagent: ARP314

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 38 | CD-4/1 | p24(46–56) | p24(182–197) | GATPQDLNTML | no | rec p24-$\beta$-galactosidase fusion protein | murine($IgG_{2a}\kappa$) |

**References:** [Grunow (1990), Franke (1992), Hohne (1993), Glaser & Hausdorf(1996), Ehrhard (1996)]

- CD-4/1: Inhibits spread of HIV-1 in cell cultures –Franke92
- CD-4/1: Affinity of CB-4/1 to native p24 is lower than to peptide or denatured p24 – proposed that the peptide binds in a loop conformation –Hohne93
- CD-4/1: Unusual p24-MAb binding kinetics, with biphasic association – probably due to conformational changes in p24, not to p24 dimerization –Glaser96
- CD-4/1: Modification of p24 lysine residues by maleic anhydrid increased the affinity of CD-4/1, presumably due to conformational changes exposing a cryptic epitope –Ehrhard96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 39 | 15F8C7 | p24(47–56) | p24(183–197) | ATPQDLNTML | no | Purified HIV-1 | murine($IgG_1$) |

**References:** [Janvier (1990)]

- 15F8C7: Mapped to aa209-217 through Pepscan method – cross-reacts with HIV-2 –Janvier90 – maps to aa203-217 through EIA pentadecapeptide –Janvier92

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40 | 111/052 | p24(51–60) | p24(183–192 IIIB) | DLNTMLNTVG | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |

**References:** [Niedrig (1991)]

- 111/052: Weak cross-reaction with HIV-2 on WB, otherwise not cross-reactive with HIV-2 or SIV MAC –Niedrig91

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 41 | 91-5 | p24(64–75) | p24(196–207) | AAMQMLKETINE | no | HIV-1 infection | human($IgG_1\lambda$) |
| | **References:** [Gorny (1989), Tyler (1990), Robinson (1990b), Gorny (1998)]<br>• 91-5: Synthesized by immortalization of peripheral blood cells with Epstein-Barr virus –Gorny89<br>• 91-5: Did not enhance HIV-1 IIIB infection –Robinson90a<br>• 91-5: NIH AIDS Research and Reference Reagent Program: 1238 | | | | | | |
| 42 | 47-2 | p24(69–86) | p24(201–218 BRU) | LKETINEEAAEWDRVHPV | no | BRU | murine(IgG) |
| | **References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | | |
| 43 | 714/01 | p24(69–86) | p24(201–218 BRU) | LKETINEEAAEWDRVHPV | no | IIIB virus | murine(IgG) |
| | **References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | | |
| 44 | 1109/01 | p24(69–86) | p24(201–218 BRU) | LKETINEEAAEWDRVHPV | no | IIIB virus | murine(IgG) |
| | **References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | | |
| 45 | 1G5C8 | p24(69–86) | p24(201–218 BRU) | LKETINEEAAEWDRVHPV | no | HIV-1 p24 | murine($IgG_{2b}$) |
| | **References:** [Janvier (1990), Robert-Hebmann (1992b), Robert-Hebmann (1992a)]<br>• 1G5C8: Mapped to aa209-217 through Pepscan method (original paper, AAEWDRVHP) –Janvier90 – and to aa203-217 through EIA pentadecapeptide –Janvier92 | | | | | | |
| 46 | 14D4E11 | p24(69–86) | p24(201–218 BRU) | LKETINEEAAEWDRVHPV | no | Purified HIV-1 | murine($IgG_1$) |
| | **References:** [Janvier (1990), Robert-Hebmann (1992b), Robert-Hebmann (1992a)]<br>• 14D4E11: Mapped to aa209-217 through Pepscan method (original paper, AAEWDRVHP) – cross-reacts with HIV-2 –Janvier90 – and to aa203-217 through EIA pentadecapeptide –Janvier92 | | | | | | |
| 47 | 113/038 | p24(71–81) | p24(203–213 IIIB) | ETINEEAAEWD | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)]<br>• 113/038: cross-reactive between HIV-1, HIV-2 and SIV MAC by multiple assays –Niedrig91 | | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 48 | 111/073 | p24(71–81) | p24(203–213 IIIB) | ETINEEAAEWD | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | | **References:** [Niedrig (1991)] | | | | | |
| | | • 111/073: cross-reactive between HIV-1, HIV-2 and SIV MAC by multiple assays –Niedrig91 | | | | | |
| 49 | 1-E-4 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine(IgG) |
| | | **References:** [Niedrig (1989)] | | | | | |
| | | • 1-E-4: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | |
| 50 | 1-E-9 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine(IgG) |
| | | **References:** [Niedrig (1989)] | | | | | |
| | | • 1-E-9: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | |
| 51 | 2-E-4 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_{2a}$) |
| | | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | |
| | | • 2-E-4: Cross reactive between HIV-1, HIV-2 and SIV by ELISA, HIV-1 and HIV-2 by WB –Niedrig88 | | | | | |
| | | • 2-E-4: One of nine MAbs that bind to this peptide – cross-reactive with HIV-2 ROD –Niedrig89 | | | | | |
| 52 | 2-H-4 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_1$) |
| | | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | |
| | | • 2-H-4: Cross reactive between HIV-1, HIV-2 and SIV by ELISA, HIV-1 and HIV-2 by WB –Niedrig88 | | | | | |
| | | • 2-H-4: One of nine MAbs that bind to this peptide – cross-reactive with HIV-2 ROD –Niedrig89 | | | | | |
| 53 | 8-D-2 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_{2a}$) |
| | | **References:** [Niedrig (1989), Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | |
| | | • 8-D-2: HIV-1 specific –Niedrig88 | | | | | |
| | | • 8-D-2: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | |
| 54 | 8-H-7 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_3$) |
| | | **References:** [Niedrig (1988), Niedrig (1989), Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | |
| | | • 8-H-7: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | |
| 55 | 8-G-9 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine(IgG) |
| | | **References:** [Niedrig (1989)] | | | | | |
| | | • 8-G-9: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 56 | 10-E-7 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_1$) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 10-E-7: Cross reactive between HIV-1, HIV-2 and SIV –Niedrig88 | | | | | | |
| | • 10-E-7: One of nine MAbs that bind to this peptide – cross-reactive with HIV-2 ROD and SIV MAC –Niedrig89 | | | | | | |
| 57 | 10-G-9 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_1$)) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 10-G-9: HIV-1 specific –Niedrig88 | | | | | | |
| | • 10-G-9: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | | |
| 58 | 11-C-5 | p24(71–85) | p24(203–217) | ETINEEAAEWDRVHP | no | IIIB virus | murine($IgG_1$) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 11-C-5: HIV-1 specific –Niedrig88 | | | | | | |
| | • 11-C-5: One of nine MAbs that bind to this peptide –Niedrig89 | | | | | | |
| 59 | C5123 | p24(71–85) | p24(203–217 HXB2) | ETINEEAAEWDRVHP | no | Inact HIV lysate | murine($IgG_1\kappa$) |
| | **References:** [Hinkula (1990)] | | | | | | |
| | • C5123: Epitope defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90 | | | | | | |
| 60 | 1-B-7 | p24(76–85) | p24(208–217 BH10) | EAAEWDRVHP | no | IIIB | murine($IgG_1$) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 1-B-7: Reacts with two overlapping peptides, region of overlap is given – reacted with HIV-2 and SIV MAC –Niedrig89 | | | | | | |
| 61 | 3-B-7 | p24(76–85) | p24(208–217 BH10) | EAAEWDRVHP | no | IIIB | murine($IgG_1$) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 3-B-7: Reacts with two overlapping peptides, region of overlap is given – reacted with HIV-2 –Niedrig89 | | | | | | |
| 62 | 6-D-12 | p24(76–85) | p24(208–217 BH10) | EAAEWDRVHP | no | IIIB | murine($IgG_1$) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 6-D-12: Reacts with two overlapping peptides, region of overlap is given – reacted with HIV-2 –Niedrig89 | | | | | | |
| 63 | 6-E-7 | p24(76–85) | p24(208–217 BH10) | EAAEWDRVHP | no | IIIB | murine($IgG_1$) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 6-E-7: Reacts with two overlapping peptides, region of overlap is given – reacted with HIV-2 and SIV MAC –Niedrig89 | | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 64 | 8-D-5 | p24(76–85) | p24(208–217 BH10) | EAAEWDRVHP | no | IIIB | murine(IgG) |
| | **References:** [Niedrig (1988), Niedrig (1989)] | | | | | | |
| | • 8-D-5: Reacts with two overlapping peptides, region of overlap is given – bound only HIV-1 –Niedrig89 | | | | | | |
| 65 | FF1 | p24(76–90) | p24(208–222 HXB2) | EAAEWDRVHPVHAGP | no | Inact HIV | murine($IgG_1\kappa$) |
| | **References:** [Hinkula (1990)] | | | | | | |
| | • FF1: Epitope defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90 | | | | | | |
| 66 | 113/072 | p24(81–90) | p24(213–222 IIIB) | DRVHPVHAGP | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)] | | | | | | |
| | • 113/072: Weak cross-reaction with HIV-2 on WB, otherwise not cross-reactive with HIV-2 or SIV MAC –Niedrig91 | | | | | | |
| 67 | 25.3 | p24(82–102) | p24(82–102) | RVHPVHAGPIAPGQMRE-PRGS | no | | murine($IgG_1\kappa$) |
| | **References:** [Momany (1996)] | | | | | | |
| | • 25.3: Crystal structure of the CA protein bound to Fab 25.3 was solved – monomers form 7 alpha-helices arranged in a coiled-coil – Fab binds to a long antigenic peptide that separates the longest helices, with a salt bridge at CA 82 R, and interactions as far away as positions 100 and 102 –Momany96 | | | | | | |
| 68 | 13-102-100 | p24(86–97) | p24(102–112 IIIB) | VHAGPIAPGIAP | | | murine(IgG) |
| | **Donor:** Advanced Technologies, Inc., Columbia, MD | | | | | | |
| | **References:** [Parker (1996), Qian & Tomer(1998)] | | | | | | |
| | • 13-102-100: Binding site (HPVHAGPIAPG) defined by epitope footprinting – first binding p24 to MAb, then allowing proteolytic cleavage to take place to cleave unprotected residues, then performing mass spectrometry to identify protected residues of epitope –Parker96 | | | | | | |
| | • 13-102-100: Affinity capillary electrophoresis was used to fine map this epitope, and the optimal peptide was defined as VHAGPIAPGIAP – this method uses migration time shifts to probe relative affinities of Abs – the antibody binds to the cyclophilin A binding domain –Qian98 | | | | | | |
| 69 | RL4.72.1 | p24(87–101) | p24(219–233 BRU) | HAGPIAPGQMREPRG | no | NDK | murine(IgG) |
| | **References:** [Tatsumi (1990), Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | | |
| | • RL4.72.1: Immunized with inactivated HIV NDK, D clade, reacts with B clade peptide –RobertHebmann92b | | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 70 | 406/01 | p24(101–121) | p24(233–253 BRU) | GSDIAGTTSTLQEQIGW-MTNN | no | IIIB | murine(IgG) |
| | | **References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | |
| 71 | 38:9.6K | p24(121–130) | p24(253–262 HXB2) | NPPIPVGEIY | no | rec p24-15 | murine($IgG_1\kappa$) |
| | | **References:** [Hinkula (1990)] | | | | | |
| | | • 38:9.6K: Called 38:96K – epitope defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90 | | | | | |
| | | • 38:9.6K: UK Medical Research Council AIDS reagent: ARP365 | | | | | |
| 72 | EB1A9 | p24(121–135) | p24(253–267 LAI) | NPPIPVGEIYKRWII | | Inact CBL-1 | murine($IgG_1$) |
| | | **Donor:** R. B. Ferns and R. S. Tedder | | | | | |
| | | **References:** [Ferns (1987), Ferns (1989)] | | | | | |
| | | • EB1A9: Reacted with both p55 and p24 – showed less than 75% homologous inhibition –Ferns87 | | | | | |
| | | • EB1A9: UK Medical Research Council AIDS reagent: ARP345 | | | | | |
| 73 | EF7 | p24(141–170) | p24(273–302 HXB2) | IVRMYSPTSILDIRQGP-KEPFRDYVDRFYK | | rec p24-15 | murine($IgG_1\kappa$) |
| | | **References:** [Hinkula (1990), Lundin (1996)] | | | | | |
| | | • EF7: Epitope defined by peptide blocking of binding to native protein – WB reactive with p53 –Hinkula90 | | | | | |
| | | • EF7: Included as a control –Lundin96 | | | | | |
| | | • EF7: UK Medical Research Council AIDS reagent: ARP366 | | | | | |
| 74 | 30:3E5 | p24(141–170) | p24(273–302 HXB2) | IVRMYSPTSILDIRQGP-KEPFRDYVDRFYK | | rec p24-15 | murine($IgG_1\lambda$) |
| | | **Donor:** B. Wahren | | | | | |
| | | **References:** [Hinkula (1990)] | | | | | |
| | | • 30:3E5: Epitope defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90 | | | | | |
| | | • 30:3E5: UK Medical Research Council AIDS reagent: ARP367 | | | | | |
| 75 | LH-104-E | p24(143–148) | p24(275–280 BRU) | RMYSPT | no | Peptide | murine($IgG_1\kappa$) |
| | | **References:** [Haaheim (1991)] | | | | | |
| | | • LH-104-E: Reacts with both p24 and p55 –Haaheim91 | | | | | |
| | | • LH-104-E: UK Medical Research Council AIDS reagent: ARP319 | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 76 | 1B2C12 | p24(149–154) | p24(273–292 IIIB) | SILDIR | no | purified HIV-1 | murine($IgG_1$) |
| | **References:** [Janvier (1990)] | | | | | | |
| | • 1B2C12: Reacts with HIV-1 and HIV-2 – mapped to aa281-286 through Pepscan method –Janvier90, and to aa273-292 through EIA pentadecapeptide method –Janvier92 | | | | | | |
| 77 | LH-104-K | p24(149–154) | p24(281–286 BRU) | SILDIR | no | Peptide | murine($IgG_1\kappa$) |
| | **References:** [Haaheim (1991)] | | | | | | |
| | • LH-104-K: Binds exclusively with p24 (not p55) –Haaheim91 | | | | | | |
| | • LH-104-K: UK Medical Research Council AIDS reagent: ARP322 | | | | | | |
| 78 | 1A7 | p24(152–172) | p24(152–172 SIVmac) | CVKQGPKEPFQSYVDRF-YKSL | no | Inact AGMTYO-7 | murine($IgG_1$) |
| | **References:** [Otteken (1992)] | | | | | | |
| | • 1A7: Recognized an epitope present on HIV-2/SIVmac (MAC251/32H) and HIV-2smmH4, but not SIVagmTYO-1, HIV-1 IIIB or SIVmnd –Otteken92 | | | | | | |
| 79 | 1.17.3 | p24(152–172) | p24(152–172 SIVmac) | CVKQGPKEPFQSYVDRF-YKSL | no | Inact AGMTYO-7 | murine($IgG_1$) |
| | **References:** [Otteken (1992)] | | | | | | |
| | • 1.17.3: Recognized an epitope present on HIV-2/SIVmac (MAC251/32H) and HIV-2smmH4, but not SIVagmTYO-1, HIV-1 IIIB or SIVmnd –Otteken92 | | | | | | |
| 80 | 1F6 | p24(152–172) | p24(152–172 SIVmac) | CVKQGPKEPFQSYVDRF-YKSL | no | Inact AGMTYO-7 | murine($IgG_1$) |
| | **References:** [Otteken (1992)] | | | | | | |
| | • 1F6: Recognized an epitope present on HIV-2/SIVmac (MAC251/32H) and HIV-2smmH4, but not SIVagmTYO-1, HIV-1 IIIBor SIVmnd –Otteken92 | | | | | | |
| 81 | 23A5G5 | p24(153–172) | p24(285–304 BRU) | IRQGPKEPFRDYVDRFY-KTL | no | IIIB p25 | murine(IgG) |
| | **References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)] | | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 82 | 23A5G4 | p24(153–172) | p24(285–304 IIIB) | IRQGPKEPFRDYVDRFY-KTL | no | HIV-1 p24 | murine($IgG_1$) |

**References:** [Janvier (1990), Janvier (1996)]

- 23A5G4: Mapped to aa209-217 through Pepscan method –Janvier90 and to aa285-304 through EIA pentadecapeptide method –Janvier92
- 23A5G4: A few sera which were able to bind the linear sequence 178-192, but not sequence 288–302 in an indirect peptide ELISA inhibited the binding of 23A5G4 to the native p24 –Janvier96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 83 | 3D10G6 | p24(153–172) | p24(285–304 IIIB) | IRQGPKEPFRDYVDRFY-KTL | no | purified HIV-1 | murine($IgG_1$) |

**References:** [Janvier (1990)]

- 3D10G6: Epitope cross-reacts with HIV-1 and HIV-2 – mapped to aa260-267 through Pepscan method –Janvier90 and to aa285-304 through EIA pentadecapeptide method –Janvier92

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 84 | F5-4 | p24(153–175) | p24(153–174 HXB2) | IRQGPKEPFRDYVDRFY-KTLRAE | no | ? | murine() |

**References:** [Kusk (1988), Kusk (1992)]

- F5-4: Located in the most hydrophilic region of p24 –Kusk88,Kusk92

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 85 | MO9.42.2 | p24(153–178) | p24(285–310 BRU) | IRQGPKEPFRDYVDRFY-KTLRAEQAS | no | HIV2 ROD | murine(IgG) |

**References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)]

- MO9.42.2: Reacts with HIV-1s, HIV-2s, and SIVs in rec protein ELISA –RobertHebmann92a

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|---|---|---|---|---|---|---|---|
| 86 | MO9.50.2 | p24(153–178) | p24(285–310 BRU) | IRQGPKEPFRDYVDRFY-KTLRAEQAS | no | HIV2 ROD | murine(IgG) |

**References:** [Robert-Hebmann (1992b), Robert-Hebmann (1992a)]

- MO9.50.2: Reacts with HIV-1s, HIV-2s, and SIVs in rec protein ELISA –RobertHebmann92a

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|---|---|---|---|---|---|---|---|
| 87 | V10 | p24(155–169) | p24(289–303 IIIB) | QGPKEPFRDYVDRFY | no | virion | murine() |

**References:** [Matsuo (1992)]

- V10: Reacts with HIV-1 and SIV AGM analogous peptides –Matsuo92

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 88 | V107 | p24(155–177) | p24(289–311 IIIB) | QGPKEPFRDYVDRFYKT-LRAEQA | no | Virion | murine() |

**References:** [Matsuo (1992)]
- V107: Reacts with FIV, HIV-1 and SIV AGM analogous peptides –Matsuo92

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|---|---|---|---|---|---|---|---|
| 89 | 12-B-4 | p24(161–170) | p24(293–302 BH10) | FRDYVDRFYK | no | IIIB virus | murine($IgG_1$) |

**References:** [Niedrig (1988), Niedrig (1989)]
- 12-B-4: Epitope is defined as the overlap between two HIV-1 reactive peptides – cross-reacts with HIV-2 ROD and SIV MAC –Niedrig88,Niedrig89

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|---|---|---|---|---|---|---|---|
| 90 | C5122 | p24(161–170) | p24(293–302 HXB2) | FRDYVDRFYK | no | Inact HIV lysate | murine($IgG_1\kappa$) |

**References:** [Hinkula (1990)]
- C5122: Defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90

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|---|---|---|---|---|---|---|---|
| 91 | 9A4C4 | p24(170–188) | p24(303–317 IIIB) | KTLRAEQASQEVKNWM-TET | no | IIIB p25 | murine($IgG_1$) |

**References:** [Janvier (1990), Robert-Hebmann (1992b), Robert-Hebmann (1992a)]
- 9A4C4: Mapped to aa260-267 through Pepscan method –Janvier90 – and to aa303-317 through EIA pentadecapeptide method –Janvier92

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|---|---|---|---|---|---|---|---|
| 92 | 11D11F2 | p24(171–185) | p24(303–317 IIIB) | TLRAEQASQEVKNWM | no | HIV-1 p24 | murine($IgG_1$) |

**References:** [Janvier (1990)]
- 11D11F2: Mapped to aa260-267 through Pepscan method –Janvier90 – and to aa303-317 through EIA pentadecapeptide method –Janvier92

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|---|---|---|---|---|---|---|---|
| 93 | 11C10B10 | p24(171–185) | p24(303–317 IIIB) | TLRAEQASQEVKNWM | no | HIV-1 p24 | murine($IgG_1$) |

**References:** [Janvier (1990)]
- 11C10B10: Mapped to aa260-267 through Pepscan method –Janvier90 – and to aa303-317 through EIA pentadecapeptide method –Janvier92

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|---|---|---|---|---|---|---|---|
| 94 | CD12B4 | p24(171–185) | p24(303–317 LAI) | TLRAEQASQEVKNWM | | Inact CBL-1 | murine($IgG_1$) |

**Donor:** R. B. Ferns and R. S. Tedder
**References:** [Ferns (1987), Ferns (1989)]
- CD12B4: Reacted with both p55 and p24 – strain-specific binding –Ferns87
- CD12B4: UK Medical Research Council AIDS reagent: ARP346

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 95 | BE3 | p24(176–190) | p24(308–322 HXB2) | QASQEVKNWMTETLL | no | rec p24-15 | murine($IgG_1\kappa$) |
| | **Donor:** B. Wahren<br>**References:** [Hinkula (1990)]<br>• BE3: Defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90<br>• BE3: UK Medical Research Council AIDS reagent: ARP368 | | | | | | |
| 96 | L14 | p24(176–190) | p24(308–322 HXB2) | QASQEVKNWMTETLL | no | rec p24-15 | murine($IgG_1\kappa$) |
| | **Donor:** B. Wahren<br>**References:** [Hinkula (1990)]<br>• L14: Defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90<br>• L14: UK Medical Research Council AIDS reagent: ARP369 | | | | | | |
| 97 | 110/015 | p24(181–190) | p24(313–322 IIIB) | VKNWMTETLL | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)]<br>• 110/015: Cross-reactive between HIV-1, HIV-2 and SIV MAC by multiple tests –Niedrig91 | | | | | | |
| 98 | 108/03 | p24(181–190) | p24(313–322 IIIB) | VKNWMTETLL | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | **References:** [Niedrig (1991)]<br>• 108/03: Cross-reactive between HIV-1, HIV-2 and SIV MAC by multiple tests –Niedrig91 | | | | | | |
| 99 | 32:32K | p24(199–222) | p24(331–354 HXB2) | KTILKALGPAATLEEMM-TACQGVG | | rec p24-15 | murine($IgG_1\lambda$) |
| | **References:** [Hinkula (1990)]<br>• 32:32K: Epitope defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90<br>• 32:32K: UK Medical Research Council AIDS reagent: ARP368 | | | | | | |
| 100 | C5200 | p24(199–222) | p24(331–354 HXB2) | KTILKALGPAATLEEMM-TACQGVG | | Inact HIV-1 lysate | murine($IgG_1\kappa$) |
| | **References:** [Hinkula (1990)]<br>• C5200: Epitope defined by peptide blocking of binding to native protein –Hinkula90 | | | | | | |
| 101 | FH2 | p24(201–215) | p24(333–347 HXB2) | ILKALGPAATLEEMM | no | rec p24-15 | murine($IgG_1\kappa$) |
| | **References:** [Hinkula (1990)]<br>• FH2: Defined by peptide blocking of binding to native protein – WB reactive with p53 and p24 –Hinkula90 | | | | | | |

| | MAb ID | HXB2 Location | Author's Location | Sequence | Neutralizing | Immunogen | Species(Isotype) |
|---|---|---|---|---|---|---|---|
| 102 | 13B5 | p24(206–215) | p24(205–213) | LGPAATLEEM | | rec p24 RH24 | murine( ) |
| | | **Donor:** bioMerieux | | | | | |
| | | **References:** [Berthet-Colominas (1999)] | | | | | |
| | | • 13B5: FAb which was bound to p24 capsid for crystallization and study of p24's structure –BerthetColominas99; | | | | | |
| 103 | 106/01 | p24(211–230) | p24(343–362 IIIB) | LEEMMTACQGVGGPGH-KARV | no | IIIB p24-$\beta$-gal fusion | murine($IgG_1$) |
| | | **References:** [Niedrig (1991)] | | | | | |
| | | • 106/01: Cross-reactive between HIV-1, HIV-2 and SIV MAC by multiple tests –Niedrig91 | | | | | |
| 104 | LH-104-B | p24(225–230) | p24(357–362 BRU) | GHKARV | no | Peptide | murine($IgG_1\kappa$) |
| | | **References:** [Haaheim (1991)] | | | | | |
| | | • LH-104-B: Binds exclusively with p55 (not p24), in contrast to LH-104-I –Haaheim91 | | | | | |
| | | • LH-104-B: UK Medical Research Council AIDS reagent: ARP308 | | | | | |
| 105 | LH-104-I | p24(226–231) | p24(358–363 BRU) | HKARVL | no | Peptide | murine($IgG_1\kappa$) |
| | | **References:** [Haaheim (1991)] | | | | | |
| | | • LH-104-I: Binds exclusively with p24 (not p55), in contrast to LH-104-B –Haaheim91 | | | | | |
| | | • LH-104-I: UK Medical Research Council AIDS reagent: ARP321 | | | | | |
| 106 | 91-6 | p24( ) | p24(121-240) | | no | HIV-1 infection | human($IgG_1\lambda$) |
| | | **References:** [Gorny (1989), Robinson (1990b)] | | | | | |
| | | • 91-6: No enhancing activity for HIV-1 IIIB –Robinson90a | | | | | |
| | | • 91-6: NIH AIDS Research and Reference Reagent Program: 1239 | | | | | |