Table 1: **p17**

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species(Isotype)
1	L14.17	p17(11–25)	p17(11–25 BRU)	GELDRWEKIRLRPGG	no	Inactivated BRU	murine(IgG)
	References: [Tatsumi (1990), Robert-Hebmann (1992b), Robert-Hebmann (1992a)]						
2	HyHIV-1	p17(12–29)	p17(12–29 JMH1)	ELDKWEKIRLRPGGKTLY	no	rec p17	murine(IgG_1)
	References: [Liu (1995), Ota & Ueda(1998)]						
	• HyHIV-1: This paper compares the results of affinity constant (Ka) measurements of anti-p17 MAbs using double Ab methods versus the faster, isotope-free BIAcore system, and results were found to be similar for HyHIV-(1-6)– these six MAbs all bind to the first α helix of p17, a functional domain for both membrane binding and nuclear localization – Ota98b						
3	HyHIV-2	p17(12–29)	p17(12–29 JMH1)	ELDKWEKIRLRPGGKTLY	no	rec p17	murine(IgG_1)
	References: [Liu (1995), Ota & Ueda(1998)]						
	• HyHIV-2: This paper compares the results of affinity constant (Ka) measurements of anti-p17 MAbs using double Ab methods versus the faster, isotope-free BIAcore system, and results were found to be similar for HyHIV-(1-6)– these six MAbs all bind to the first α helix of p17, a functional domain for both membrane binding and nuclear localization – Ota98b						
4	HyHIV-3	p17(12–29)	p17(12–29 JMH1)	ELDKWEKIRLRPGGKTLY	no	rec p17	murine(IgG_1)
	References: [Liu (1995), Ota & Ueda(1998)]						
	• HyHIV-3: This paper compares the results of affinity constant (Ka) measurements of anti-p17 MAbs using double Ab methods versus the faster, isotope-free BIAcore system, and results were found to be similar for HyHIV-(1-6)– these six MAbs all bind to the first α helix of p17, a functional domain for both membrane binding and nuclear localization – Ota98b						
5	HyHIV-4	p17(12–29)	p17(12–29 JMH1)	ELDKWEKIRLRPGGKTL-Y?	no	rec p17	murine(IgG_1)
	References: [Liu (1995), Ota (1998), Ota & Ueda(1998)]						
	• HyHIV-4: epitope uncertain, based on the best estimate from JMH1 sequence– Ka is 1.8×10^7 M^{-1} for rec p17 – stains the surface of infected cells indicating the antigen is exposed at the cell surface –Ota98a						
	• HyHIV-4: This paper compares the results of affinity constant (Ka) measurements of anti-p17 MAbs using double Ab methods versus the faster, isotope-free BIAcore system, and results were found to be similar for HyHIV-(1-6)– these six MAbs all bind to the first α helix of p17, a functional domain for both membrane binding and nuclear localization – Ota98b						

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species(Isotype)
6	HyHIV-5	p17(12–29)	p17(12–29 JMH1)	ELDKWEKIRLRPGGKTLY	no	rec p17	murine(IgG_1)

References: [Liu (1995), Ota & Ueda(1998)]

- HyHIV-5: This paper compares the results of affinity constant (Ka) measurements of anti-p17 MAbs using double Ab methods versus the faster, isotope-free BIAcore system, and results were found to be similar for HyHIV-(1-6)– these six MAbs all bind to the first α helix of p17, a functional domain for both membrane binding and nuclear localization – Ota98b

7	HyHIV-6	p17(12–29)	p17(12–29 JMH1)	ELDKWEKIRLRPGGKTLY	no	rec p17	murine(IgG_1)

References: [Liu (1995), Ota & Ueda(1998)]

- HyHIV-6: This paper compares the results of affinity constant (Ka) measurements of anti-p17 MAbs using double Ab methods versus the faster, isotope-free BIAcore system, and results were found to be similar for HyHIV-(1-6)– these six MAbs all bind to the first α helix of p17, a functional domain for both membrane binding and nuclear localization – Ota98b

8	32/1.24.89	p17(17–22)	p17(17–22 IIIB)	EKIRLR	L	Viral lysate	murine(IgG)

References: [Papsidero (1989)]

- 32/1.24.89: Inhibited infectivity of cell free virus –Papsidero89

9	3E11	p17(19–38)	p17(19–38 SIVmac)	IRLPGGKKKYMLKHVV-WAA	no	Inact AGMTYO-7	murine(IgG_1)

References: [Otteken (1992), Nilsen (1996)]

- 3E11: There is another MAb with this ID that recognizes integrase –Nilsen96
- 3E11: Recognized an epitope present on HIV-2/SIVmac (MAC251/32H), SIVagm, HIV-1, and SIVmnd, demonstrating that the matrix protein of all nine HIV and SIV isolates tested in this study expresses at least one highly conserved immunogenic epitope –Otteken92

10	3B10	p17(19–38)	p17(19–38 SIVmac)	IRLPGGKKKYMLKHVV-WAA	no	Inact AGMTYO-7	murine(IgG_1)

References: [Otteken (1992)]

- 3B10: Recognized an epitope present on HIV-2/SIVmac (MAC251/32H) , SIVagm, HIV-1, and SIVmnd, demonstrating that the matrix protein of all nine HIV and SIV isolates tested in this study expresses at least one conserved immunogenic epitope recognized serologically –Otteken92

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species(Isotype)
11	HyHIV-21	p17(30–52)	p17(30–52 JMH1)	KLKHIIWASRELERFAV-NPGLLE	no	rec p17	murine(IgG_{2a})

References: [Liu (1995), Ota (1998)]

- HyHIV-21: epitope uncertain, based on the best estimate from JMH1 sequence – Ka is 3.6×10^6 M^{-1} for rec p17 – stains the surface of infected cells indicating the antigen is exposed at the cell surface –inhibited growth of HIV-1 JMH1 in MT-4 cells when added 24 hours after the initial culture –Ota98a

12	-B4f8	p17(51–65)	p17(51–65)	LETSEGCRQILGQLQ	no	IIIB lysate	rat(IgG_{2a})

References: [Shang (1991)]

- -B4f8: Did not bind live infected cells, only cells that had been made permeable with acetone –Shang91

13	12H-D3b3	p17(62–78)	p17(62–78)	GQLQPSLQTGSEELRSL	no	IIIB lysate	rat(IgG_{2a})

References: [Shang (1991)]

- 12H-D3b3: Did not bind live infected cells, only cells that had been made permeable with acetone –Shang91

14	12G-A8g2	p17(86–115)	p17(86–115)	YCVHQRIEIKDTKEALD-KIEEEQNKSKKKA	no	IIIB lysate	rat(IgG_{2a})

References: [Shang (1991)]

- 12G-A8g2: Bound to 30-mer, but not to internal peptides – did not bind live infected cells – antigenic domain known as HPG30 –Shang91

15	12G-D7h11	p17(86–115)	p17(86–115)	YCVHQRIEIKDTKEALD-KIEEEQNKSKKKA	no	IIIB lysate	rat(IgG_{2a})

References: [Shang (1991)]

- 12G-D7h11: Bound to 30-mer, but not to internal peptides – did not bind live infected cells – antigenic domain known as HPG30 –Shang91

16	12I-D12g2	p17(86–115)	p17(86–115)	YCVHQRIEIKDTKEALD-KIEEEQNKSKKKA	no	IIIB lysate	rat(IgG_{2a})

References: [Shang (1991)]

- 12I-D12g2: Bound to 30-mer, but not to internal peptides – did not bind live infected cells – antigenic domain known as HPG30 –Shang91

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species(Isotype)
17	12G-H1c7	p17(86–115)	p17(86–115)	YCVHQRIEIKDTKEALD-KIEEEQNKSKKKA	no	IIIB lysate	rat(IgG)
	References: [Shang (1991)]						
	• 12G-H1c7: Bound to 30-mer, but not to internal peptides – did not bind live infected cells – antigenic domain known as HPG30 –Shang91						
18	polyclonal	p17(86–115)	p17(86–115)	YSVHQRIDVKDTKEALE-KIEEEQNKSKKKA	L	peptide, oral, cholera toxin adjuvant	murine(IgA)
	References: [Bukawa (1995)]						
	• Polyclonal secretory IgA antibody raised by mucosal immunization is able to neutralize IIIB, SF2, and MN – HIV-1 neutralization may be due to the V3, CD4 or HPG30 component of the multicomponent peptide immunogen –Bukawa95						
19	HyHIV-15	p17(87–115)	p17(87–115 JMH1)		L	rec p17	murine(IgG_1)
	References: [Liu (1995), Ota (1998)]						
	• HyHIV-15: epitope uncertain, based on the best estimate from JMH1 sequence – Ka is 1.4×10^7 M^{-1} for rec p17 – stains the surface of infected cells indicating the antigen is exposed at the cell surface – inhibited growth of HIV-1 JMH1 in MT-4 cells when added 24 hours after the initial culture –Ota98a						
20	11H9	p17(101–115)	p17(101–115 SF2)	LEKIEEEQNKSKKKA?		Inact CBL-1	murine(IgG_1)
	Donor: R. B. Ferns and R. S. Tedder						
	References: [Ferns (1987), Ferns (1989)]						
	• 11H9: Reactive against p18 and p55 –Ferns87						
	• 11H9: UK Medical Research Council AIDS reagent: ARP344						
21	C5126	p17(113–122)	p17(113–122 HXB2)	KKAQQAAADT	no	Inact HIV lysate	murine($IgG_1\kappa$)
	References: [Hinkula (1990)]						
	• C5126: Defined epitope by peptide blocking of binding to native protein – WB reactive with p53 and p17 –Hinkula90						
22	3-H-7	p17(113–122)	p17(113–122 BH10)	KKAQQAAADT	L	IIIB	murine(IgG)
	References: [Niedrig (1989), Robert-Hebmann (1992b), Robert-Hebmann (1992a), Levin (1997)]						
	• 3-H-7: No cross-reactivity with HIV-2 ROD or SIV MAC by immunoblot –Niedrig89						
	• 3-H-7: Called 3H7 – using a bicistronic vector, an intracellular Fab intrabody, 3H7, can inhibit HIV-1 infection when expressed in the cytoplasm of dividing CD4+ T cells – HXBIIIB and SI primary isolate virions from 3H7 expressing cells were far less infectious – 3H7 intrabody acts both at the stage of nuclear import and virus particle assembly –Levin97						

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species(Isotype)
23	4H2B1	p17(119–132)	p17(121–134 SF2)	AAGTGNSSQVSQNY		Inact CBL-1	murine(IgG_1)
	Donor: R. B. Ferns and R. S. Tedder **References:** [Ferns (1987), Ferns (1989)] • 4H2B1: Reactive against p18 and p55 of multiple isolates –Ferns87 • 4H2B1: UK Medical Research Council AIDS reagent: ARP315						
24	1D9	p17(119–132)	p17(121–134 SF2)	AAGTGNSSQVSQNY		Inact CBL-1	murine(IgG_{2a})
	Donor: R. B. Ferns and R. S. Tedder **References:** [Ferns (1987), Ferns (1989)] • 1D9: Reactive against p18, but not p55 –Ferns87 • 1D9: UK Medical Research Council AIDS reagent: ARP316						
25	4C9	p17(119–132)	p18(121–134 SF2)	AAGTGNSSQVSQNY		Inact CBL-1	murine(IgG_{2a})
	Donor: R. B. Ferns and R. S. Tedder **References:** [Ferns (1987), Ferns (1989)] • 4C9: Reactive against p18, but not p55 –Ferns87 • 4C9: UK Medical Research Council AIDS reagent: ARP342						
26	9G5	p17(119–132)	p17(121–134 SF2)	AAGTGNSSQVSQNY		Inact CBL-1	murine(IgM)
	Donor: R. B. Ferns and R. S. Tedder **References:** [Ferns (1987), Ferns (1989)] • 9G5: Reactive against p18, but not p55 –Ferns87 • 9G5: UK Medical Research Council AIDS reagent: ARP343						
27	31-11	p17(121–132)	p17(121–132 BRU)	DTGHSSQVSQNY	no	BRU	murine(IgG)
	References: [Robert-Hebmann (1992b), Robert-Hebmann (1992a)]						
28	15-21	p17(121–132)	p17(121–132 BRU)	DTGHSSQVSQNY	no	BRU	murine(IgG)
	References: [Robert-Hebmann (1992b), Robert-Hebmann (1992a)]						
29	sc-FV p17	p17(121–132)	p17(121–132 BRU)	DTGHSSQVSQNY	L	BRU	murine($IgG_1\kappa$)
	Donor: Paul Zhou, NIH, Bethesda, MD, USA **References:** [Robert-Hebmann (1992a), Tewari (1998)] • A single chain Ab (sc-FV) was made from an anti-p17 MAb, and intracellular binding of sc-FV resulted in inhibition of viral replication that was more pronounced when the sc-FV was expressed in the cytoplasm instead of the nucleaus –Tewari98						