Table 4: **Gag**

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutral-izing	Immunogen	Species (Isotype)
122	32/5.8.42	Gag(dis)	p17(12-19 + 100–105 IIIB)	ELDRWEKI + ALDKIE	no	Viral lysate	murine(IgG)
	References: [Papsidero (1989)]						
	• 32/5.8.42: Inhibited infectivity of cell free virus – bound to both peptides, ELDRWEKI and ALDKIE [Papsidero (1989)]						
123	32/5.8.42	Gag(dis)	p17(12-19 + 100–105 IIIB)	ELDRWEKI + ALDKIE	no	Viral lysate	murine(IgG)
	References: [Papsidero (1989)]						
	• 32/5.8.42: Inhibited infectivity of cell free virus – bound ELDRWEKI and ALDKIE [Papsidero (1989)]						
124	CH9B2	Gag( )	p17( )			Inact CBL-1	murine(IgG_1)
	Donor: R. B. Ferns and R. S. Tedder						
	References: [Ferns (1987), Ferns (1989)]						
	• CH9B2: Reactive against p18 and p55 [Ferns (1987)]						
	• CH9B2: UK Medical Research Council AIDS reagent: ARP349						
125	G11G1	Gag( )	p17( )			?	rat( )
	References: [Shang (1991), Pincus (1996)]						
	• G11G1: Immunotoxins were generated by linking Env MAbs to ricin A – immunotoxins mediated cell killing, but only if the antigen was expressed at the cell surface – ricin-G11G1 did not mediate cell killing [Pincus (1996)]						
126	2A6	Gag( )	p17( )			?	( )
	Donor: A. O. Arthur, Frederick Cancer Research and Development Center, Frederick, MD						
	References: [Pincus (1998)]						
	• 2A6: Part of a panel of 17 MAbs used as controls testing for the dual specificity of MAb G11H3 for both p17 and mycoplasma [Pincus (1998)]						
127	G11H3	Gag(dis)	p17(Gag dis)			?	( )
	References: [Shang (1991), Pincus (1998)]						
	• G11H3: This MAb is cross-reactive between p17 and mycoplasma – this antibody binds strain specifically to the variable lipoprotein (Vlp) F of M. hyorhinis, in the region of the carboxy-terminal repeat CGGSTPTPEQGNNQG-GSTPTPEQGNSQVSK – the p17 epitope is discontinuous, but p17 and Vlp F share the tetrapeptide SQVS [Pincus (1998)]						

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutral-izing	Immunogen	Species (Isotype)
128	HyHIV-19	Gag(dis)	p17(dis JMH1)		no	rec p17	murine(IgG_1)
	References: [Liu (1995), Ota (1998)]						
	• HyHIV-19: Does not react with p17 peptides – K_a is 3.7×10^6 M^{-1} for rec p17 – inhibited growth of HIV-1 JMH1 in MT-4 cells when added 24 hours after the initial culture [Ota (1998)]						
129	5E2.A3k	Gag(dis)	p24(1-158 dis SF2)		no		murine(IgG_1)
	Donor: Biodesign International, Kennebunk, Maine, USA						
	References: [Hochleitner (2000a)]						
	• 5E2.A3k: The Ab binding site was studied with epitope excision (protein is bound in native conformation to immobilized MAb, then digested with proteolytic enzymes) and extraction (protein is digested then allowed to react with Ab), followed by mass spectroscopy, as well as lysine modification – the epitope is discontinuous, but involves the highly conserved N-term proline, and the antibody recognizes SIVs and HIV-2 as well as HIV-1 p24 [Hochleitner (2000a)]						
130	BC1071	Gag( )	p24( )		no	HIV-1 infection	murine( )
	Donor: Aalto BioReagents						
	References: [Schonning (1999)]						
	• BC1071: The stoichiometry of MAb neutralization was tested and MAb BC1071 was used in this study for virion quantitation [Schonning (1999)]						
131	91-6	Gag( )	p24(121-240 IIIB)		no	HIV-1 infection	human($IgG_1\lambda$)
	References: [Gorny (1989), Robinson (1990b)]						
	• 91-6: No enhancing activity for HIV-1 IIIB [Robinson (1990b)]						
	• 91-6: NIH AIDS Research and Reference Reagent Program: 1239						
132	LH-104-A	Gag(dis)	p24(dis BRU)	DIRQGP + QGVGGP	no	104 amino acid peptide	murine($IgG_1\kappa$)
	References: [Haaheim (1991)]						
	• LF-104-A: Hexapeptide scans revealed two reactive p24 peptides – cross-competition studies indicated the region 270–286 [Haaheim (1991)]						
	• LH-104-A: UK Medical Research Council AIDS reagent: ARP307						
133	EH12E1	Gag(dis)	p24(Gag dis)			Inact CBL-1	murine(IgG_1)
	Donor: R. B. Ferns and R. S. Tedder						
	References: [Ferns (1987), Ferns (1989)]						
	• EH12E1: Reacted with p55 and p24 in WB [Ferns (1987)]						
	• EH12E1: UK Medical Research Council AIDS reagent: ARP313						

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	MAb ID	HXB2 Location	Author's Location	Sequence	Neutral-izing	Immunogen	Species (Isotype)
134	LH-104-C	Gag(dis)	p24(dis BRU)	GPKEPF + QGVGGP	no	104 amino acid peptide	murine($IgG_3\kappa$)
	References: [Haaheim (1991)] • LF-104-C: Hexapeptide scans revealed two reactive p24 peptides – cross-competition studies indicated the region 351–373 [Haaheim (1991)] • LH-104-C: UK Medical Research Council AIDS reagent: ARP309						
135	71-31	Gag( )	p24( )		no	HIV-1	human($IgG_1\lambda$)
	References: [Gorny (1989), Robinson (1990b), Robinson (1991), Spear (1993), Gorny (1997), Gorny (1998), Bandres (1998)] • 71-31: Did not enhance HIV-1 IIIB infection [Robinson (1990b)] • 71-31: No enhancing or neutralizing activity [Robinson (1991)] • 71-31: Did not mediate deposition of complement component C3 on HIV infected cells [Spear (1993)] • 71-31: Included as a negative control in studies that demonstrate that CXCR4 can bind to gp120 in the absence of CD4-gp120 interactions, and that this binding can be enhanced by Env deglycosylation [Bandres (1998)] • 71-31: NIH AIDS Research and Reference Reagent Program: 530						
136	V7-8	Gag( )	p24( )		no	HIV-1 infection	murine($IgG_3\kappa$)
	References: [Robinson (1990b), Montefiori (1991)] • V7-8: Did not enhance HIV-1 IIIB infection [Robinson (1990b)] • V7-8: Reacted with HIV-1IIIB, RF, and MN [Montefiori (1991)] • V7-8: NIH AIDS Research and Reference Reagent Program: 381						
137	98-4.9	Gag( )	p24( )		no	HIV-1 infection	murine($IgG_3\lambda$)
	References: [Gorny (1989)]						
138	98-4.3	Gag( )	p24( )		no	HIV-1 infection	human($IgG_1\lambda$)
	References: [Robinson (1991)] • 98-4.3: No enhancing or neutralizing activity [Robinson (1991)]						

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutral-izing	Immunogen	Species (Isotype)
139	IE8G2	Gag( )	p24( )			Inact CBL-1	murine(IgG_1)

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

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

- IE8G2: Reacted with both p55 and p24 – broadly reactive – showed less than 75% homologous inhibition [Ferns (1987)]
- IE8G2: UK Medical Research Council AIDS reagent: ARP347

140	human sera	Gag( )	p24( )			HIV-1 infection	human(IgG)

References: [Binley (1997b)]

- Retention of anti-Env antibodies and loss of anti-Gag antibodies during progression was studied, and suggested to be the result of the loss of T-cell help and the unique ability of Env to stimulate B cells even in a backdrop of declining CD4 cells, because of the ability of Env to bind to the CD4 molecule [Binley (1997b)]

141	241-D	Gag( )	p24( )		no		human($IgG_1\lambda$)

Donor: Susan Zolla-Pazner (Zollas01@mcrcr6.med.nyu) (NYU Med. Center)

References: [Gorny (1989), Tyler (1990), Robinson (1991)]

- 241-D: An antibody by this name is available in the NIH AIDS Research and Reference Reagent Program, and they refer to the papers: [Gorny (1989), Tyler (1990), Robinson (1991)], but no p24 MAb by this name is discussed in these papers
- 241-D: MH AIDS Research and Reference Reagent program: 1244

142	183-H12-5C	Gag( )	p24( )		no	unk	murine(IgG_1)

Donor: Bruce Chesebro and Kathy Wehrly, Rocky Mountain Laboratories, Hamilton, Montana

References: [Chesebro (1992), Toohey (1995), Wehrly & Chesebro(1997)]

- 183-H12-5C: Cross-reacts with HIV1 and HIV-2 p24, and SIV p27
- 183-H12-5C: Used as antigen capture reagent for p24 ELISA [Chesebro (1992), Toohey (1995)]
- 183-H12-5C: Cross-reacts with HIV1 and HIV-2 p24, and SIV p27 [Wehrly & Chesebro(1997)]
- 183-H12-5C: NIH AIDS Research and Reference Reagent Program: 3537

143	ED8	Gag(dis)	p7(Gag dis)		no	purified NCp7	murine(IgG)

References: [Tanchou (1995)]

- ED8: Binds NCp7 independent of Zn fingers, does not react with NCp15 [Tanchou (1995)]

144	AC2	Gag(dis)	p7(Gag dis)		no	purified NCp7	murine(IgG)

References: [Tanchou (1995)]

- AC2: Binds NCp7 independent of Zn fingers, does not react with NCp15 [Tanchou (1995)]

Table of HIV MAbs

	MAb ID	HXB2 Location	Author's Location	Sequence	Neutral-izing	Immunogen	Species (Isotype)
145	CD9	Gag(dis)	p7(Gag dis)		no	purified NCp7	murine(IgG)
	References: [Tanchou (1995)]						
	• CD9: Binds NCp7 independent of Zn fingers, does not react with NCp15 [Tanchou (1995)]						
146	BE10	Gag(dis)	p7(Gag dis)		no	purified NCp7	murine(IgG)
	References: [Tanchou (1995)]						
	• BE10: Binding NCp7 requires Zn fingers, does not react with NCp15, inhibits NCp7-tRNA interaction [Tanchou (1995)]						
147	polyclonal	Gag( )	p24( )			rgp120 and p24 SF2 in PLG+MF59 microparticles	murine and ba-boon( )
	References: [O'Hagan (2000)]						
	• Microparticles were used as an adjuvant for entrapped HIV-1 gp120 and induced strong serum IgG responses in mice – polylactide co-glycolide polymer (PLG) microparticles in combination with MF59 had the highest Ab response and also induced p24 specific CTL [O'Hagan (2000)]						