

Table 8: Pol

MAB ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
193	polyclonal	Pol()	p55()	no	HIV-1 Pr55gag VLP with anchored gp120 or V3+CD4 linear domains	<i>Macaca mulatta</i> ()
References: [Wagner (1998)] <ul style="list-style-type: none"> • A VLP is a non-infectious virus-like particle self-assembled from HIV Pr55 gag – macaques were immunized with VLPs bound to either gp120 or V3+CD4 linear domains – gag and env CTL specific CTL were stimulated in each case, and Ab response to gag and gp120 and was elicited, but the gp120 neutralizing response occurred only with whole gp120, not V3+CD4 – despite the CTL and Ab response, immunized macaques were infected by intervenous challenge with SHIV chimeric challenge stock [Wagner (1998)] 						
194	RT70	Pol()	RT(231-315)		rRT	murine(IgG ₁)
Donor: B. Ferns and R. Tedder References: [Ferns (1991)] <ul style="list-style-type: none"> • RT70: Conformational epitope located centrally in the protein – inhibited RT enzyme activity and thus may bind close to the active site of the enzyme [Ferns (1991)] • RT70: UK Medical Research Council AIDS reagent: ARP381 						
195	RT7U	Pol()	RT(231-315)		rRT	murine()
Donor: B. Ferns and R. Tedder References: [Ferns (1991)] <ul style="list-style-type: none"> • RT7U: Has a conformational epitope – reacts with p66 and p51 in WB [Ferns (1991)] • RT7U: UK Medical Research Council AIDS reagent: ARP380 						
196	1C12B1	Pol()	RT(431-521)		rRT	murine()
References: [Ferns (1991)] <ul style="list-style-type: none"> • 1C12B1: Recognized both p66 and p51 in Western blot, binds to C terminus [Ferns (1991)] • 1C12B1: UK Medical Research Council AIDS reagent: ARP384 						
197	8G4	Pol(dis)	Integrase(22-31 + 82-101 HXB2)	no	MA5DFNLPPV + GYIEAEVI-PAETGQETAYFI?	murine(IgG ₁ κ)
References: [Haugan (1995), Nilsen (1996)] <ul style="list-style-type: none"> • 8G4: This MAb reacted strongly with peptides IN(12-31) and IN(22-42), and less strongly with peptide IN(82-101) – it did not react with a deletion mutant of positions 17-38 – this MAb inhibits end processing and DNA joining, but had little effect on integration activities [Nilsen (1996)] • 8G4: MAb interferes with integrase binding to DNA [Haugan (1995)] 						

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198 12	Pol() References: [Bizub-Bender (1994), Levy-Mintz (1996)] <ul style="list-style-type: none"> 12: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – the Zn finger motif is in the binding region – MABs 12, 13 and 35 form a competition group [Bizub-Bender (1994)] 12: Used for the creation of single-chain variable antibody fragments (SFVs) for internal cellular expression – neutralization of IN activity prior to integration, whether the Ab is expressed in the nucleolus or the cytoplasm – relative binding affinity to IN: $12 > 17 = 33 > 21 > 4$ [Levy-Mintz (1996)] 	Integrase(1-58)		no	rec IN	murine(IgG _{2a})
199 35	Pol() References: [Bizub-Bender (1994)] <ul style="list-style-type: none"> 35: There appears to be two IN Abs with similar names: MAb 35 and 35 [Barsov (1996), Bizub-Bender (1994)] 35: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – the Zn finger motif is in the binding region – MABs 12, 13 and 35 form a competition group [Bizub-Bender (1994)] 	Integrase(1-58)		no	rec IN	murine(IgG _{2b})
200 13	Pol() References: [Bizub-Bender (1994)] <ul style="list-style-type: none"> 13: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – the Zn finger motif is in the binding region – MABs 12, 13 and 35 form a competition group [Bizub-Bender (1994)] 	Integrase(1-58)		no	rec IN	murine(IgG ₁)
201 14	Pol() References: [Bizub-Bender (1994)] <ul style="list-style-type: none"> 14: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – the Zn finger motif is in the binding region – MABs 14 and 17 form a competition group [Bizub-Bender (1994)] 	Integrase(1-58)		no	rec IN	murine(IgG ₁)

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MAB ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
202 17	Pol()	Integrase(1-58) References: [Bizub-Bender (1994), Levy-Mintz (1996)]		no	rec IN	murine(IgG ₁)
		<ul style="list-style-type: none"> • 17: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – the Zn finger motif is in the binding region – MAbs 14 and 17 form a competition group [Bizub-Bender (1994)] • 17: Used for the creation of single chain variable antibody fragments (SFvs) for internal cellular expression – neutralization of IN activity prior to integration, whether the Ab is expressed in the nucleolus or the cytoplasm – relative binding affinity to IN: 12 > 17 = 33 > 21 > 4 [Levy-Mintz (1996)] 				
203 21	Pol()	Integrase(58-141) References: [Bizub-Bender (1994), Levy-Mintz (1996)]		no	rec IN	murine(IgG _{2b})
		<ul style="list-style-type: none"> • 21: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized [Bizub-Bender (1994)] • 21: Used for the creation of single chain variable antibody fragments (SFvs) for internal cellular expression – neutralization of IN activity prior to integration, whether the Ab is expressed in the nucleolus or the cytoplasm – relative binding affinity to IN: 12 > 17 = 33 > 21 > 4 [Levy-Mintz (1996)] 				
204 4	Pol()	Integrase(141-172) References: [Bizub-Bender (1994), Levy-Mintz (1996)]		no	rec IN	murine(IgG _{2b})
		<ul style="list-style-type: none"> • 4: There is another MAb with this ID that reacts with gp41 [Oldstone (1991), Bizub-Bender (1994)] • 4: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – 4 has a low binding affinity [Bizub-Bender (1994)] • 4: Used for the creation of single chain variable antibody fragments (SFvs) for internal cellular expression – neutralization of IN activity prior to integration, whether the Ab is expressed in the nucleolus or the cytoplasm – relative binding affinity to IN: 12 > 17 = 33 > 21 > 4 [Levy-Mintz (1996)] 				
205 16	Pol(dis)	Integrase(Pol dis) References: [Bizub-Bender (1994)]		no	rec IN	murine(IgG _{2a})
		<ul style="list-style-type: none"> • 16: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized [Bizub-Bender (1994)] 				

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MAB ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
206 32	Pol() References: [Bizub-Bender (1994)] • 32: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – MAbs 32 and 33 form a competition group [Bizub-Bender (1994)]	Integrase(259-288) Bizub-Bender (1994)		no	rec IN	murine(IgG _{2b})
207 33	Pol() References: [Bizub-Bender (1994), Levy-Mintz (1996)] • 33: BALBc mice were immunized with rec integrase, hybridomas expressing anti-integrase Abs were generated, and the antibodies characterized – MAbs 32 and 33 form a competition group [Bizub-Bender (1994)] • 33: Used for the creation of single chain variable antibody fragments (SFvs) for internal cellular expression – neutralization of IN activity prior to integration, whether the Ab is expressed in the nucleolus or the cytoplasm – relative binding affinity to IN: 12 > 17 = 33 > 21 > 4 [Levy-Mintz (1996)]	Integrase(259-288) Bizub-Bender (1994), Levy-Mintz (1996)		no	rec IN	murine(IgG _{2b})
208 7C4	Pol(dis) References: [Chiba (1997)] • 7C4: Dose-dependent inhibition of polymerase activity of RT of strains IIIB, Bru and HIV-2 strains GH-1 or LAV-2 or SIV strains MAC or MND [Chiba (1997)]	RT(Pol dis) Chiba (1997)			rec vaccinia-RT	murine(IgG ₁)
209 3D12	Pol(dis) References: [Chiba (1997)] • 3D12: There is an anti-Nef MAb that also has this name (see [Chiba (1997)])	RT(Pol dis) Chiba (1997)			rec vaccinia-RT	murine(IgG _{2a})
210 6B9	Pol(dis) References: [Chiba (1997)]	RT(Pol dis) Chiba (1997)			rec vaccinia-RT	murine(IgG _{2a})
211 3F10	Pol(dis) References: [Chiba (1997)]	RT(Pol dis) Chiba (1997)			rec vaccinia-RT	murine(IgG _{2a})

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212 RT-4	Pol()	RT()		no	?	murine(IgG _{2b})
	References: [Li (1993), Gu (1996)] <ul style="list-style-type: none"> • RT-4: Increased nevirapine and delavirdine inhibition, no effect on AZT inhibition [Gu (1996)] 					
213 anti-HIV-1 RT	Pol()	RT()		?		murine(IgG)
	References: [di Marzo Veronese (1986), Maciejewski (1995), Wainberg & Gu(1995)] <ul style="list-style-type: none"> • anti-HIV-1 RT: Cloned heavy and light chains to express Fab intracellularly, preventing HIV infection <i>in vitro</i> – this MAb was broadly cross-reactive with clinical strains and even HIV-2 [Maciejewski (1995)] • Commentary on Maciejewski <i>et al.</i> [Wainberg & Gu(1995)] 					
214 polyclonal	Pol()	RT()				murine()
	References: [Kim (1997)] <ul style="list-style-type: none"> • A gag/pol, vif or CMN160 DNA vaccine, when delivered in conjunction with the plasmid encoding the co-stimulatory molecules B7 and IL-12, gave a dramatic increase in both the cytotoxic and proliferative responses in mice, as well as Ab response detected by ELISA 					