

Table 5: Protease

MAb ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
148 1696	Protease(1-7)	Pro(1-7)	PQIYLWQ	HIV-1 Pro	murine(IgG)	
	References: [Lescar (1999)]					
	• 1696: MAb binds to HIV-1 and HIV-2, putative epitopes are PQIYLWQ and PQFSLWK respectively – Pro1 is critical, QIYLNQR residues 2-8, does not compete - MAb disrupts catalytic activity – crystal structure of Fab at 3 A resolution reveals a deep cavity lined by acidic and hydrophobic residues – the binding region is located within the region required for dimerization and the Fab structure could serve as a basis for drug design targeting this region [Lescar (1999)]					
149 10E7	Protease(36-46)	Pro()	MSLPGRWKP KM	no	rec Protease	hamster(IgG)
	References: [Croix (1993)]					
	• 10E7: Immunodominant region of protease in Armenian hamster (but only weakly reactive in people, see: [Bjorling (1992)]) – peptide MSLPGRWKP blocks protease binding [Croix (1993)]					
150 F11.2.32	Protease(36-46)	Pro(36-46 BH10)	MSLPGRWKP KM	rec BH10 Protease	murine(IgG ₁ κ)	
	References: [Lescar (1996), Lescar (1997), Lescar (1999)]					
	• F11.2.32: Binding leads to significant inhibition in proteolytic activity – crystal structure of Fab-peptide was determined to 2.2 Å resolution – bound peptide shows no structural similarity to the corresponding segment in native protease suggesting binding may distort protein structure [Lescar (1997)]					
	• F11.2.32: Distortion may occur in the flap region of the protein, important for regulating access of substrate to the catalytic site [Lescar (1999)]					
151 8G5	Protease(38-45)	Pro(38-45 HXB2)	LPGRWKP KPK	no	rec Protease	hamster(IgG)
	References: [Croix (1993)]					
	• 8G5: Binds to MSLPGRWKP KM with slightly higher affinity [Croix (1993)]					
152 13E1	Protease(38-45)	Pro(38-45 HXB2)	LPGRWKP KPK	no	rec Protease	hamster(IgG)
	References: [Croix (1993)]					
	• 13E1: Binds to MSLPGRWKP KM with slightly higher affinity [Croix (1993)]					
153 8B11	Protease(38-45)	Pro(38-45 HXB2)	LPGRWKP KPK	no	rec Protease	hamster(IgG)
	References: [Croix (1993)]					
	• 8B11: Binds to MSLPGRWKP KM with slightly higher affinity [Croix (1993)]					
154 8C10	Protease(38-45)	Pro(38-45 HXB2)	LPGRWKP KPK	no	rec Protease	hamster(IgG)
	References: [Croix (1993)]					
	• 8C10: Binds to MSLPGRWKP KM with slightly higher affinity [Croix (1993)]					