Table 4: **p2p7p1p6**

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
p2p7p1p6(5–13)	Gag( )	SQVTNPANI	p55Gag vaccination	murine BALB/c(H-2D^b)	[Paliard (1998)]

- HIV-1(SF2)p55Gag vaccination of H-2 mice activates a CTL response against this epitope
- CTL that recognized SQVTNPANI in the context of H-2D^b cross-reacted with H-2 alloantigens H-2L^d and an unidentified self-peptide
- A postulate: heterozygosity at the MHC level could prevent the maturation of some T cell receptor combinations for foreign peptide and self-MHC constructs because of thymic depletion and tolerance

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
p2p7p1p6(55–70)	p15(446–460 BRU)	KEGHQMKDCTERQAN-F	HIV-1 infection	human(A2)	[Claverie (1988)]

- one of 4 epitopes first predicted, then subsequently shown to stimulate an HLA-A2 restricted CTL line

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
p2p7p1p6(83–97)	p15(418–433 BRU)	GNFLQSRPEPTAPPF	HIV-1 infection	human(A2)	[Claverie (1988)]

- One of 4 epitopes first predicted, then subsequently shown to stimulate an HLA-A2 restricted CTL line

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
p2p7p1p6(118–126)	p2p7p1p6(118–126)	KELYPLTSL		human(B*4001(B60))	[Brander & Goulder(2001)]

- C. Brander notes that this is a B*4001 epitope

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
p2p7p1p6(121–130)	Gag(484–493)	YPLTSLRSLF	HIV-1 infection	human(B7)	[Jin (2000)]

- This B7 epitope is one of three subdominant CTL responses detected in a long-term non-progressor
- A dominant B7 epitope was defined using conventional methods, and three additional sub-dominant HLA B7 epitopes were defined by first using a non-anchor based strategy, EpiMatrix, to identify 2078 possible epitopes in the autologous HIV-1, followed by B7 anchor residue prediction to narrow the set to 55 peptides for experimental testing