

## HIV Helper-T Cell Epitopes

Table 7: Pol

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
Pol( )	RT(248-256 HXB2)		p66 <i>in vitro</i> human(DR5)	[Manca (1995c)]	
	• CD4+ T-cell lines from uninfected individuals by stimulation with p66-pulsed APC				
	• TcR V $\beta$ D $\beta$ J $\beta$ sequences were obtained from p66-specific T-cell clones				
	• There were multiple responses to peptides throughout p66, but because of uncertain locations, they have not been mapped				
	• Response to peptide 248-256 was associated with DR5				
Pol( )	Gag/Pol( )		DNA gag/pol, vif, or CMN160 vaccine	murine( )	[Kim (1997a)]
	• A gag/pol DNA vaccine delivered in conjunction with the plasmid encoding the co-stimulatory molecules B7 and IL-12 gives a dramatic increase in both the cytotoxic and proliferative responses in mice				
Pol( )	Gag/Pol( )		DNA gag/pol, or env vaccine + CD86 expression vector	murine( )	[Kim (1997b)]
	• A gag/pol DNA vaccine delivered in conjunction with the plasmid encoding the co-stimulatory molecule CD86 gives an increase in proliferative responses to Pr55 in mice				
Pol( )	Gag/Pol( )		DNA vaccine + CD80 and CD86 expression vectors	chimpanzee( )	[Kim (1998)]
	• Co-stimulatory molecules co-expressed with an HIV-1 immunogen in a DNA vaccine used to enhance the immune response – co-expression of CD86, but not CD80, dramatically increased both HIV Env and Gag/Pol specific CTL and Th proliferative responses				
Pol( )	RT( )		DNA gag/pol, or env vaccine + IL- 2, IL-4, IFN- $\gamma$ , or IL-13 expression vectors	murine(H-2 $d$ )	[Kim (2000)]
	• Co-stimulatory molecules co-expressed with an HIV-1 immunogen in a DNA vaccine used to enhance the immune response – co-expression of Th1 cytokine IFN- $\gamma$ drove Th1 immune responses and enhanced CTL responses				

Helper-T