Table 12: **Vif**

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
Vif( )	Vif( )		DNA gag/pol, vif, and env vaccine	murine( )	[Kim (1997b)]

- A gag/pol, vif or env DNA vaccine, when delivered in conjuction 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
- When IL-12 was present, CTL response could be detected even without *in vitro* stimulation

Table 13: **Tat**

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
Tat(49–57)	Tat(49–57)	NOT AN EPITOPE	protein-peptide conjugate	murine( )	[Kim (1997a)]

- The Tat peptide RKKRRQRRR when conjugated to a protein can cause that protein to be taken up by APCs and presented to CTL
- The system was demonstrated by vaccinating mice with an OVA-Tat peptide conjugate and immunizing H-2 K^b mice
- The CTL response to the H-2 K^b specific OVA peptide SIINFEKL was stimulated

Tat( )	Tat( )		HIV-1 infection	human( )	[Froebel (1997)]

- Two HIV-1 infected children with contrasting disease courses were followed longitudinally – one died of AIDS, the other is a long term non-progressor
- Reactivity against Gag, Pol, Env and Tat proteins was tested by PBMC bulk cultured cells reacting with protein expressed in vaccinia constructs in autologous EBV transformed B cells
- The child who progressed consistently had CTL against Pol and Tat
- The long term non-progressing child had no detectable CTL, but was heterozygous for a mutation in the CCR5 receptor and for HLA-B49, which has been shown to be associated with slower progression