

Table 13: **Tat**

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
Tat(2-11)	( )	EPVDPRLPEPW		(B53)	[Brander & Goulder(2001), Addo (2001)]
Tat(49-57)	Tat(49-57)	NOT AN EPITOPE	protein-peptide conjugate	murine( )	[Kim (1997a)]
	<ul style="list-style-type: none"> <li>• The Tat peptide RKKRRQRRR when conjugated to a protein can cause that protein to be taken up by APCs and presented to CTL</li> <li>• The system was demonstrated by vaccinating mice with an OVA-Tat peptide conjugate and immunizing H-2 K<sup>b</sup> mice</li> <li>• The CTL response to the H-2 K<sup>b</sup> specific OVA peptide SIINFEKL was stimulated</li> </ul>				
Tat( )	Tat( )		DNA constructs encoding HIV-1 genes Nef, Rev or Tat	human( )	[Calarota (1999)]
	<ul style="list-style-type: none"> <li>• 9/9 HIV-1+ subjects were given one of three DNA vaccinations for Nef, Rev or Tat, and novel proliferative and CTL responses were generated</li> <li>• The Nef DNA immunization induced the highest and most consistent CTLp activity, IFN-<math>\gamma</math> production, and IL-6 and IgG responses</li> <li>• Highly active antiretroviral treatment (HAART) did not induce new HIV-specific CTL responses but reduced viral load, while DNA vaccination induced new immune responses but did not reduce viral load – thus this is a potentially complementary and promising combination</li> </ul>				
Tat( )	Tat( )		HIV-1 infection	human( )	[Froebel (1997)]
	<ul style="list-style-type: none"> <li>• Two HIV-1 infected children with contrasting disease courses were followed longitudinally – one died of AIDS, the other is a long-term non-progressor</li> <li>• 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</li> <li>• The child who progressed consistently had CTL against Pol and Tat</li> <li>• 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</li> </ul>				