Table 14: **Rev**

| HXB2 Location | Author Location | Sequence | Immunogen | Species(HLA) | References |
|---|---|---|---|---|---|
| Rev(9–23) | Rev(9–23 HXB2) | DEELIRTVRLIKLLY | HIV-1 infection | human( ) | [Blazevic (1995)] |
| | • Induces both Th and CTL activities, no HLA restriction analysis performed | | | | |
| Rev(12–31) | Rev(11–30 SF2) | LLKAVRLIKFLYQSNPPPNF | HIV-1 infection | human( ) | [Lieberman (1997a)] |
| | • Of 25 patients, most had CTL specific for more than 1 HIV-1 protein<br>• Only one subject had CTL that could recognize vaccinia expressed LAI Rev<br>• This subject had a CTL response to this peptide, and was HLA-A2, A24, B13, B35 | | | | |
| Rev(25–39) | Rev(25–39 HXB2) | SNPPPNPEGTRQARR | HIV-1 infection | human( ) | [Blazevic (1995)] |
| | • Induces both Th and CTL activities, no HLA restriction analysis performed | | | | |
| Rev(33–48) | Rev(33–48 HXB2) | GTRQARRNRRRRWRER | HIV-1 infection | human( ) | [Blazevic (1995)] |
| | • Induces both Th and CTL activities, no HLA restriction analysis performed | | | | |
| Rev(41–56) | Rev(41–56 HXB2) | RRRRWRERQRQIHSIS | HIV-1 infection | human( ) | [Blazevic (1995)] |
| | • Induces both Th and CTL activities | | | | |
| Rev(55–63) | Rev(55–63 LAI) | ISERILSTY | HIV-1 infection | human(A1) | [van Baalen (1997)] |
| | • Predicted to be an HLA-A1 epitope based on anchor residues 2S and 9Y<br>• Both forms LSGWL(L or I)STY, with intact anchors, were found in an HLA-A1+ individual with Rev responsive CTL<br>• An HLA-A1 individual who did not make a Rev response had lost the C-term anchor, ISGWILS(T or N)S<br>• 3/7 long term non-progressors and 0/5 progressors were positive for HLA-B57 (associated with prolonged survival)<br>• CTLp frequencies to Rev and Tat were inversely correlated with rapid progression to AIDS, but not Gag, RT or Nef | | | | |

| HXB2 Location | Author Location | Sequence | Immunogen | Species(HLA) | References |
|---|---|---|---|---|---|
| Rev(67–75) | Rev(67–75 IIIB) | SAEPVPLQL | HIV-1 infection | human(B14, Cw8) | [Van Baalen (1998)] |
| | • The Rev-specific CTL response studied here was from an individual infected with HIV-1 for more than 12 years without developing symptoms – Rev and Tat are expressed early and CTL activity against these proteins has been correlated with long term survival<br>• The CTL clone TCC108 specific for this eptiope was studied *in vitro*<br>• CTLs added immediately after infection suppressed viral production, indicative of CTL interference with viral production prior to lysis – CTL-mediated lysis occurred after the onset of progeny viral release, but prior to peak viral production<br>• Rapid selection of a E69K mutation, which abolished CTL, recognition was observed<br>• The epitope was originally listed as B14, but Cw8 and B14 are in linkage disequilbrium, and in this case were not distinguished (Pers. Comm., Christian Brander, 1999) | | | |
| Rev( ) | Rev( ) | | DNA vaccine pCMV160/Rev | murine(H-$2^d$) | [Ishii (1997)] |
| | • pCMV160/Rev is a DNA vaccine candidate carrying gp160 and Rev linked to a cytomegalovirus (CMV promotor)<br>• pCMV160/Rev given in conjuction with a cationic liposome gave enhanced DTH, Ab and CTL responses | | | | |