

HIV Molecular Immunology 2006: Maps of T-Helper/CD4+ Epitope Locations Plotted by Protein

Theoretical Biology & Biophysics, Los Alamos National Laboratory

July 31, 2008

All HIV T-helper/CD4+ (Th) epitopes mapped to within a region of 18 amino acids or less are indicated on the HIV protein epitope maps. The location and HLA restriction elements of Th epitopes are indicated on protein sequences of HXB2. These maps are meant to provide the relative location of defined epitopes on a given protein, but the HXB2 sequence may not actually carry the epitope of interest, as it may vary relative to the sequence for which the epitope was defined. Epitopes with identical boundaries and HLA fields are included in the maps only once. If one laboratory determines HLA presenting molecules at the serotype level (example: A2) and another at the genotype level (example: A*0201) both will be included in the map. MHC specificities are indicative of the host species; when no MHC presenting molecule is defined, the host species is noted.

1 p17 T-Helper/CD4+ Epitope Map

Figure 1: p17 T-Helper/CD4+ Map aa 1–100

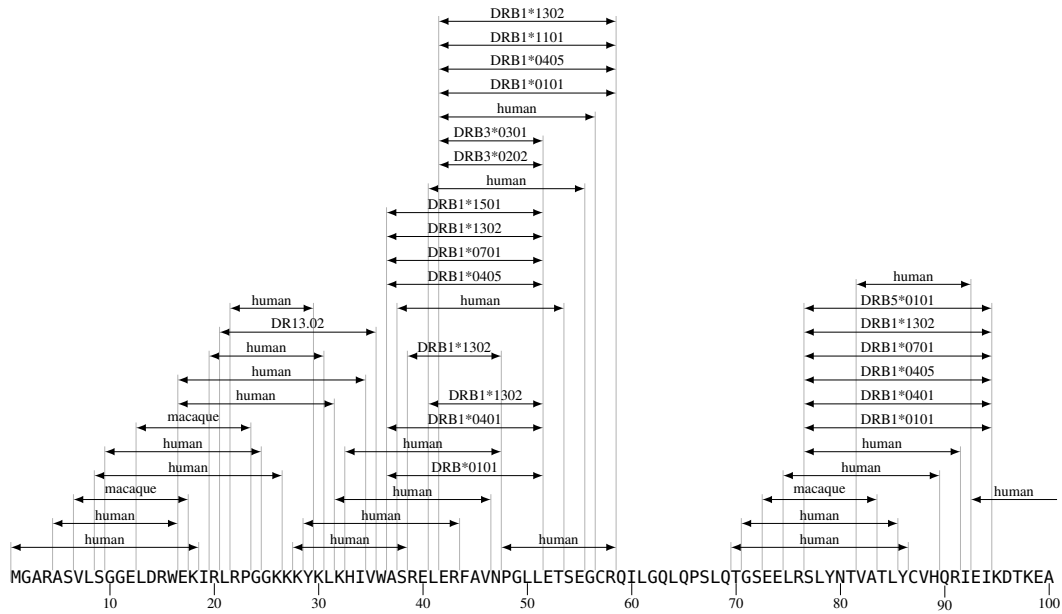
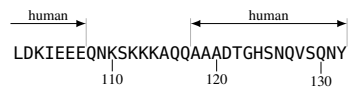


Figure 2: p17 T-Helper/CD4+ Map aa 101–132



2 p24 T-Helper/CD4+ Epitope Map

Figure 3: p24 T-Helper/CD4+ Map aa 1–100

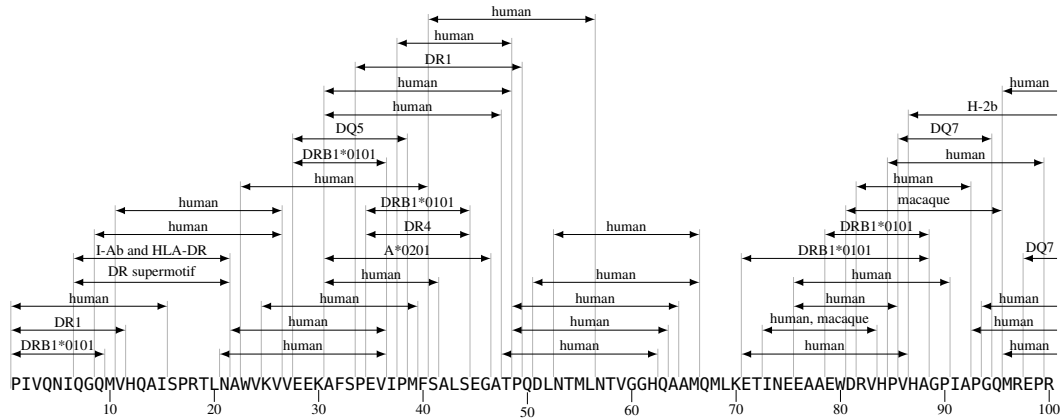


Figure 4: p24 T-Helper/CD4+ Map aa 101–200

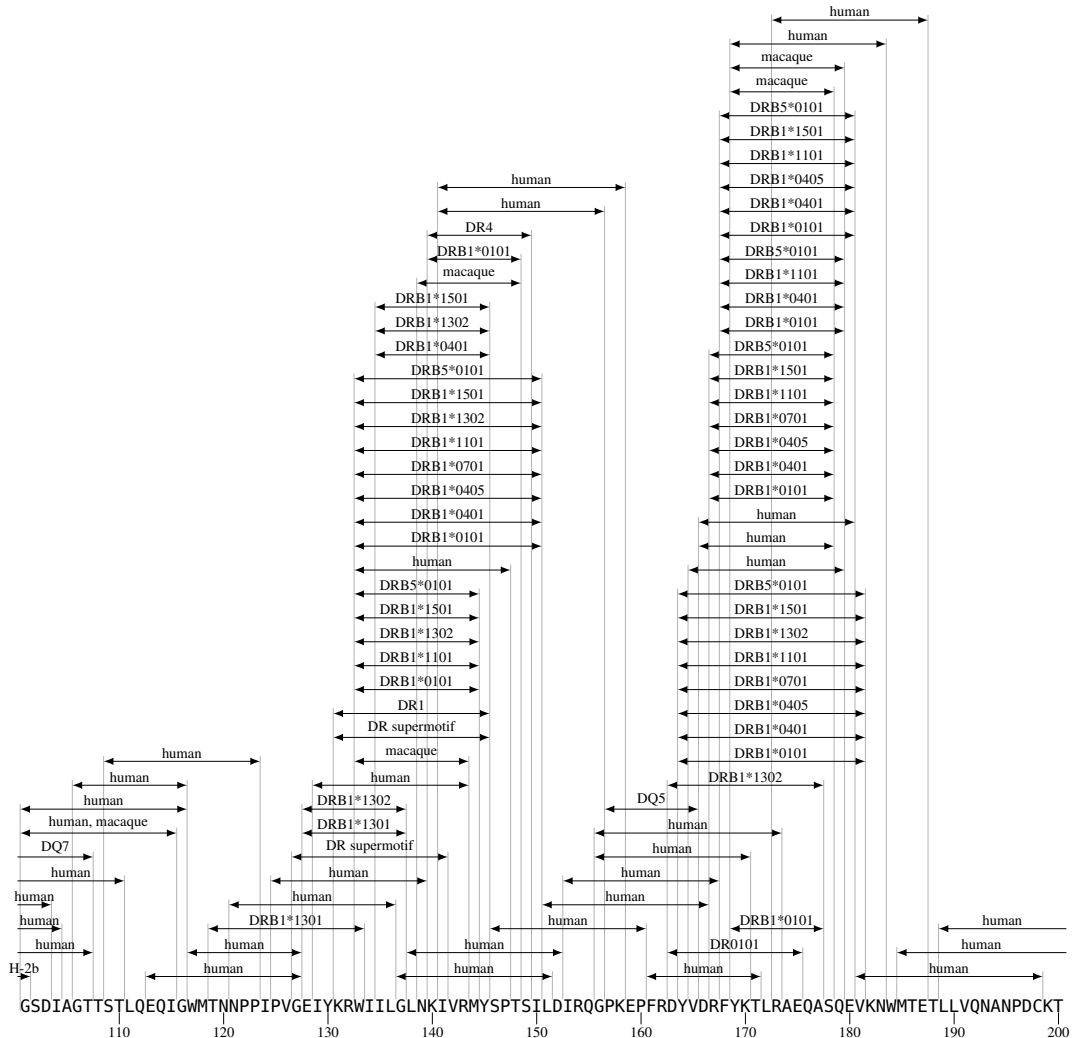
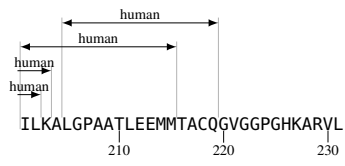


Figure 5: p24 T-Helper/CD4+ Map aa 201–231



3 p2p7p1p6 T-Helper/CD4+ Epitope Map

Figure 6: p2p7p1p6 T-Helper/CD4+ Map aa 1–100

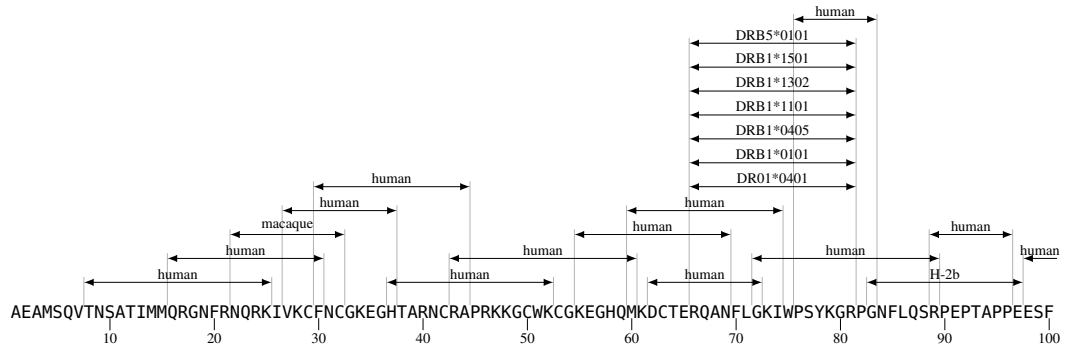
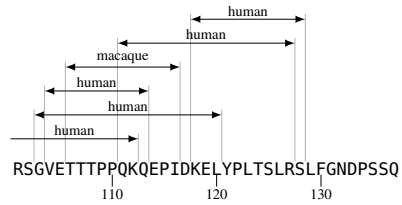


Figure 7: p2p7p1p6 T-Helper/CD4+ Map aa 101–137



4 Gag/Pol TF T-Helper/CD4+ Epitope Map

Figure 8: Gag/Pol TF T-Helper/CD4+ Map aa 1–56

FFREDLAFLOGKAREFSSEQTRANSPTRRELQVWGRDNNSPSEAGADROGTVSFNF
10 20 30 40 50

5 Protease T-Helper/CD4+ Epitope Map

Figure 9: Protease T-Helper/CD4+ Map aa 1–99

PQVTLWQRPLVTIKIGGQLKEALLDTGADDTVLEEMSLPGRWPKMKMIGGIGGFIKVRQYDQILIEICGHKAIGTVLVGPTPVNIIGRNLLTQIGCTLNF
10 20 30 40 50 60 70 80 90

6 RT T-Helper/CD4+ Epitope Map

Figure 10: RT T-Helper/CD4+ Map aa 1–100

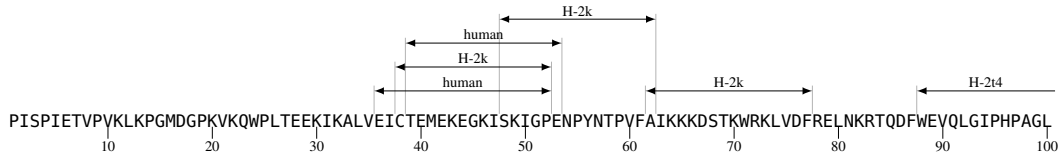


Figure 11: RT T-Helper/CD4+ Map aa 101–200

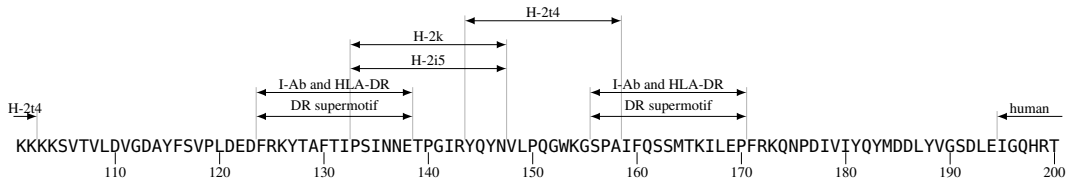


Figure 12: RT T-Helper/CD4+ Map aa 201–300

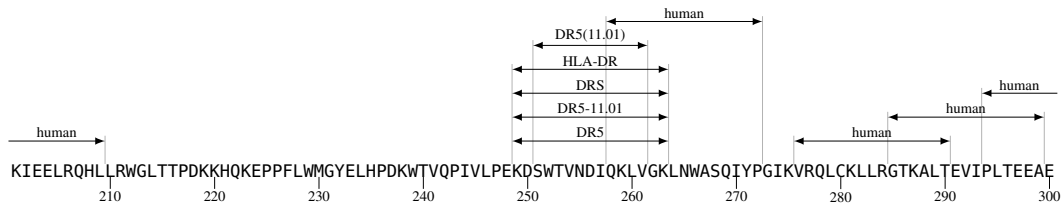


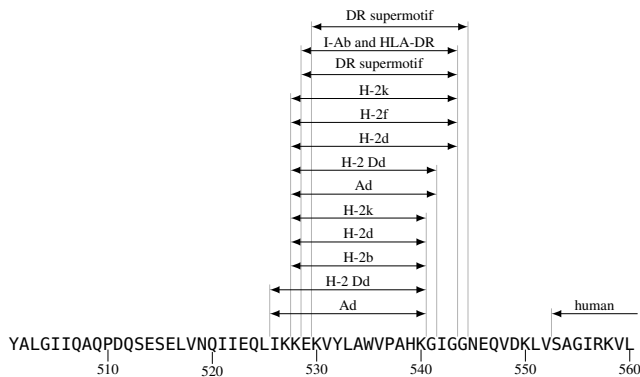
Figure 13: RT T-Helper/CD4+ Map aa 301–400



Figure 14: RT T-Helper/CD4+ Map aa 401–500



Figure 15: RT T-Helper/CD4+ Map aa 501–560



7 Integrase T-Helper/CD4+ Epitope Map

Figure 16: Integrase T-Helper/CD4+ Map aa 1–100

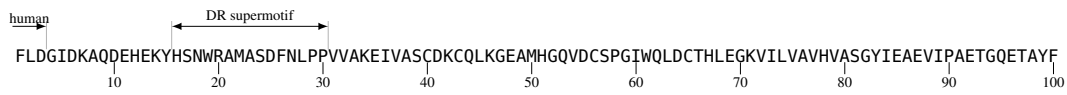


Figure 17: Integrase T-Helper/CD4+ Map aa 101–200

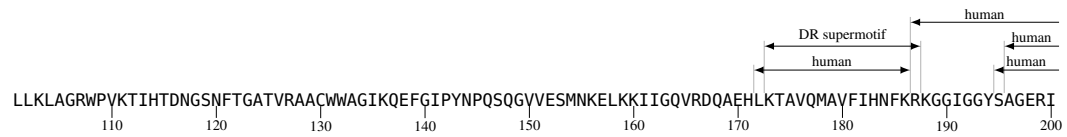
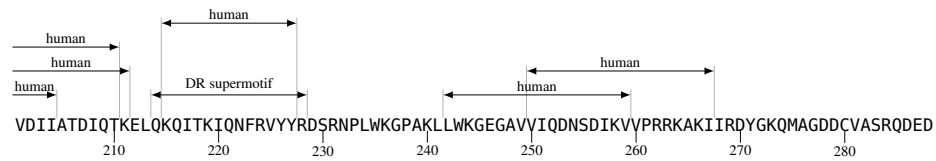


Figure 18: Integrase T-Helper/CD4+ Map aa 201–288



8 Vif T-Helper/CD4+ Epitope Map

Figure 19: Vif T-Helper/CD4+ Map aa 1–100

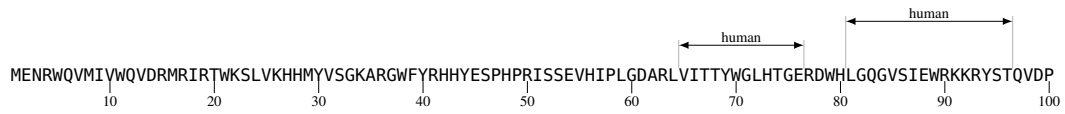
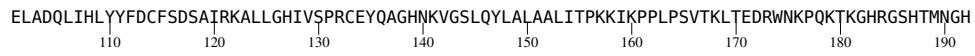
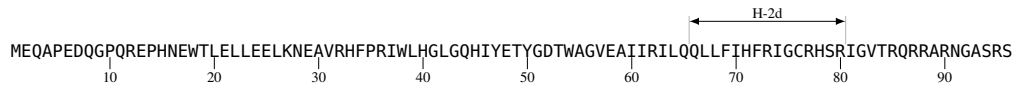


Figure 20: Vif T-Helper/CD4+ Map aa 101–192



9 Vpr T-Helper/CD4+ Epitope Map

Figure 21: Vpr T-Helper/CD4+ Map aa 1-96



10 Tat T-Helper/CD4+ Epitope Map

Figure 22: Tat T-Helper/CD4+ Map aa 1–100

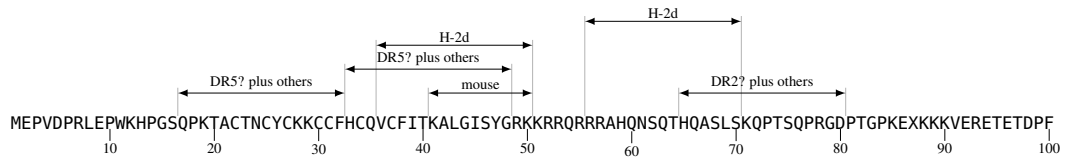


Figure 23: Tat T-Helper/CD4+ Map aa 101–101

D
101

11 Rev T-Helper/CD4+ Epitope Map

Figure 24: Rev T-Helper/CD4+ Map aa 1–100

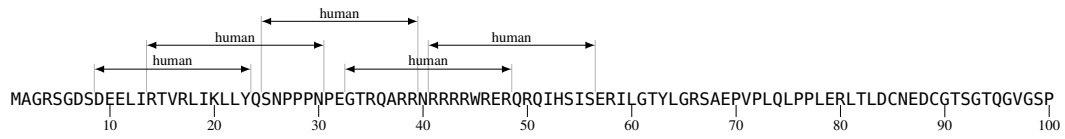
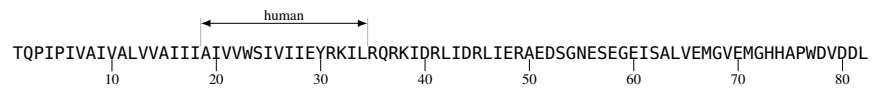


Figure 25: Rev T-Helper/CD4+ Map aa 101–116



12 Vpu T-Helper/CD4+ Epitope Map

Figure 26: Vpu T-Helper/CD4+ Map aa 1–82



13 gp160 T-Helper/CD4+ Epitope Map

Figure 27: gp160 T-Helper/CD4+ Map aa 1–100

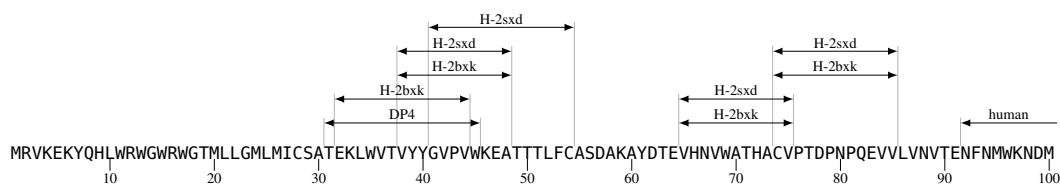


Figure 28: gp160 T-Helper/CD4+ Map aa 101–200

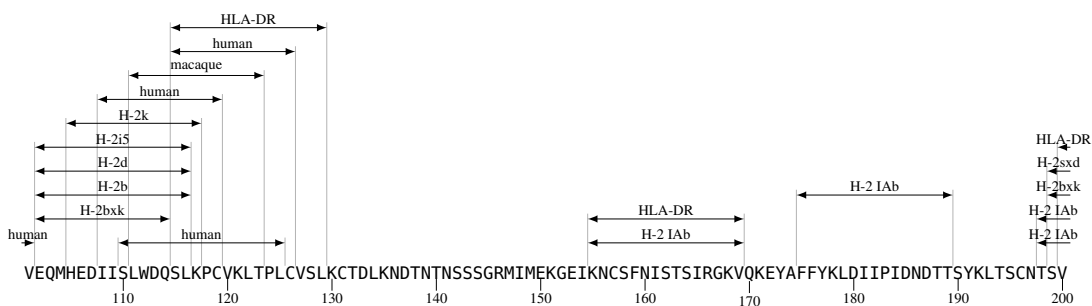


Figure 29: gp160 T-Helper/CD4+ Map aa 201–300

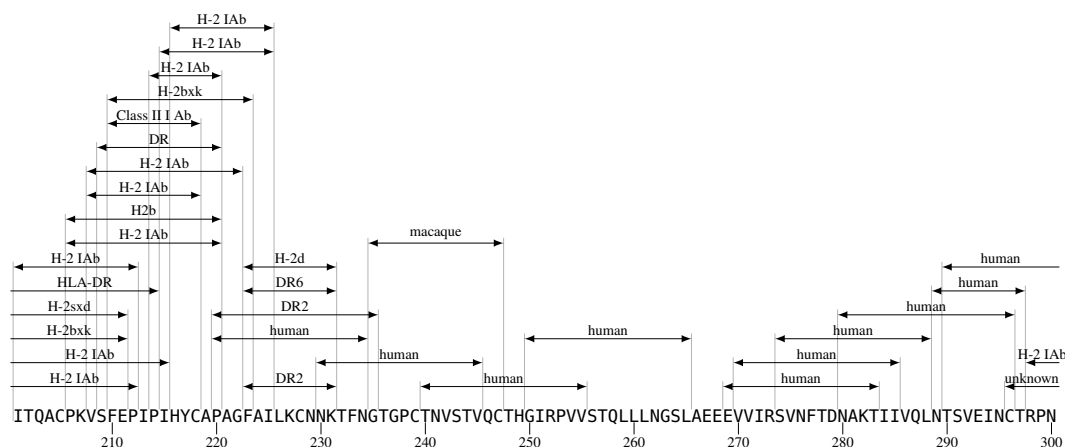


Figure 33: gp160 T-Helper/CD4+ Map aa 601–700

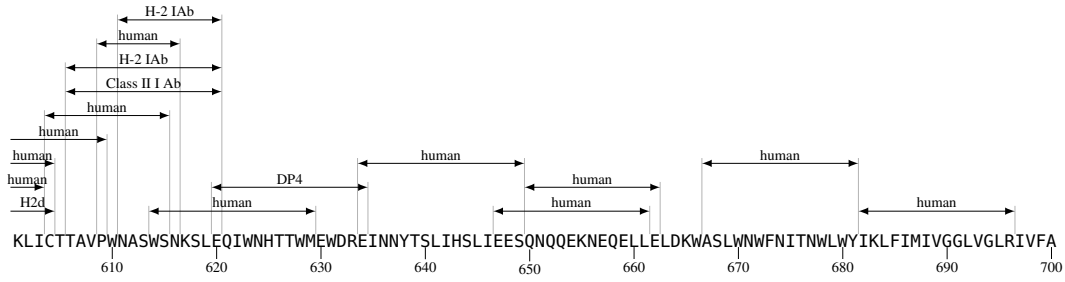


Figure 34: gp160 T-Helper/CD4+ Map aa 701–800

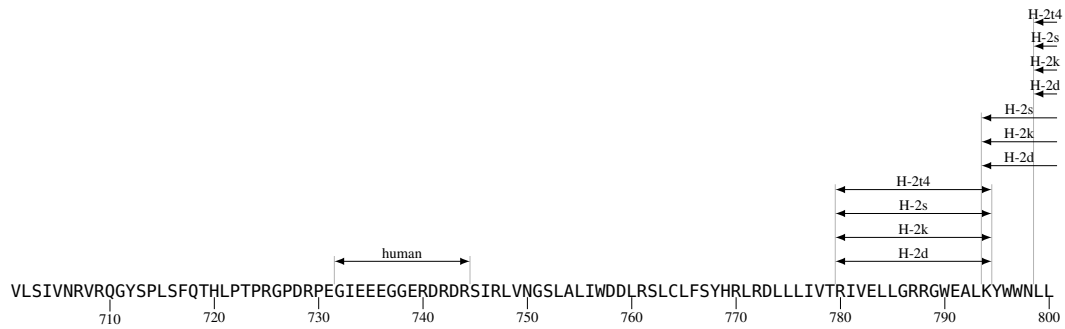
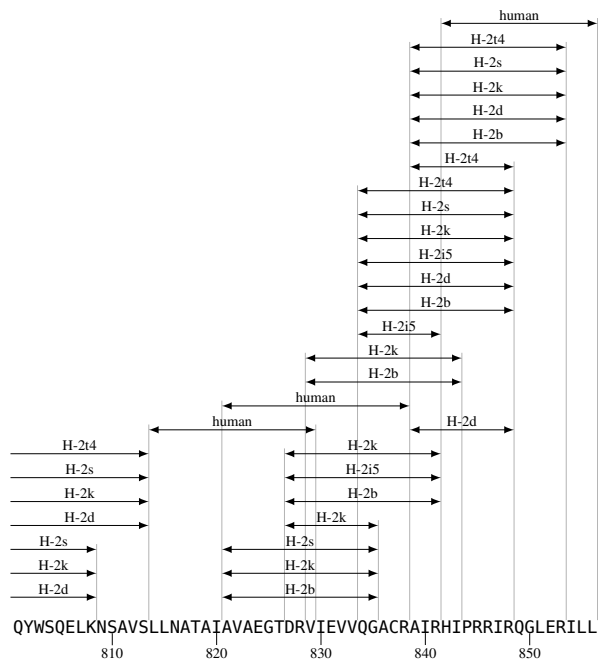


Figure 35: gp160 T-Helper/CD4+ Map aa 801–856



14 Nef T-Helper/CD4+ Epitope Map

Figure 36: Nef T-Helper/CD4+ Map aa 1–100

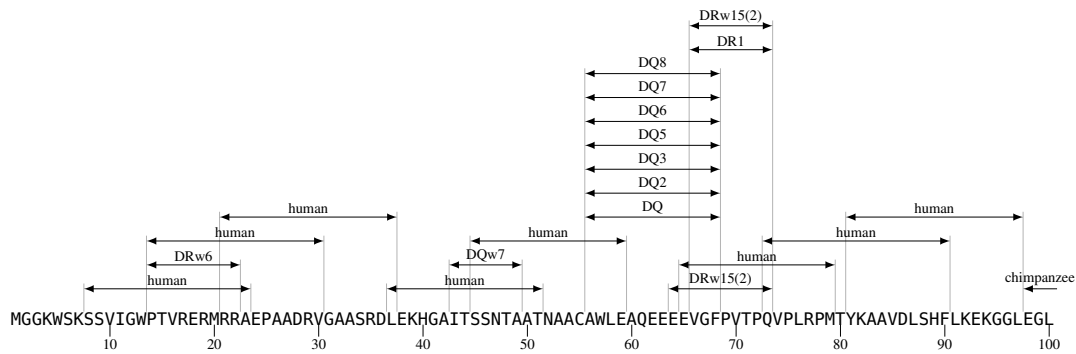


Figure 37: Nef T-Helper/CD4+ Map aa 101–200



Figure 38: Nef T-Helper/CD4+ Map aa 201–206

