

HIV Molecular Immunology: Maps of Ab Epitope Locations Plotted by Protein

Theoretical Biology & Biophysics, Los Alamos National Laboratory

June 16, 2017

The names of MAbs and the location of well characterized linear binding sites of 21 amino acids or less are indicated relative to the protein sequences of the HXB2 clone. This map is meant to provide the relative location of epitopes on a given protein, but the HXB2 sequence may not actually bind to the MAb of interest, as it may vary relative to the sequence for which the epitope was defined. Above each linear binding site, the MAb name is given followed by the species in parentheses. Human is represented by 'h', non-human primate by 'p', mouse by 'm', and others by 'o'. More precise species designations for any given MAb can be found using the web search interface.

1 Gag Ab Epitope Map

Figure 1: Gag Ab Map aa 1–100

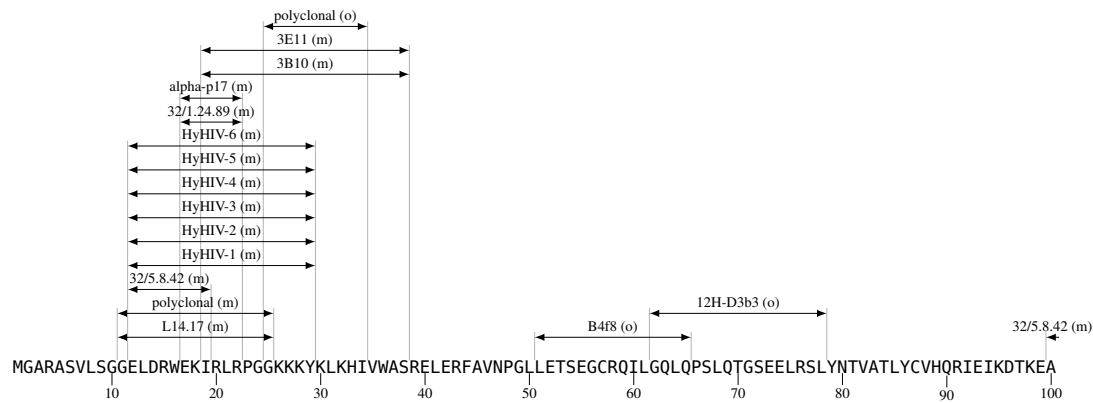


Figure 2: Gag Ab Map aa 101–200

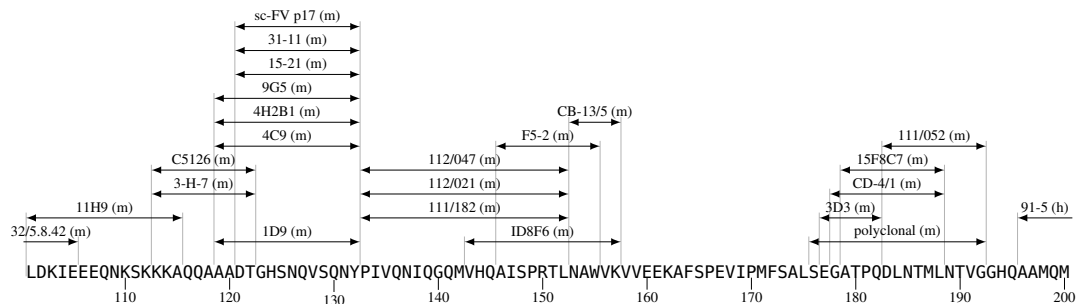


Figure 3: Gag Ab Map aa 201–300

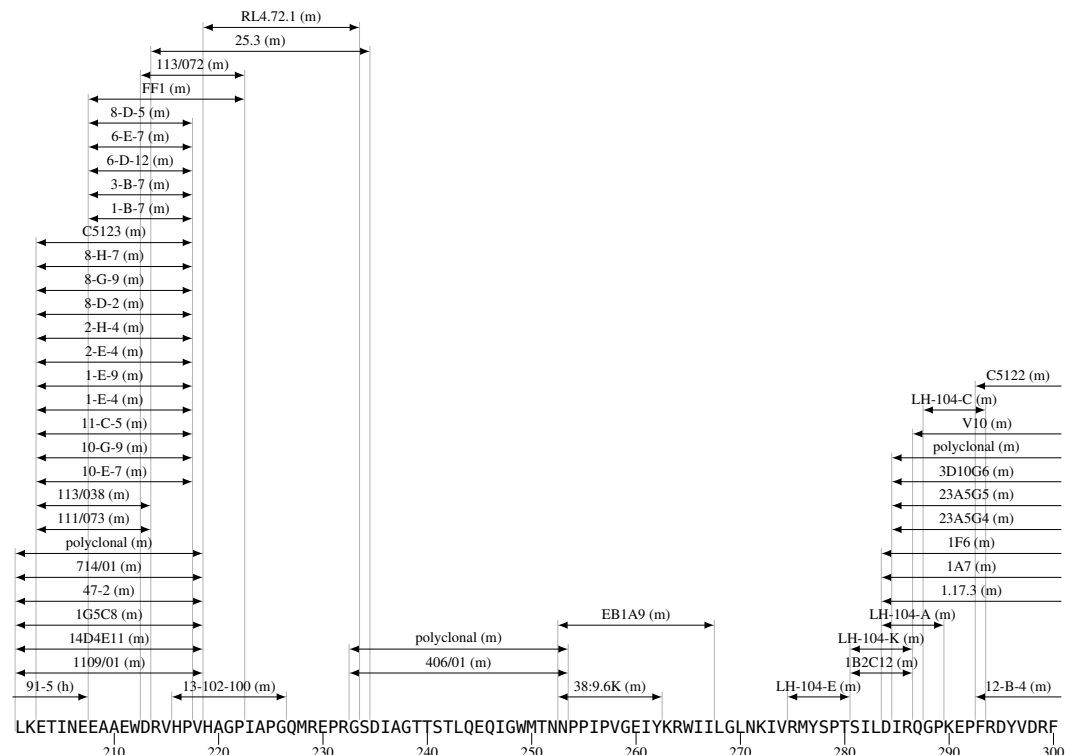
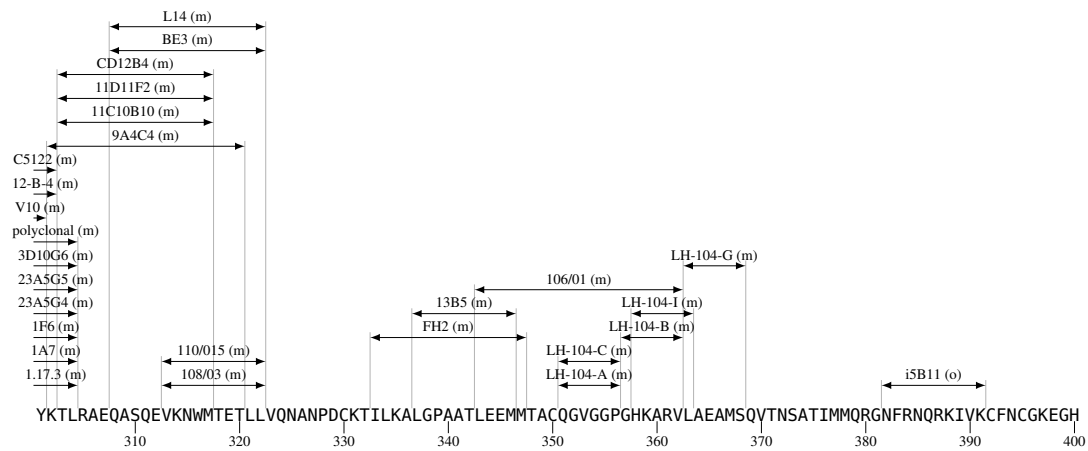
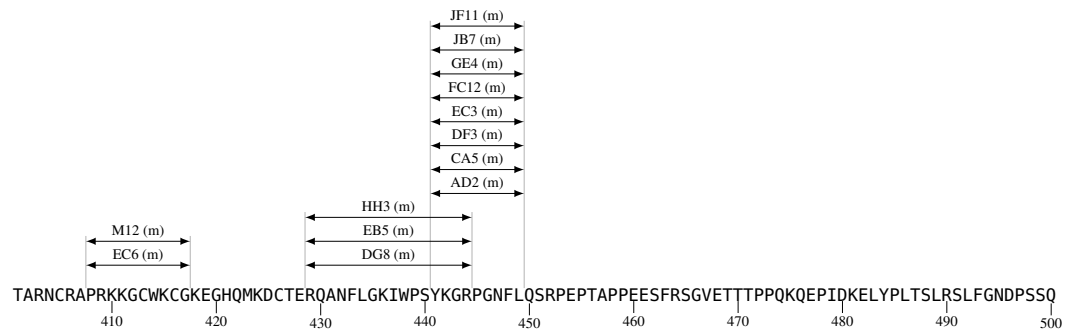


Figure 4: Gag Ab Map aa 301–400**Figure 5: Gag Ab Map aa 401–500**

2 Pol Ab Epitope Map

Figure 6: Pol Ab Map aa 1–100

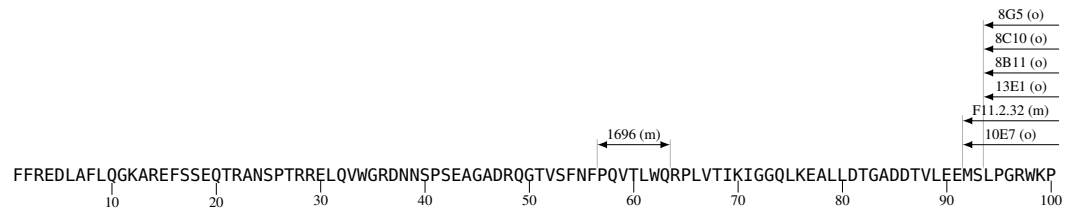


Figure 7: Pol Ab Map aa 101–200

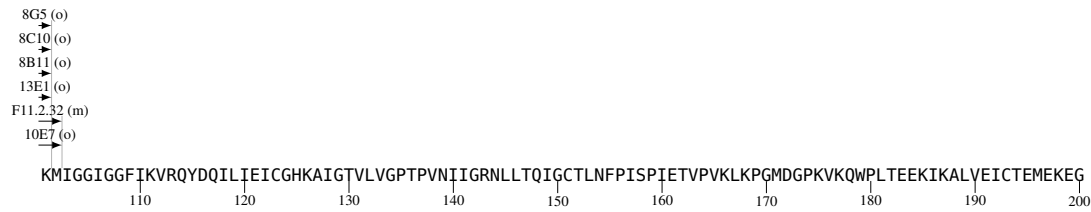


Figure 8: Pol Ab Map aa 201–300

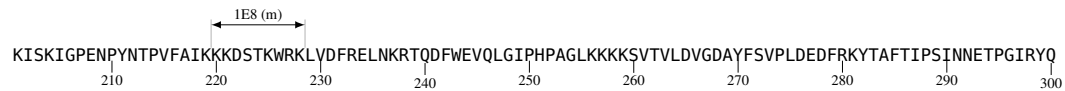


Figure 9: Pol Ab Map aa 301–400



Figure 10: Pol Ab Map aa 401–500

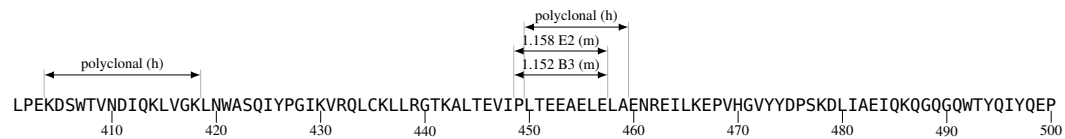


Figure 11: Pol Ab Map aa 501–600

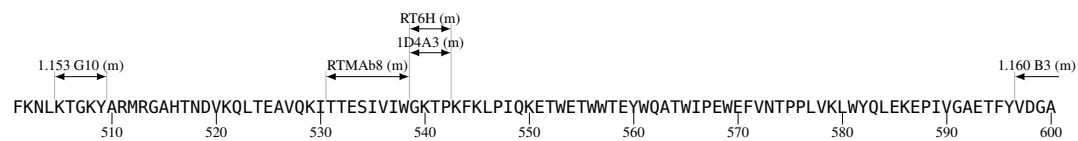


Figure 12: Pol Ab Map aa 601–700

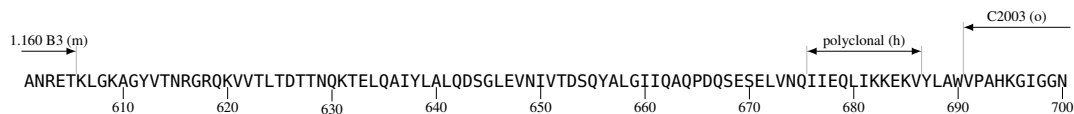


Figure 13: Pol Ab Map aa 701–800

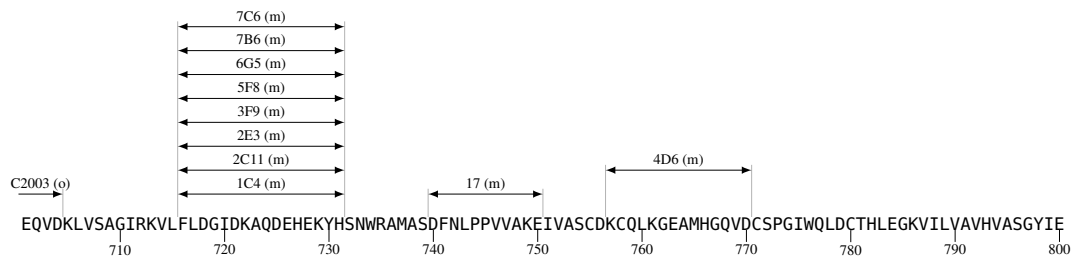


Figure 14: Pol Ab Map aa 801–900

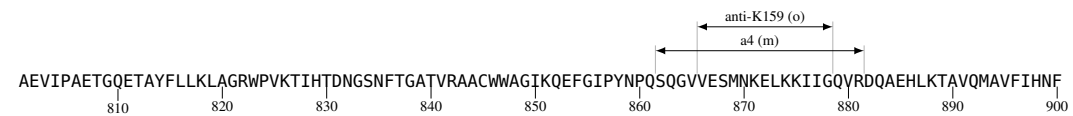


Figure 15: Pol Ab Map aa 901–1000

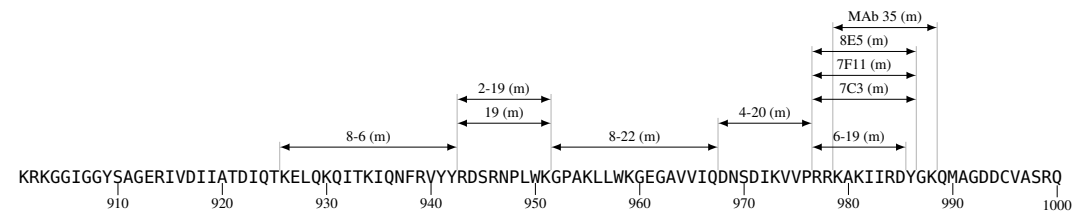


Figure 16: Pol Ab Map aa 1001–1003



3 Vif Ab Epitope Map

Figure 17: Vif Ab Map aa 1–100

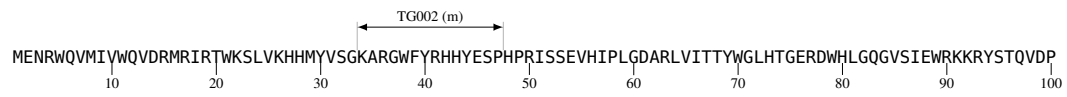


Figure 18: Vif Ab Map aa 101–192



4 Vpr Ab Epitope Map

Figure 19: Vpr Ab Map aa 1–96

MEQAPEDQGPGREPHNEWTLLELLEELKNEAVRHFPRIWLHGLGQHIYETYGDTWAGVEAIIIRILQQLLFTHFRIGCRHSRIGVTRQRRARNGASRS

10 20 30 40 50 60 70 80 90

5 Tat Ab Epitope Map

Figure 20: Tat Ab Map aa 1–100

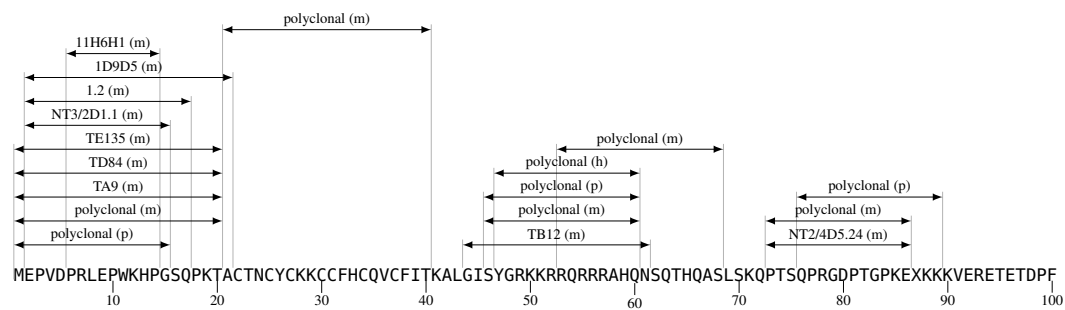


Figure 21: Tat Ab Map aa 101–101



6 Rev Ab Epitope Map

Figure 22: Rev Ab Map aa 1–100

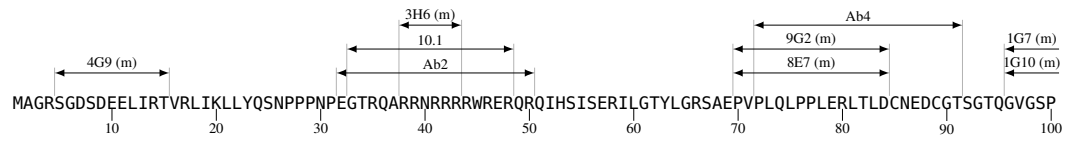
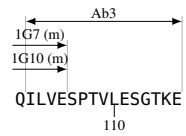


Figure 23: Rev Ab Map aa 101–116



7 Vpu Ab Epitope Map

Figure 24: Vpu Ab Map aa 1–82

TQPIPIVAI¹ALVVAIIIAI²VVWSIVII³EYRKILRQ⁴RKIDRLIDRLIERAEDSGNESEGEISALVEMGVEMGH⁵HAPWDVDDL⁶

10 20 30 40 50 60 70 80

8 gp160 Ab Epitope Map

Figure 25: gp160 Ab Map aa 1–100

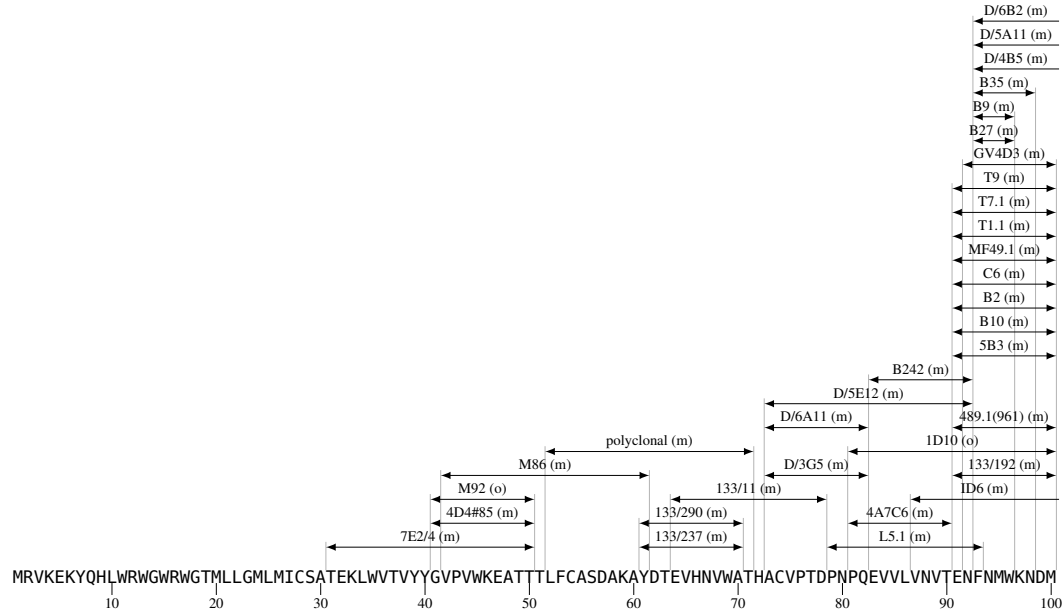


Figure 26: gp160 Ab Map aa 101–200

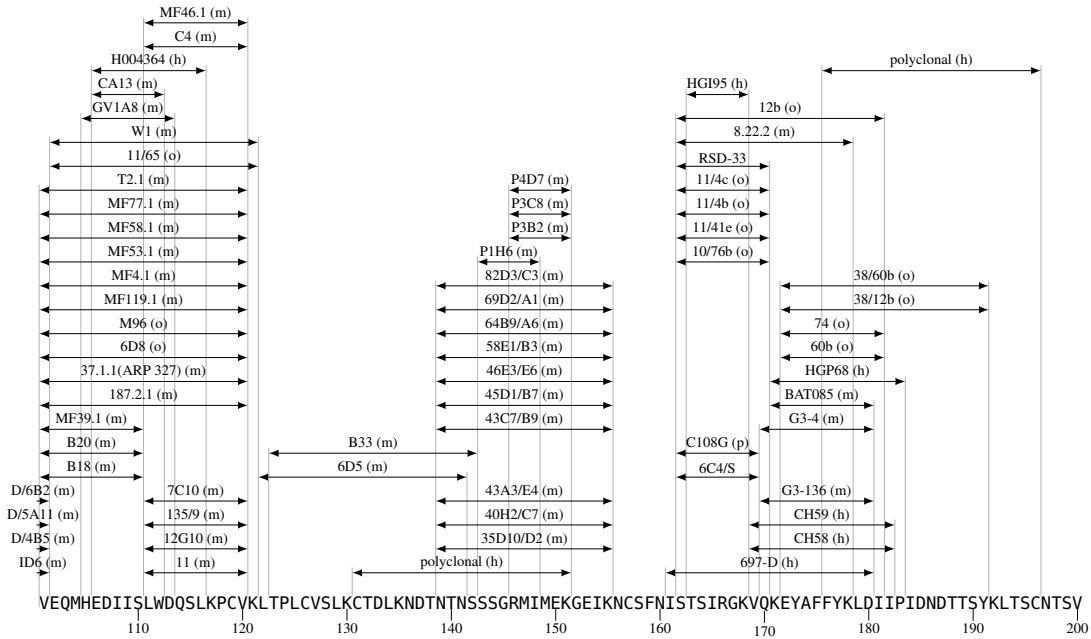


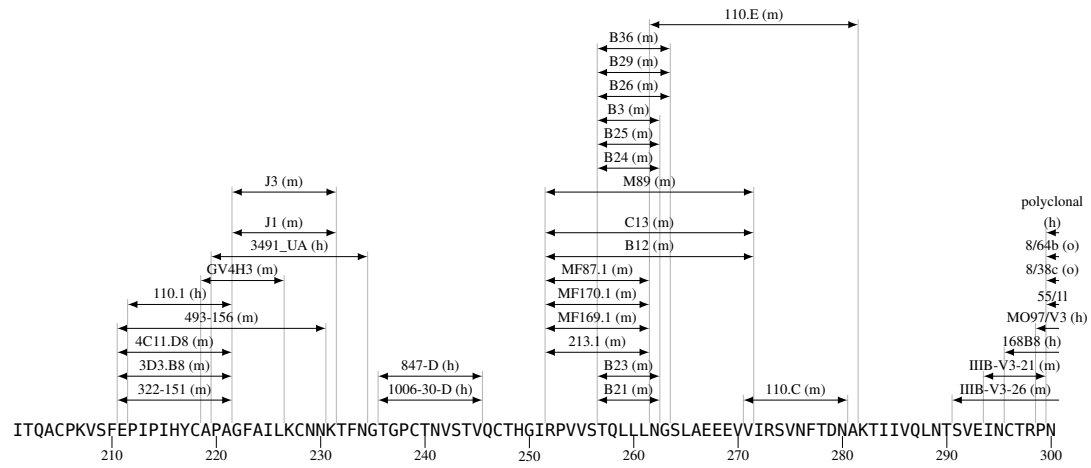
Figure 27: gp160 Ab Map aa 201–300

Figure 28: gp160 Ab Map aa 301–400 1/3

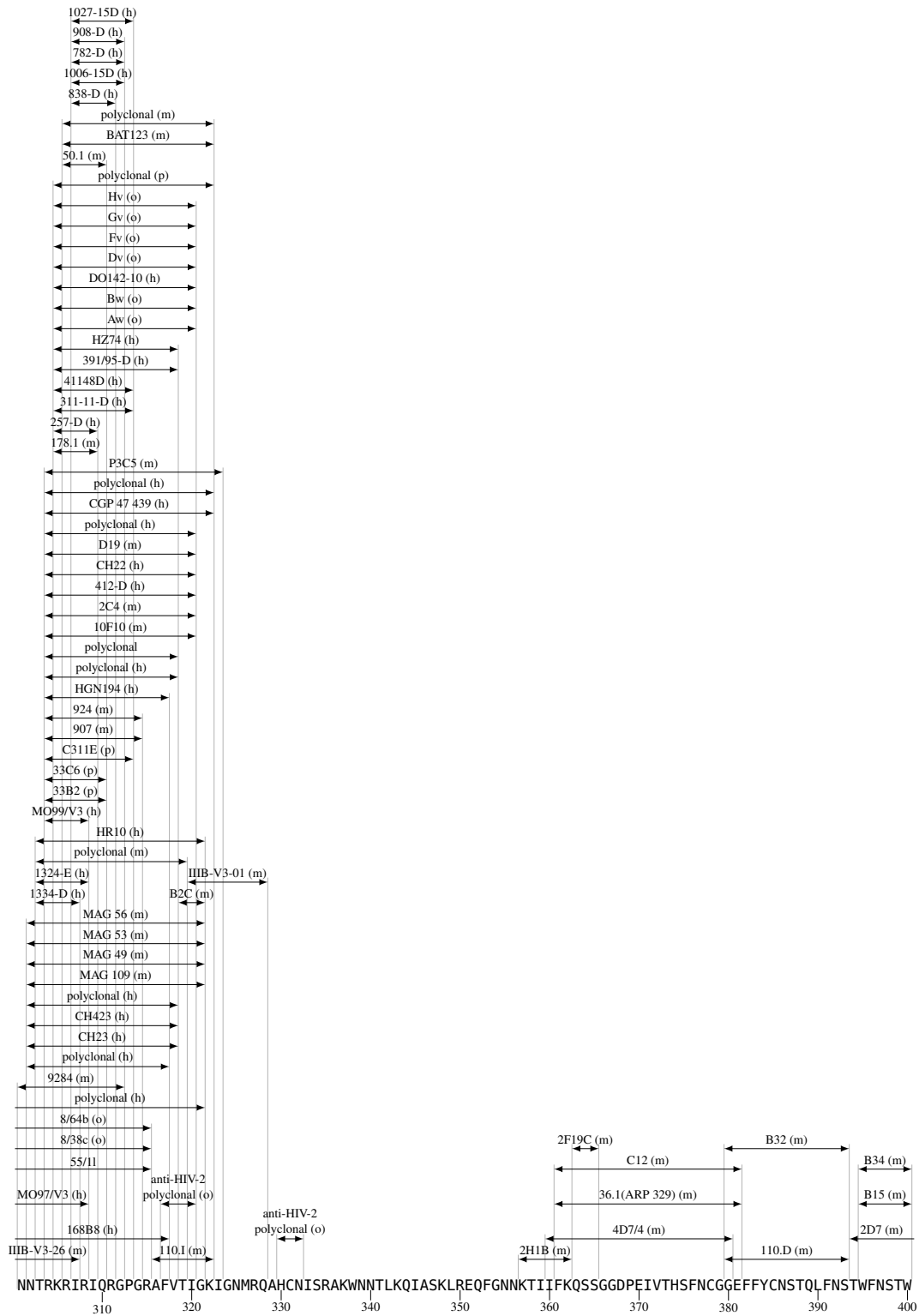


Figure 29: gp160 Ab Map aa 301–400 2/3

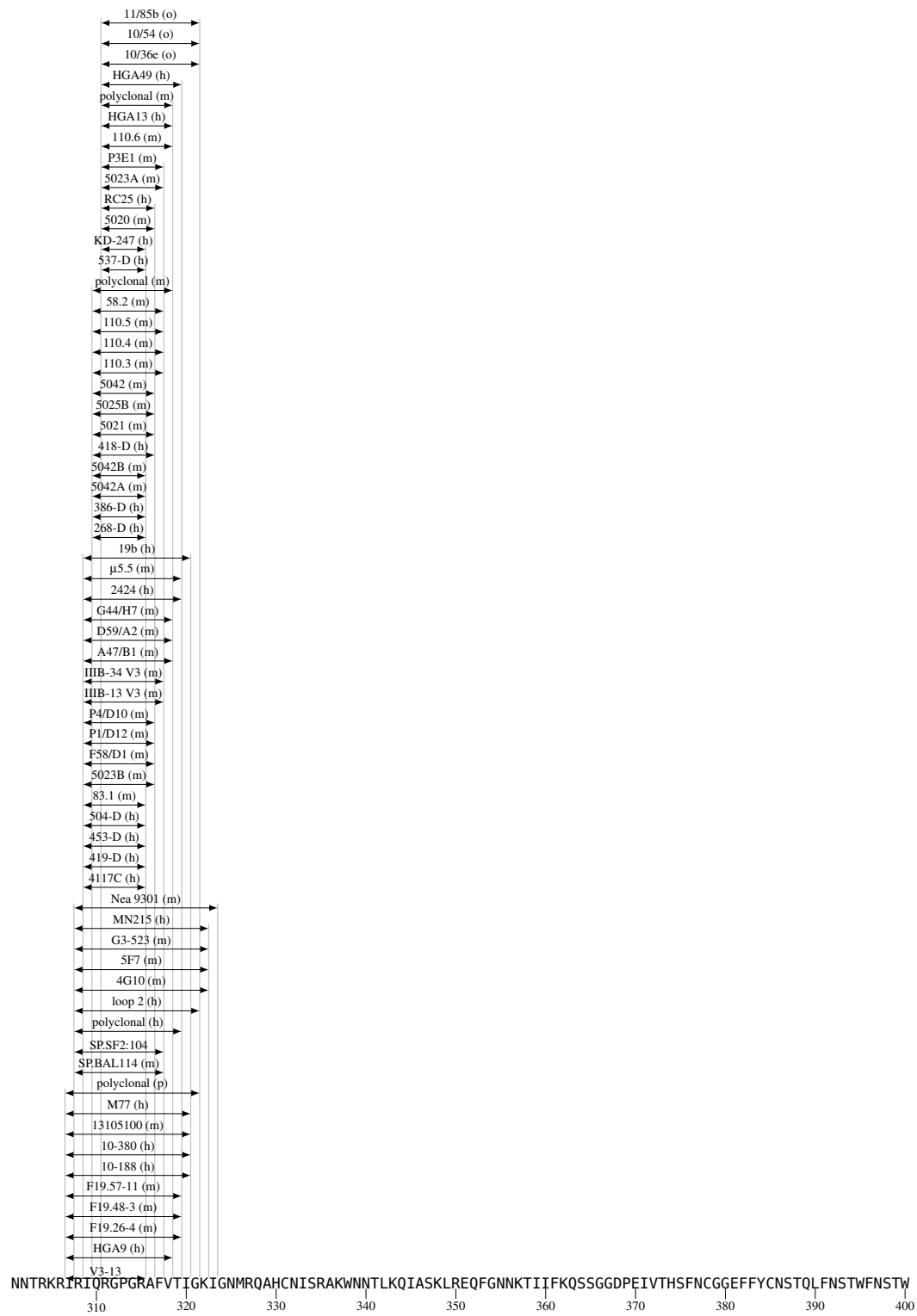


Figure 30: gp160 Ab Map aa 301–400 3/3

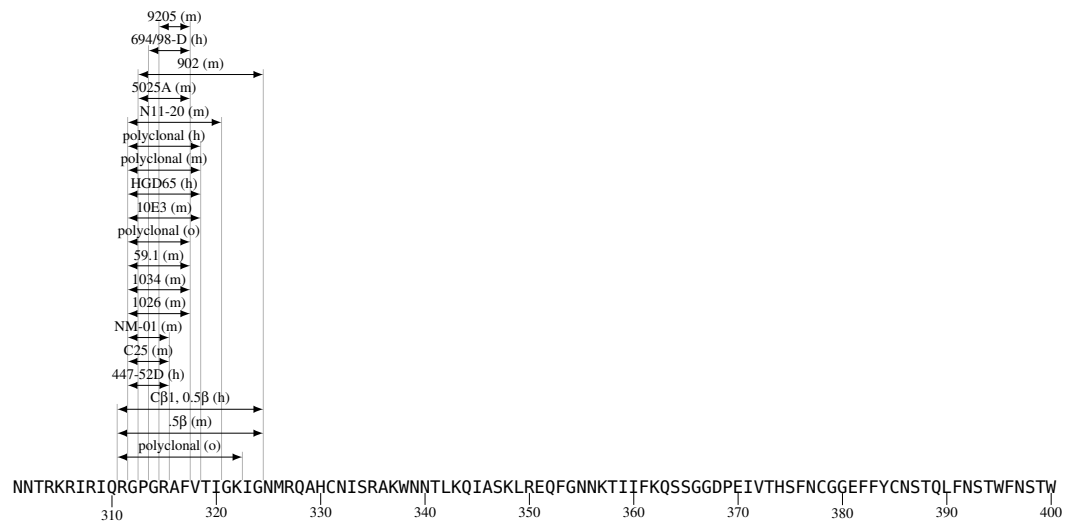


Figure 31: gp160 Ab Map aa 401–500

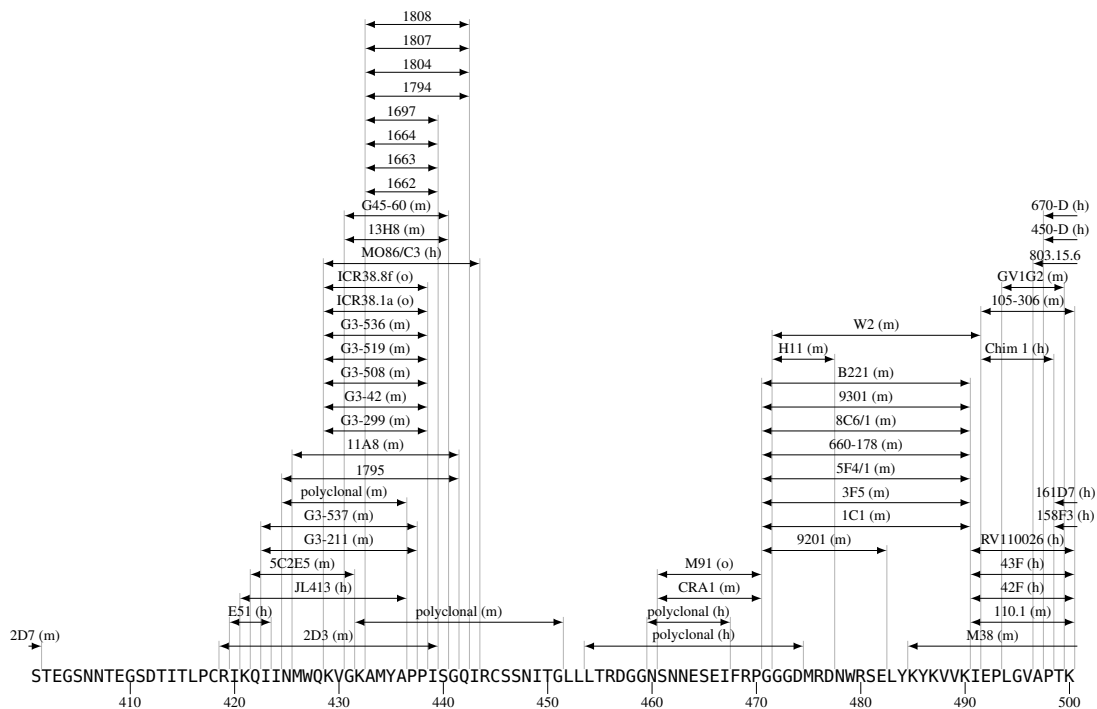


Figure 32: gp160 Ab Map aa 501–600

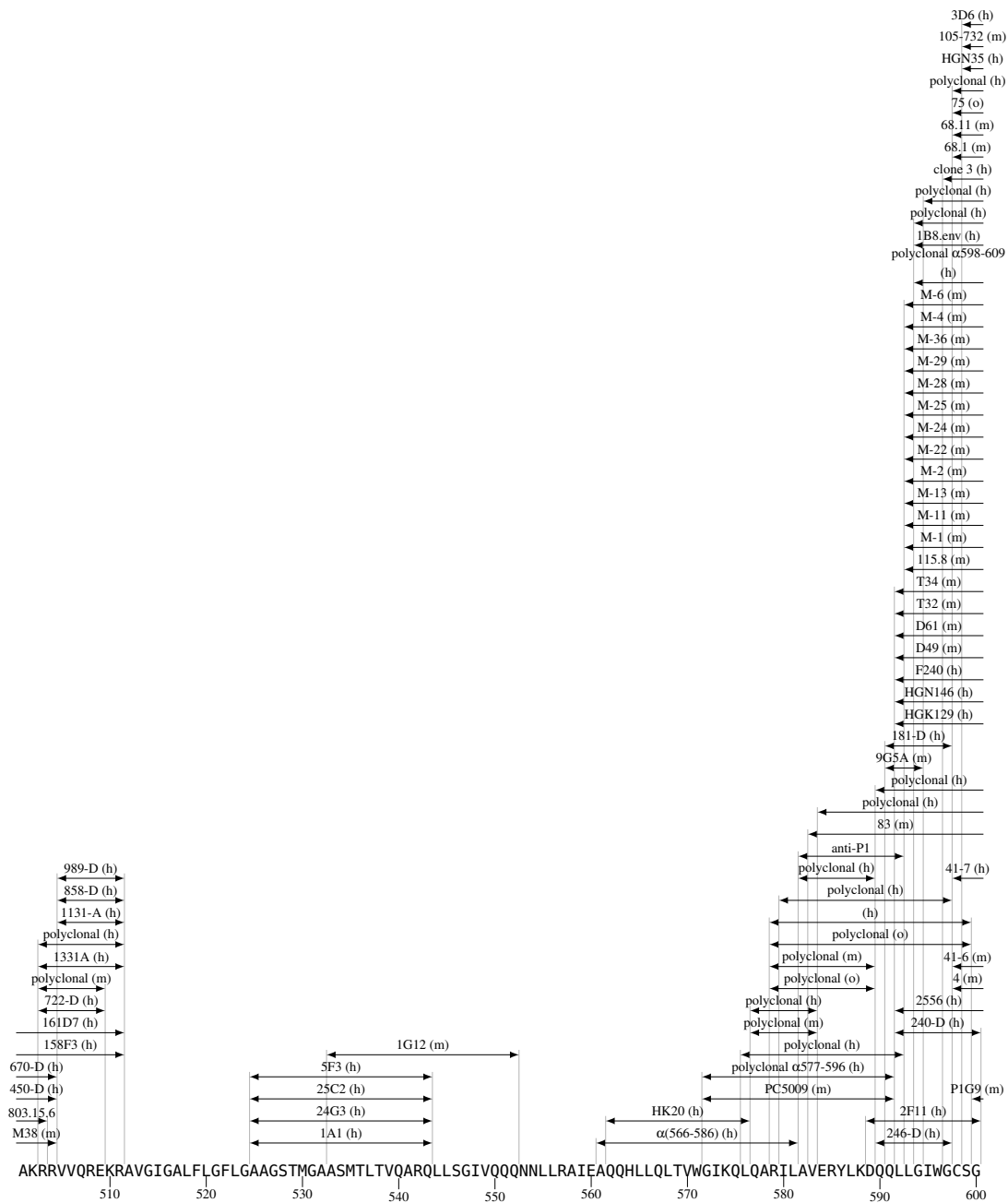


Figure 33: gp160 Ab Map aa 601–700

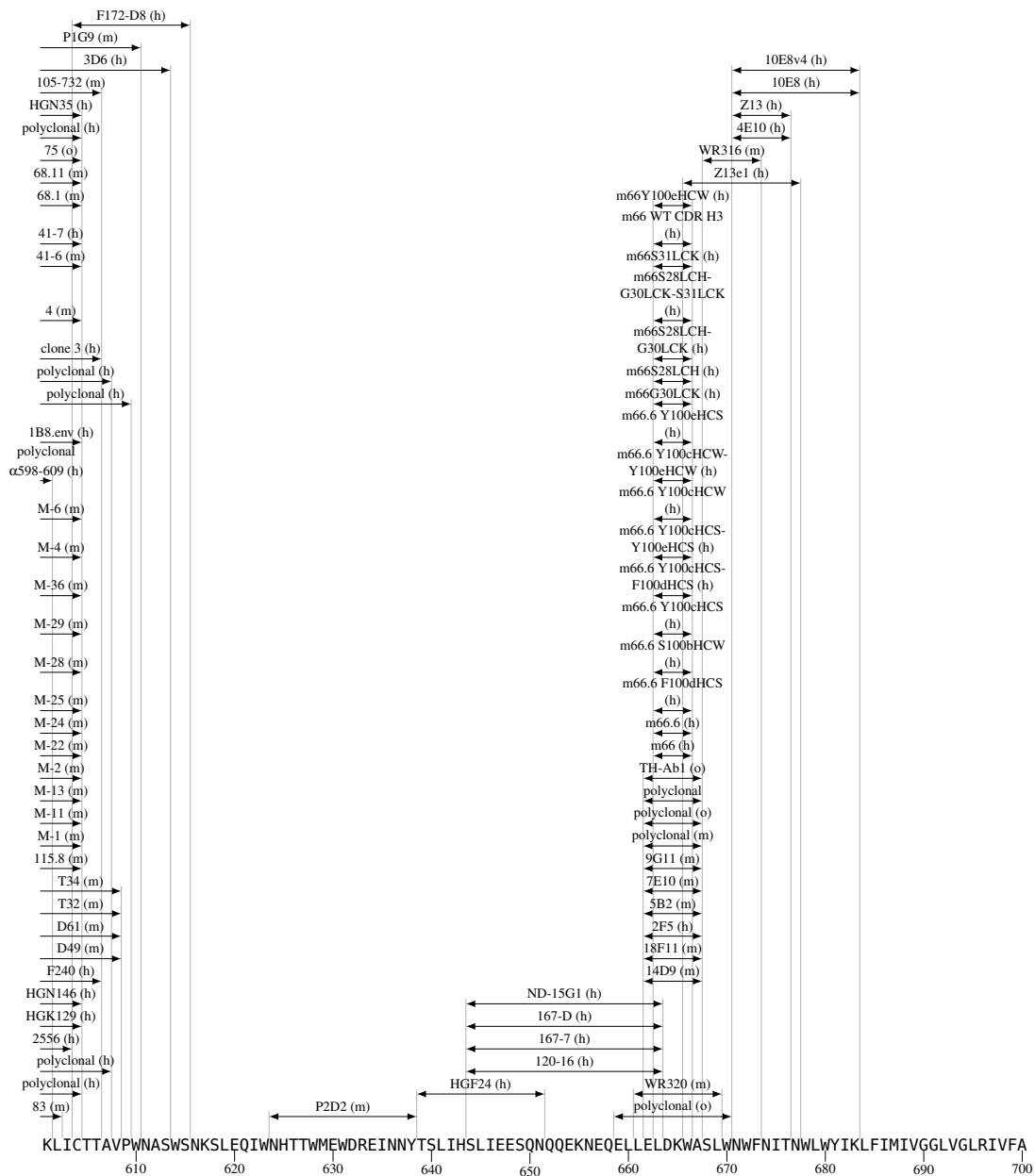


Figure 34: gp160 Ab Map aa 701–800

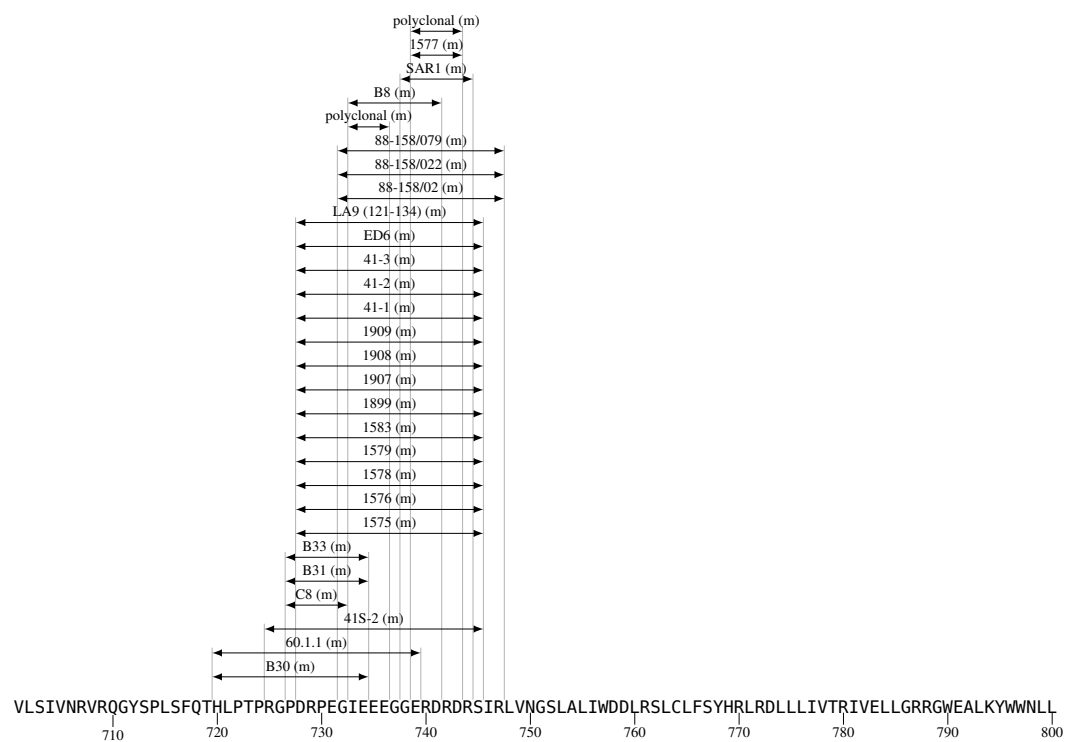
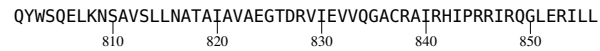


Figure 35: gp160 Ab Map aa 801–856



9 Nef Ab Epitope Map

Figure 36: Nef Ab Map aa 1–100

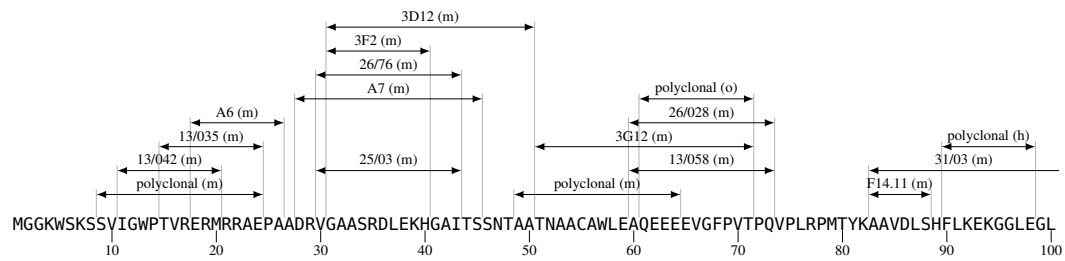


Figure 37: Nef Ab Map aa 101–200

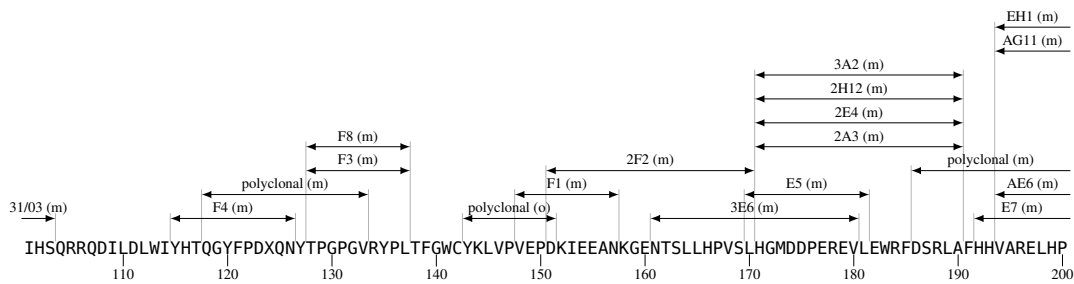


Figure 38: Nef Ab Map aa 201–206

