

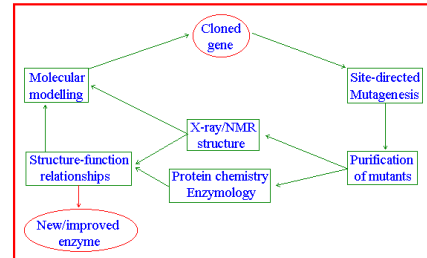
BINF 731

Protein Structure Analysis

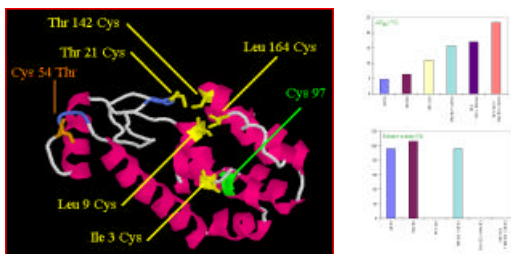
Iosif Vaisman

2002

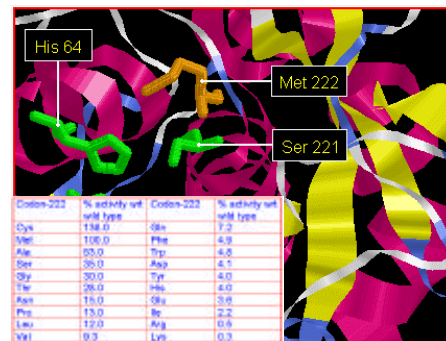
Protein Engineering



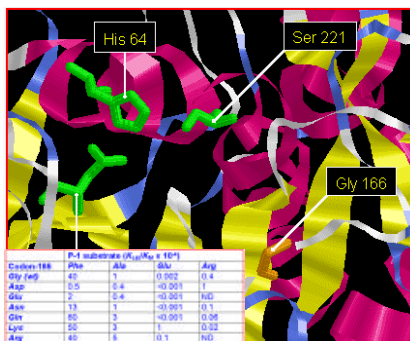
Protein Engineering



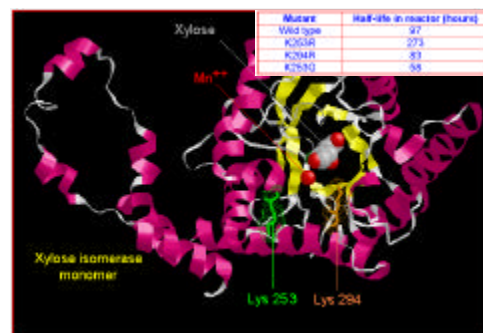
Protein Engineering



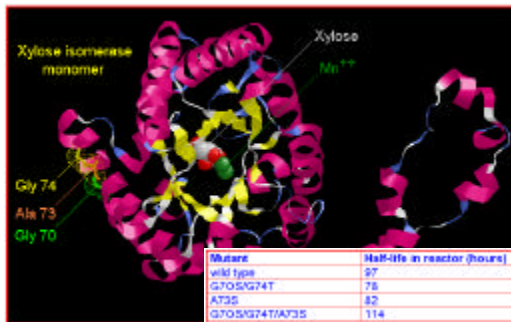
Protein Engineering



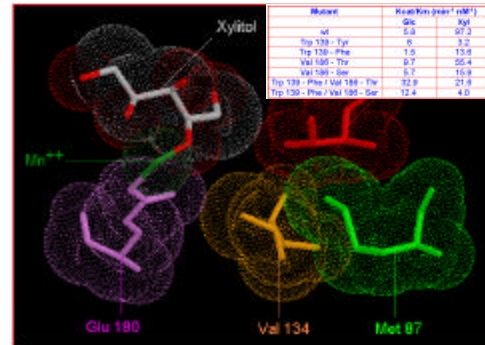
Protein Engineering



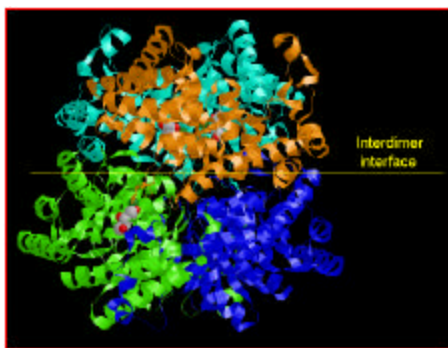
Protein Engineering



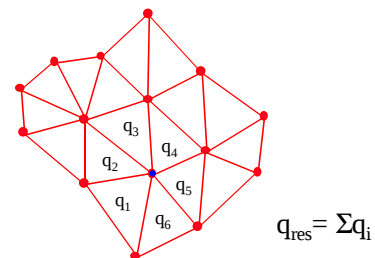
Protein Engineering



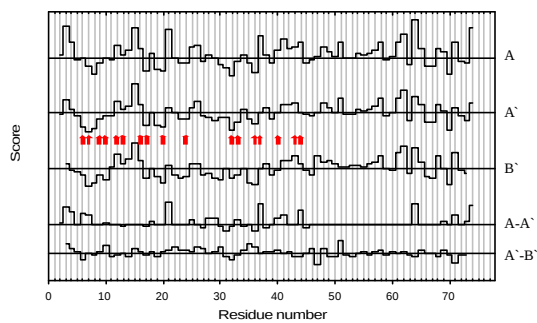
Protein Engineering



Residue score

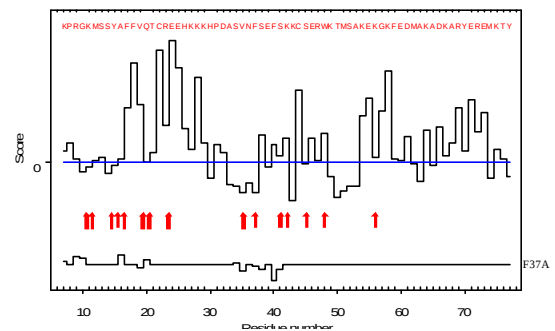


Protein-protein and protein-DNA interfaces (HMG-D)



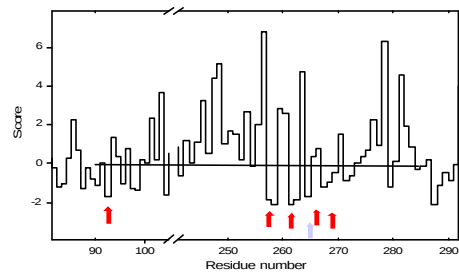
Coordinate file 1qrv: Murphy F V et al. *EMBO Journal* 18:6610

DNA binding residues in HMG1



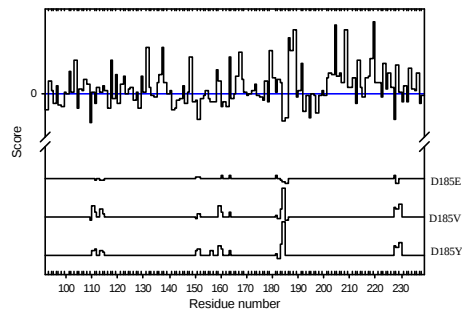
Coordinate file 1ckt: Ohndorf U-M et al. *Nature* 399:708

DNA binding residues in HIV RT



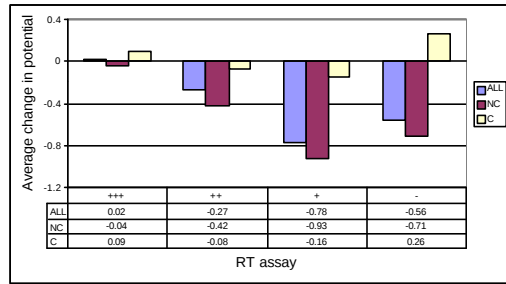
HIV RT MGBT: Ile94, Gln258, Gly262, Trp266, Gln269

Computational mutagenesis



1rtj profile and D185 mutations

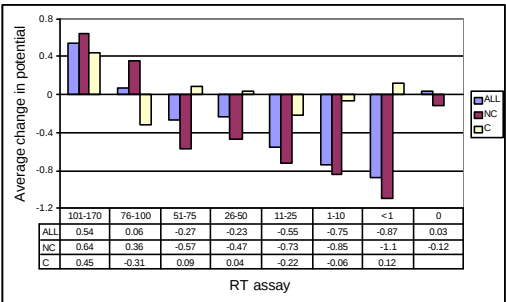
Structure – function correlations



HIV RT mutagenesis data

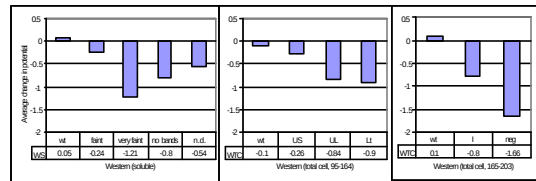
Experimental data from Wrobel JA et al. PNAS 95:638

Structure – function correlations



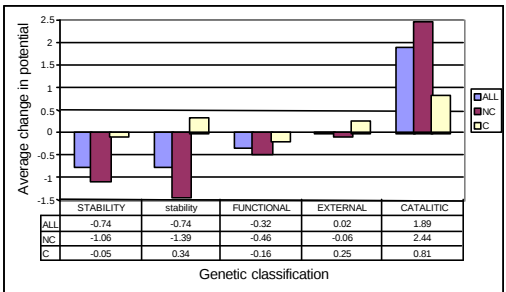
HIV RT mutagenesis data

Structure – function correlations



HIV RT mutagenesis data

Structure – function correlations



HIV RT mutagenesis data