SHEBA Download

SHEBA (Structural Homology by Environment-Based Alignment)

Introduction Manual Examples Download

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The latest version of SHEBA is 4.0.1 which has been tested on Mac OSX 10.4.9, Red Hat Enterprise Linux WS release 3 and IRIX64 6.5. The source code can be downloaded at sheba-4.0.1.tar.gz. Executable for Mac OSX is ready in the test directory. Manual and documentation are still under construction.

SHEBA has been tested on Linux SuSE 7.3 and IRIX 6.5. sheba-3.1.1.tar.gz contains the SHEBA source codes, manual and two test (*.pdb) files.

envdb-3.1.tar.gz contains the 8001 files in the (.env) format. Those (.env) files are derived from the ASTRAL SCOP 1.61 genetic domain sequence subsets, which is based on PDB SEQRES records, with less than 95% identity to each other. They are processed by SHEBA and all the (*.env) file names are stored in the file envdb-3.0.list. The original ASTRAL SCOP 1.61 genetic domain sequences can be downloaded from http://astral.berkeley.edu.

The major difference between envdb-3.0 and envdb-3.1 is that there are 4 states of secondary structure in the latest version which are 0 for coil, 1 for helix, 2 for sheet and 3 for turn. Besides, if the protein structure has less than 5 amino acids that have incomplete atom information in the pdb file, we delete those amino acid residues. There are about 90 among those 8001 structures.