Result

Name: SOD2_human (NP_000627.2)
Name: SOD2_mouse (NP_038699.2)
Similarity: 89.63963963963964%
Score:1091.0

Name: SOD2_human (NP_000627.2)
Name: RandomSeq
Similarity: 5.405405405405405%
Score: -250.0

Name: SOD2_mouse (NP_038699.2)
Name: RandomSeq
Similarity: 5.855855855855852%
Score: -250.0

Interpretation

The human sequence and mouse sequence are similar to each other, so the percentage of similarity is high, and the BLOSUM62 score is also high. However, Random sequence has a big difference to other two sequence, so the percentage of similarity is low, and the BLOSUM62 scores are negative.