Comparative Genomics 2018

Practical 1: Basic Genome Analysis

Group number: 6

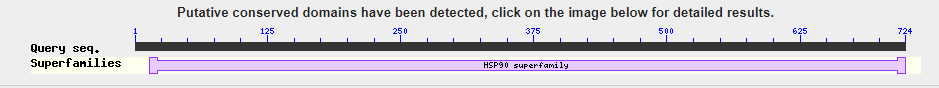
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BLAST

Ex.1

1. 03.fa
   1. Bacteroides thetaiotaomicron strain 7330
   2. 6487685bp
   3. 5145 genes
   4. prokaryotic
2. 09.fa
   1. Escherichia coli HUSEC2011
   2. 5277676 bp
   3. 5766 genes
   4. prokaryotic
3. 20.fa
   1. Thermotoga maritima strain Tma100
   2. 1869610 bp
   3. 1928 genes
   4. prokaryotic
4. 24.fa
   1. Saccharomyces cerevisiae S288C
   2. 1531933 bp
   3. 799 genes
   4. eukaryotic
5. 51.fa
   1. Spiribacter curvatus strain UAH-SP71
   2. 1926631 bp
   3. 1912 genes
   4. prokaryotic

Ex.2

1. Types of BLAST
   1. BLASTp – performs alignment of protein query against protein database
   2. BLASTn – performs alignment of nucleotide query against nucleotide database
   3. BLASTx – takes nucleotide sequence as query and translate it and performs alignment against protein database.
   4. tBLASTn – takes protein sequence as query and performs alignment against translated nucleotide database.
2. HSP90 - beta
3. It belongs to HSP90 superfamily