

Protein Coding

The website has an embedded search engine to access data within it, in which a protein-coding gene in six different standard IDs (UniProt, HGNC, Approved symbol, UCSC, Ensembl and RefSeq) can be given as query. For a given gene, the website provides information including its protein-coding regions, its associated Pfam and CATH domains (if available), the chromosome and the strand on which the gene is located, the protein length and its number of exons.

Pfam Candidate Domains

A graph chart that is represented by a bipartite graph, shows the association between Pfam candidate domains to various cancer types. By clicking on each cancer type, all related Pfam candidate domains can be distinguished via a change of edge colors. The same option is also provided for each candidate domain. Some tailored interface options such as “moving”, “zoom in” and “zoom out” are available to control the size of the display. The search engine can also be used to find a domain or a cancer type.

More Charts

Four more graph charts are provided in the website.

CATH Candidate Domains

This chart is similar to that of Pfam candidate domains, but for CATH candidate domains.

Candidate Mitochondrial Genes

This chart is similar to that of Pfam candidate domains, but for candidate mitochondrial genes of different cancer types.

Candidate Stem Cell Genes

This chart is similar to that of Pfam candidate domains, but for candidate stem cell genes of different cancer types.

Candidate DNA repair Genes

This chart is similar to that of Pfam candidate domains, but for candidate DNA repair genes of different cancer types.

Downloads

The following 12 datasets are available for download.

Cancer Types

This dataset contains the name and abbreviation for each cancer type.

Candidate Pfam Domains

List of candidate Pfam domains for each cancer type is presented in each column of this table.

CATH Candidate Domains

List of CATH candidate domains for each cancer type is presented in each column of this table.

Candidate Mitochondrial Genes

List of candidate mitochondrial genes for each cancer type is presented in each column of this table.

Candidate Stem Cell Genes

List of candidate stem cell genes for each cancer type is presented in each column of this table.

Candidate DNA Repair Genes

List of candidate DNA repair genes for each cancer type is presented in each column of this table.

List of DNA Repair Genes

This table contains the list of DNA repair genes investigated in this study.

List of Stem Cell Genes

This table contains the list of stem cell genes investigated in this study.

Protein Coding Genes

This file contains comprehensive information for protein-coding genes, such as their corresponding chromosomes, DNA strands, different IDs, the number of exons, protein-coding regions, protein lengths and the positions of their Pfam and CATH domains.

Whole Proteome CATH Domain List

This file includes detailed information for each CATH domain, such as its accumulative length in whole proteome and the number of its repetition.

Whole Proteome Pfam Domain List

This file includes detailed information for each Pfam domain, such as its accumulative length in whole proteome and the number of its repetition.

Pfam vs. CATH

This file presents CATH vs. Pfam candidate domain coverage for patients in each cancer type.

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