SURFACE a web server for annotation of protein functional sites - (session: Structural Genomics)

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SURFACE (SUrface Residues and Functions Annotated, Compared and Evaluated) is a DataBase of annotated and compared regions of protein surface. <u>SURFACE</u> contains the results of a large-scale protein annotation and local structural comparison project. A non-redundant set of protein chains is used to build a database of protein surface patches, defined as putative surface functional sites. Each patch is annotated with sequence and structure-derived information about function or interaction abilities. A new procedure for structure comparison is used to exert an all-versus-all patches comparison. Selection of the results obtained with stringent parameters offers a similarity score that can be used to associate different patches and may allow reliable annotation by similarity.

Annotation exerted through the comparison of regions of protein surface allows to highlight similarities, which cannot be recognized by other methods of sequence or structure comparison.