

Resource Summary Report

Generated by [NIF](#) on Sep 16, 2026

WD repeat Family of Proteins

RRID:SCR_002160

Type: Tool

Proper Citation

WD repeat Family of Proteins (RRID:SCR_002160)

Resource Information

URL: <http://bmerc.bu.edu/projects/wdrepeat/>

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Description: THIS RESOURCE IS NO LONGER IN SERVICE, documented on August 26, 2016. This website contains a library of WD-repeat containing proteins in which the repeats appear as multi-aligned sets. WD-repeat-containing proteins are those that contain 4 or more copies of the WD-repeat (tryptophan-aspartate repeat), a sequence motif approximately 31 amino acids long, that encodes a structural repeat. This repeat is described by the following profile, where x is ANY amino acid. By clicking on each highlighted character you will obtain the distribution of amino acids found at that position of the repeat among an aligned set of WD-repeat containing proteins. The tertiary structure of only one member of this family has been determined, that of the G protein beta subunit, which contains 7 WD-repeats. Each of the 7 repeats folds into a small antiparallel beta-sheet. The over-lines above indicate the position of these strands, with a being the strand closest to the central pore and d at the external surface of the folded protein. These sheets are arranged around a central pseudosymmetry axis into a beta propeller. The WD-repeat-containing proteins form a very large family that is diverse in both its function and domain structure. Within all these proteins the WD-repeat domains are thought to have two common features: the domain folds into a beta propeller; and the domains form a platform without any catalytic activity on which multiple protein complexes assemble reversibly. The fact that these proteins play such key roles in the formation of protein-protein complexes in nearly all the major pathways and organelles unique to eukaryotic cells has two important implications. It supports both their ancient and proto eukaryotic origins and supports a likely association with many genetic diseases.

Synonyms: WD repeat Family of Proteins

Resource Type: data or information resource, database

Keywords: eukaryotic, function, genetic, align, amino acid, ancient, antiparallel, aspartate, beta, cell, disease, domain, g protein, multi-aligned, organelle, origin, pathway, propeller,

protein, proto, pseudosymmetry, sheet, structural, tertiary, tryptophan, wd-repeat

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: WD repeat Family of Proteins

Resource ID: SCR_002160

Alternate IDs: nif-0000-20949

Record Creation Time: 20220129T080211+0000

Record Last Update: 20260912T200124+0000

Ratings and Alerts

No rating or validation information has been found for WD repeat Family of Proteins.

No alerts have been found for WD repeat Family of Proteins.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.