

WD40 MOTIF: PRESENCE OF PROTEIN CONSERVATED DOMAINS IN LEISHMANIA SPP

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The WD40 motif is found in a multitude of eukaryotic proteins involved in a variety of cellular processes. The WD repeat comprises a 44–60 residue sequence that typically contains the GH dipeptide 11–24 residues from its N-terminus and the WD dipeptide at the C-terminus. This study identifies the presence of WD40 domains on proteins of different species of *Leishmania*. Furthermore, analyses on the similarities within evaluated proteins were performed. The available data were investigated under several databases, as SMART, SUPERFAMILY and GENEDB, providing a global analysis of protein sequences. For three-dimensional modeling we employed MODELLER, software that models structures of proteins and their assemblies by satisfaction of spatial restraints. Bioinformatics analyses of this putative WD40 motif suggest that some proteins, where this domain is enclosure, are strongly related to flagellar activities in *Leishmania spp.* These protein sequences might contribute to integrate the flagellar database – FlagellLink (<http://nugen.lcc.uece.br/lpgate/?p=flagdb>).

Supported by: CNPq

Key words: WD40 motif, protein domains, *Leishmania*, Bioinformatic