

Resource Summary Report

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G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project

RRID:SCR_013638

Type: Tool

Proper Citation

G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project (RRID:SCR_013638)

Resource Information

URL: http://icb.med.cornell.edu/wiki/index.php/GPCR_OKB

Proper Citation: G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project (RRID:SCR_013638)

Description: G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project offers an ontology that can be downloaded. :G Protein-Coupled Receptors (GPCRs) are a large and diverse family of membrane proteins whose members participate in the regulation of most cellular and physiological processes and therefore represent key pharmacological targets. Although several bioinformatics resources support research on GPCRs, most of them have been designed based on the traditional assumption that monomeric GPCRs constitute the functional receptor unit (Figure 1 below). The increase in the frequency and number of reports about GPCR dimerization/oligomerization and the implication of oligomerization in receptor function makes necessary the ability to store and access information about GPCR dimers/oligomers electronically. :We present here the design blueprint for an information system that can manage the elements of information required to describe comprehensively the phenomena of both homo- and hetero-oligomerization of GPCRs. Specifically, we present the ontology (Figures 2-4 below) that we plan to use for the development of an intuitive and user-friendly GPCR-Oligomerization Knowledge Base (GPCR-OKB). This information system is being designed in close collaboration with experimental colleagues working on GPCR oligomerization, and adopts the list of recommendations recently stipulated by the NC-IUPHAR subcommittee for the recognition and nomenclature of GPCR multimers. :Our long term goal is to disseminate to the scientific community organized, curated, and detailed information about GPCR dimerization/oligomerization, and its related structural context. :Skrabanek L, Murcia M, Bouvier M, Devi L, George SR, Lohse MJ, Milligan G, Neubig R, Palczewski K, Parmentier

M, Pin JP, Vriend G, Javitch JA, Campagne F, Filizola M. Requirements and ontology for a G protein-coupled receptor oligomerization knowledge base. BMC Bioinformatics. 2007 May 30;8:177. PMID 17537266 :The ontology files (developed in Protege) can be downloaded. :

Synonyms: GPCR-OKB

Resource Type: controlled vocabulary, data or information resource, ontology

Funding:

Resource Name: G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project

Resource ID: SCR_013638

Alternate IDs: nif-0000-00520

Record Creation Time: 20220129T080317+0000

Record Last Update: 20250411T055640+0000

Ratings and Alerts

No rating or validation information has been found for G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project.

No alerts have been found for G-Protein Coupled Receptor Oligomerization Knowledge Base (GPCR-OKB) ontology project.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.