

Resource Summary Report

Generated by NIF on Aug 11, 2026

Olfactory Receptor DataBase

RRID:SCR_007830

Type: Tool

Proper Citation

Olfactory Receptor DataBase (RRID:SCR_007830)

Resource Information

URL: <http://senselab.med.yale.edu/ordb/>

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Description: Database of vertebrate olfactory receptors genes and proteins. It supports sequencing and analysis of these receptors by providing a comprehensive archive with search tools for this expanding family. The database also incorporates a broad range of chemosensory genes and proteins, including the taste papilla receptors (TPRs), vomeronasal organ receptors (VNRs), insect olfaction receptors (IORS), *Caenorhabditis elegans* chemosensory receptors (CeCRs), and fungal pheromone receptors (FPRs). ORDB currently houses chemosensory receptors for more than 50 organisms. ORDB contains public and private sections which provide tools for investigators to analyze the functions of these very large gene families of G protein-coupled receptors. It also provides links to a local cluster of databases of related information in SenseLab, and to other relevant databases worldwide. The database aims to house all of the known olfactory receptor and chemoreceptor sequences in both nucleotide and amino acid form and serves four main purposes: * It is a repository of olfactory receptor sequences. * It provides tools for sequence analysis. * It supports similarity searches (screens) which reduces duplicate work. * It provides links to other types of receptor information, e.g. 3D models. The database is accessible to two classes of users: * General public www users have full access to all the public sequences, models and resources in the database. * Source laboratories are the laboratories that clone olfactory receptors and submit sequences in the private or public database. They can search any sequence they deposited to the database against any private or public sequence in the database. This user level is suited for laboratories that are actively cloning olfactory receptors.

Abbreviations: ORDB

Synonyms: Olfactory Receptors Database

Resource Type: data or information resource, analysis service resource, data repository, production service resource, database, service resource, data analysis service, storage

service resource

Defining Citation: [PMID:11752336](#), [PMID:9847223](#), [PMID:9218144](#)

Keywords: fungal, pheromone receptor, gene, chemosensory, chemosensory receptor, g protein-coupled receptor, olfaction receptor, protein, receptor, taste papilla receptor, vomeronasal organ receptor, olfactory receptor, nucleotide, amino acid, chemoreceptor sequence, olfactory receptor sequence, chemoreceptor, sequence

Related Condition: Aging

Funding: Human Brain Project ;
NIMH ;
NIA ;
NICD ;
NINDS ;
Multidisciplinary University Research Initiative ;
National Aeronautics and Space Administration ;
NIDCD RO1 DC 009977;
NIDCD P01 DC 04732;
NLM G08 LM05583

Availability: Public, Private, Acknowledgement requested, The community can contribute to this resource

Resource Name: Olfactory Receptor DataBase

Resource ID: SCR_007830

Alternate IDs: nif-0000-03213

Record Creation Time: 20220129T080244+0000

Record Last Update: 20260811T043320+0000

Ratings and Alerts

No rating or validation information has been found for Olfactory Receptor DataBase.

No alerts have been found for Olfactory Receptor DataBase.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Dung TT, et al. (2018) Applications and Advances in Bioelectronic Noses for Odour Sensing. *Sensors (Basel, Switzerland)*, 18(1).

Wu C, et al. (2017) Biomimetic Sensors for the Senses: Towards Better Understanding of Taste and Odor Sensation. *Sensors (Basel, Switzerland)*, 17(12).

Marenco L, et al. (2016) ORDB, HORDE, ODORactor and other on-line knowledge resources of olfactory receptor-odorant interactions. *Database : the journal of biological databases and curation*, 2016.

Liu N, et al. (2007) Integrated olfactory receptor and microarray gene expression databases. *BMC bioinformatics*, 8, 231.