

## Taste 2 receptors in GtoPdb v.2026.1

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### Abstract

Taste 2 receptors or Bitter taste receptors (TAS2Rs) [1] are G protein-coupled receptors expressed in oral sensory cells and a variety of non-gustatory tissues. The ~25 human TAS2Rs share low amino acid sequence identities with other GPCR families and are classified as broadly tuned "generalist" receptors with numerous, chemically diverse bitter agonists, as narrowly tuned "specialist" receptors with very few activators, as intermediately tuned receptors with an average number of agonists, or receptors specialized to interact with chemically defined activators [40]. The number of functional bitter taste receptor genes varies among species and orthologues might not be functionally conserved. Due to their expression in various tissues, the signal transduction of TAS2Rs is complex. Some TAS2Rs interact with drugs such as analgesic, anti-inflammatory, and antibacterial compounds. The specialist database [BitterDB](#) contains additional information on bitter compounds and receptors [17]. Recently, several experimental cryo-electron structures of TAS2Rs have been published [44].

### Contents

This is a citation summary for Taste 2 receptors in the [Guide to Pharmacology](#) database (GtoPdb). It exists purely as an adjunct to the database to facilitate the recognition of citations to and from the database by citation analyzers. Readers will almost certainly want to visit the relevant sections of the database which are given here under database links.

[GtoPdb](#) is an expert-driven guide to pharmacological targets and the substances that act on them. GtoPdb is a reference work which is most usefully represented as an on-line database. As in any publication this work should be appropriately cited, and the papers it cites should also be recognized. This document provides a citation for the relevant parts of the database, and also provides a reference list for the research cited by those parts. For further details see [13].

Please note that the database version for the citations given in GtoPdb are to the most recent preceding version in which the family or its subfamilies and targets were substantially changed. The links below are to the current version. If you need to consult the cited version, rather than the most recent version, please contact the GtoPdb curators.

### Database links

#### Taste 2 receptors

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=117>

##### Receptors

##### *TAS2R1*

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=659>

##### *TAS2R2*

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3315>

##### *TAS2R3*

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=660>

##### *TAS2R4*

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=661>

##### *TAS2R5*

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=662>

##### *TAS2R7*

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=663>

TAS2R8

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=664>

TAS2R9

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TAS2R10

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TAS2R50

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TAS2R60

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=681>

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