

5-Hydroxytryptamine receptors in GtoPdb v.2026.1

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Abstract

5-HT receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on 5-HT receptors [202] and subsequently revised [184, 26]**) are, with the exception of the ionotropic 5-HT₃ class, GPCRs where the endogenous agonist is **5-hydroxytryptamine**. The diversity of metabotropic 5-HT receptors is increased by alternative splicing that produces isoforms of the 5-HT_{2A} (non-functional), 5-HT_{2C} (non-functional), 5-HT₄, 5-HT₆ (non-functional) and 5-HT₇ receptors. Unique amongst the GPCRs, RNA editing produces 5-HT_{2C} receptor isoforms that differ in function, such as efficiency and specificity of coupling to G_{q/11} and also pharmacology [42, 501]. Most 5-HT receptors (except 5-ht_{1e} and 5-ht_{5b}) play specific roles mediating functional responses in different tissues (reviewed by [480, 396]).

Contents

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Database links

5-Hydroxytryptamine receptors

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=1>

Introduction to 5-Hydroxytryptamine receptors

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Receptors

5-HT_{1A} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1>

5-HT_{1B} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2>

5-HT_{1D} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3>

5-HT_{1e} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=4>

5-HT_{1F} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=5>

5-HT_{2A} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=6>

5-HT_{2B} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=7>

5-HT_{2C} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=8>

5-HT₄ receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=9>

5-HT_{5A} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=10>

5-HT_{5b} receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=648>

5-HT₆ receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=11>

5-HT₇ receptor

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=12>

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