

5-Hydroxytryptamine receptors in GtoPdb v.2025.3

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Abstract

5-HT receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on 5-HT receptors [201] and subsequently revised [183]**) 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 [41, 500]. Most 5-HT receptors (except 5-HT_{1e} and 5-HT_{5b}) play specific roles mediating functional responses in different tissues (reviewed by [479, 395]).

Contents

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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

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5-HT_{1B} receptor

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5-HT_{1D} receptor

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5-HT_{1E} receptor

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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

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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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