

## 5-Hydroxytryptamine receptors (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

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## Abstract

5-HT receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on 5-HT receptors [194] and subsequently revised [176]**) are, with the exception of the ionotropic 5-HT<sub>B</sub> 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<sub>2A</sub> (non-functional), 5-HT<sub>2C</sub> (non-functional), 5-HT<sub>4</sub>, 5-HT<sub>6</sub> (non-functional) and 5-HT<sub>7</sub> receptors. Unique amongst the GPCRs, RNA editing produces 5-HT<sub>2C</sub> receptor isoforms that differ in function, such as efficiency and specificity of coupling to G<sub>q/11</sub> and also pharmacology [40, 482]. Most 5-HT receptors (except 5-HT<sub>1e</sub> and 5-HT<sub>5b</sub>) play specific roles mediating functional responses in different tissues (reviewed by [463, 382]).

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#### Receptors

##### 5-HT<sub>1A</sub> receptor

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##### 5-HT<sub>1B</sub> receptor

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##### 5-HT<sub>1D</sub> receptor

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##### 5-HT<sub>1F</sub> receptor

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

##### 5-HT<sub>2A</sub> receptor

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

##### 5-HT<sub>2B</sub> receptor

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

5-HT<sub>2C</sub> receptor

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

5-HT<sub>4</sub> receptor

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

5-HT<sub>5A</sub> receptor

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

5-HT<sub>5b</sub> receptor

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

5-HT<sub>6</sub> receptor

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5-HT<sub>7</sub> receptor

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

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