

**HTR2A Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17879c****Specification**

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**HTR2A Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P28223](#)**HTR2A Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 3356**Other Names**

5-hydroxytryptamine receptor 2A, 5-HT-2, 5-HT-2A, Serotonin receptor 2A, HTR2A, HTR2

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**HTR2A Antibody (Center) Blocking Peptide - Protein Information****Name** HTR2A**Synonyms** HTR2**Function**

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:<a href="http://www.uniprot.org/citations/1330647" target="\_blank">1330647</a>, PubMed:<a href="http://www.uniprot.org/citations/18703043" target="\_blank">18703043</a>, PubMed:<a href="http://www.uniprot.org/citations/19057895" target="\_blank">19057895</a>). Also functions as a receptor for various drugs and psychoactive substances, including mescaline, psilocybin, 1-(2,5-dimethoxy-4-iodophenyl)-2-aminopropane (DOI) and lysergic acid diethylamide (LSD) (PubMed:<a href="http://www.uniprot.org/citations/28129538" target="\_blank">28129538</a>). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors (PubMed:<a href="http://www.uniprot.org/citations/28129538" target="\_blank">28129538</a>). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/28129538" target="\_blank">28129538</a>). Signaling activates phospholipase C and a phosphatidylinositol-calcium second messenger system that modulates the activity of phosphatidylinositol 3-kinase and promotes the release of Ca(2+) ions from intracellular stores (PubMed:<a href="http://www.uniprot.org/citations/18703043" target="\_blank">18703043</a>).

target="\_blank">18703043</a>, PubMed:<a href="http://www.uniprot.org/citations/28129538" target="\_blank">28129538</a>). Affects neural activity, perception, cognition and mood (PubMed:<a href="http://www.uniprot.org/citations/18297054" target="\_blank">18297054</a>). Plays a role in the regulation of behavior, including responses to anxiogenic situations and psychoactive substances. Plays a role in intestinal smooth muscle contraction, and may play a role in arterial vasoconstriction.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:P35363}. Cell projection, axon {ECO:0000250|UniProtKB:P14842}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P14842}. Membrane, caveola {ECO:0000250|UniProtKB:P14842}. Presynapse {ECO:0000250|UniProtKB:P14842}

#### **Tissue Location**

Detected in brain cortex (at protein level). Detected in blood platelets.

### **HTR2A Antibody (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

### **HTR2A Antibody (Center) Blocking Peptide - Images**

### **HTR2A Antibody (Center) Blocking Peptide - Background**

This gene encodes one of the receptors for serotonin, a neurotransmitter with many roles. Mutations in this gene are associated with susceptibility to schizophrenia and obsessive-compulsive disorder, and are also associated with response to the antidepressant citalopram in patients with major depressive disorder (MDD). MDD patients who also have a mutation in intron 2 of this gene show a significantly reduced response to citalopram as this antidepressant downregulates expression of this gene. Multiple transcript variants encoding different isoforms have been found for this gene.

### **HTR2A Antibody (Center) Blocking Peptide - References**

Blaya, C., et al. Neurosci. Lett. 485(1):11-15(2010) Klein, A.B., et al. J. Cereb. Blood Flow Metab. 30 (11), E1-E7 (2010) :Borrito-Escuela, D.O., et al. Biochem. Biophys. Res. Commun. 401(4):605-610(2010) Terrazzino, S., et al. Headache (2010) In press :Kapelski, P., et al. Psychiatr. Pol. 44(2):197-206(2010)