

# HTR2A Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17879c

## **Specification**

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/c itations/1330647" target="\_blank">1330647</a>, PubMed:<a href="http://www.uniprot.org/ci tations/18703043"

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

This gene encodes one of the receptors for serotonin, aneurotransmitter with many roles. Mutations in this gene areassociated with susceptibility to schizophrenia andobsessive-compulsive disorder, and are also associated withresponse to the antidepressant citalopram in patients with majordepressive disorder (MDD). MDD patients who also have a mutation inintron 2 of this gene show a significantly reduced response tocitalopram as this antidepressant downregulates expression of thisgene. Multiple transcript variants encoding different isoforms havebeen 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) :Borroto-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)



target=" blank">18703043</a>, PubMed:<a href="http://www.uniprot.org/ci tations/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)-2aminopropane (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.uni prot.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/c itations/28129538" target=" blank">28129538</a>). Signaling activates phospholipase C and a phosphatidylinositol-calcium second

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>, PubMed:<a href="http://www.uniprot.org/ci

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tations/28129538"
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target="\_blank">28129538</a>). Affects neural activity, perception, cognition and mood (PubMed:<a href="http://www.unipro t.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}. Cell junction, synapse, 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