

Anti-5HT2A Receptor Antibody

Catalog # ABO10698

Specification

Anti-5HT2A Receptor Antibody - Product Information

Application	WB, IHC
Primary Accession	P28223
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for 5-hydroxytryptamine receptor 2A(HTR2A) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-5HT2A Receptor Antibody - Additional Information

Gene ID 3356

Other Names

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

Calculated MW

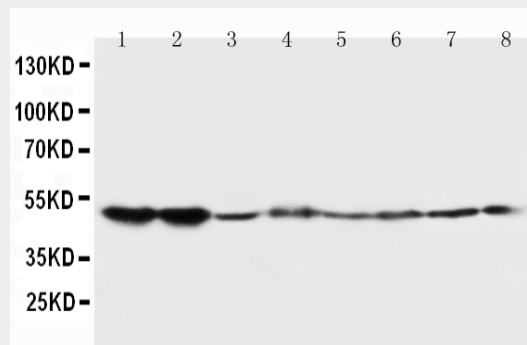
52603 MW KDa

Application Details

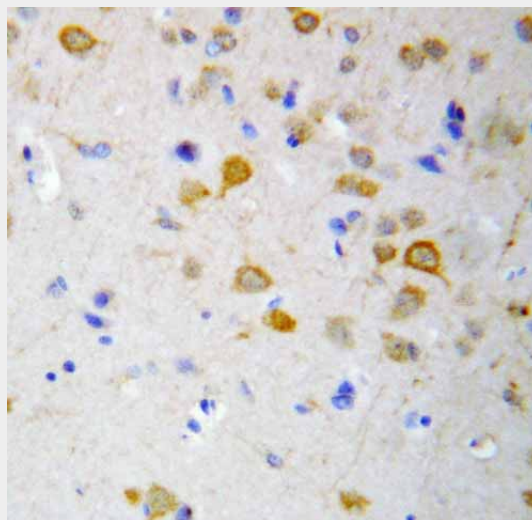
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Cell projection, dendrite . Cell projection, axon . Cytoplasmic vesicle . Membrane, caveola . Localizes to the postsynaptic thickening of axo-dendritic synapses. .



Anti-5HT2A Receptor antibody, ABO10698, Western blotting
Lane 1: Rat Brain Tissue Lysate
Lane 2: Rat Brain Tissue Lysate
Lane 3: Mouse Brain Tissue Lysate
Lane 4: Mouse Brain Tissue Lysate
Lane 5: U87 Cell Lysate
Lane 6: SMMC Cell Lysate
Lane 7: HT1080 Cell Lysate
Lane 8: COLO320 Cell Lysate



Anti-5HT2A Receptor antibody, ABO10698, IHC(P)
IHC(P): Rat Brain Tissue

Anti-5HT2A Receptor Antibody - Background

The mammalian HTR2A(5-HT2A receptor) is a subtype of the 5-HT2 receptor that belongs to the serotonin receptor family and is a G

Tissue Specificity

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

Protein Name

5-hydroxytryptamine receptor
2A(5-HT-2/5-HT-2A)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl,
0.2mg Na₂HPO₄, 0.05mg Thimerosal,
0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a
sequence at the C-terminus of human
5HT_{2A} Receptor(418-432aa
AYKSSQLQMGQKKNS), different from the
mouse sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

**At -20°C for one
year. After
reconstitution, at
4°C for one
month. It can
also be aliquotted
and stored frozen
at -20°C for a
longer time. Avoid
repeated freezing
and thawing.**

Sequence Similarities

Belongs to the G-protein coupled receptor 1
family.

**Anti-5HT_{2A} Receptor Antibody - Protein
Information**

Name HTR2A

Synonyms HTR2

Function

G-protein coupled receptor for
5-hydroxytryptamine (serotonin)
(PubMed:<a href="http://www.uniprot.org/ci
tations/1330647"
target="_blank">1330647,
PubMed:<a href="http://www.uniprot.org/ci
tations/18703043"

protein-coupled receptor(GPCR). This is the
main excitatory receptor subtype among the
GPCRs for serotonin(5-HT), although 5-HT_{2A}
may also have an inhibitory effect on certain
areas such as the visual cortex and the orbit
frontal cortex. This receptor was given
importance first as the target of psychedelic
drugs like LSD. Later it came back to
prominence because it was also found to be
mediating, at least partly, the action of many
antipsychotic drugs, especially the atypical
ones.5-HT_{2A} also happens to be a necessary
receptor for the spread of the human polyoma
virus called JC virus. Sparkes et al.(1991)
concluded that the gene is located on
13q14-q21 in man and on chromosome 14 in
the mouse.

target="_blank">18703043, PubMed:19057895). 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:28129538). 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:28129538). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:28129538). 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:18703043, PubMed:28129538). Affects neural activity, perception, cognition and mood (PubMed:18297054). 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.

Anti-5HT2A Receptor Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)