Datasheet for ABIN967504

anti-Serotonin Receptor 2B antibody (AA 1-58)

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Overview

Quantity:	0.1 mg
Target:	Serotonin Receptor 2B (HTR2B)
Binding Specificity:	AA 1-58
Reactivity:	Human, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Serotonin Receptor 2B antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Human 5HT[2B]R (aa. 1-58) fusion protein
Clone:	A72-1
Isotype:	IgG1 kappa
Cross-Reactivity:	Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 3. Please refer to us for technical protocols.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	Serotonin Receptor 2B (HTR2B)
Alternative Name:	Serotonin Receptor 5-HT 2BR (HTR2B Products)
Background:	Serotonin (5-hydroxytryptamine, 5-HT), originally discovered as a serum factor, plays an important role in regulating diverse biological processes in the central and peripheral nervous systems, the cardiovascular system and the gastrointestinal systems. The different functions of serotonin are thought to be mediated through specific receptors. Physiological, biochemical, and pharmacological studies have defined at least fourteen serotonin receptors. The fourteen receptors are grouped in seven subtypes according to operational, structural, and transductional properties. The 5-HT2 receptors (5 -HT[2A]R, 5-HT[2B]R, an d 5-HT[2C]R) may be considered as prototypes for the study of serotonin receptors . Their functions are mediated by the second messenger inositol polyphosphate in a G-protein coupled pathway. They are expressed in diverse tissues including brain, vascular smooth muscles and platelets. The 5-HT[2A]R-mRNAs have been found in only a few areas of the brain, including the frontal cortex, piriform cortex, ventro-caudal part of CA3, motor cranial nerve nuclei in the brainstem, and the ventral horn of the spinal cord. The 5-HT[2C]R mRNA has been found at high levels in many parts of the brain including retrosplenial piriform and entorhinal cortex, anterior olfactory nucleus, substantia nigra pars compacta, several brainstem nuclei and the whole grey matter of the spinal cord. The 5-HT[2B]R was cloned in stomach fundus, where it is abundantly expressed.
Molecular Weight:	45-55 kDa
Pathways:	JAK-STAT Signaling, Inositol Metabolic Process, Regulation of G-Protein Coupled Receptor Protein Signaling, Regulation of Carbohydrate Metabolic Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL

Handling

Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:

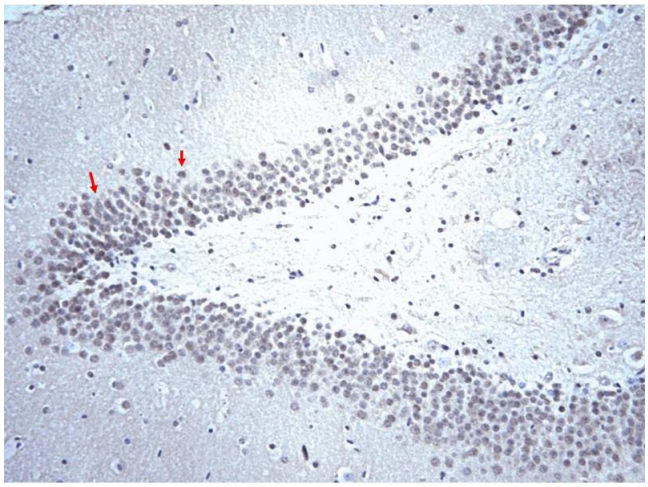
Duxon, Flanigan, Reavley, Baxter, Blackburn, Fone: "Evidence for expression of the 5-hydroxytryptamine-2B receptor protein in the rat central nervous system." in: **Neuroscience**, Vol. 76, Issue 2, pp. 323-9, (1997) (PubMed).

Saudou, Hen: "5-Hydroxytryptamine receptor subtypes in vertebrates and invertebrates." in: **Neurochemistry international**, Vol. 25, Issue 6, pp. 503-32, (1995) (PubMed).

Pompeiano, Palacios, Mengod: "Distribution of the serotonin 5-HT2 receptor family mRNAs: comparison between 5-HT2A and 5-HT2C receptors." in: **Brain research. Molecular brain research**, Vol. 23, Issue 1-2, pp. 163-78, (1994) (PubMed).

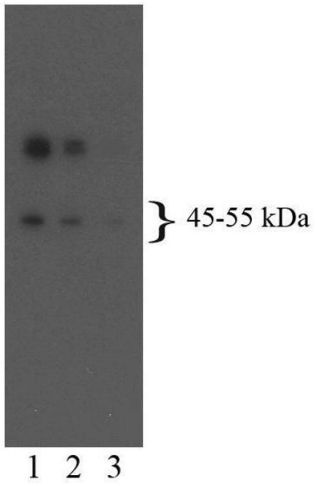
Humphrey, Hartig, Hoyer: "A proposed new nomenclature for 5-HT receptors." in: **Trends in pharmacological sciences**, Vol. 14, Issue 6, pp. 233-6, (1993) (PubMed).

Foguet, Hoyer, Pardo, Parekh, Kluxen, Kalkman, Stühmer, Lübbert: "Cloning and functional characterization of the rat stomach fundus serotonin receptor." in: **The EMBO journal**, Vol. 11, Issue 9, pp. 3481-7, (1992) (PubMed).



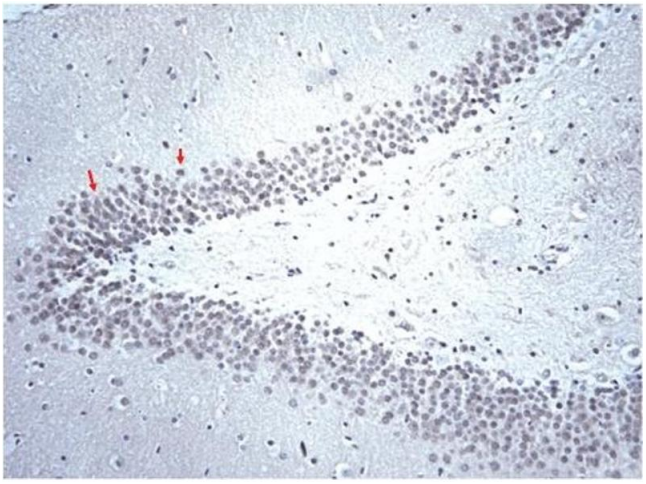
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Immunohistochemical staining of neurons in rat brain (hippocampus) (first panel). A zinc-fixed, paraffin-embedded section of a rat brain was stained with 1.25 µg/mL of the Purified Mouse Anti-Serontonin Receptor 5-HT2BR antibody. Detection was performed using a Biotin Goat Anti-Mouse Ig (MN 550337) secondary and Streptavidin-HRP (MN 550946) followed by development with a DAB chromogen (MN 550880). Arrows are indicative of 5-HT2BR immunoreactivity.



Western Blotting

Image 2. Western blot analysis for 5-HT2BR (second panel). A rat whole brain lysate was probed with 2 µg/mL (lane 1), 1 µg/mL (lane 2) and 0.5 µg/mL (lane 3) of the Mouse Anti-Serontonin Receptor 5-HT2BR antibody. The serotonin receptor 5-HT2BR is observable at 45-55 kDa with another unidentified band at 60-70 kDa.



Immunohistochemistry

Image 3.

Please check the product details page for more images. Overall 4 images are available for ABIN967504.