

### HTR4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12604a

### Specification

# HTR4 Antibody (N-term) - Product Information

Application Primary Accession Other Accession

Reactivity Host Clonality Isotype Antigen Region WB,E <u>Q13639</u> <u>NP\_001035259.1</u>, <u>NP\_000861.1</u>, <u>NP\_955525.1</u>, <u>NP\_001035262.2</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 1-30

# HTR4 Antibody (N-term) - Additional Information

Gene ID 3360

**Other Names** 5-hydroxytryptamine receptor 4, 5-HT-4, 5-HT4, Serotonin receptor 4, HTR4

Target/Specificity

This HTR4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HTR4.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

HTR4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## HTR4 Antibody (N-term) - Protein Information

Name HTR4 (HGNC:5299)

Function G-protein coupled receptor for 5-hydroxytryptamine (serotonin), a biogenic hormone



that functions as a neurotransmitter, a hormone and a mitogen (PubMed:<u>10821780</u>, PubMed:<u>16102731</u>, PubMed:<u>35714614</u>, PubMed:<u>9603189</u>). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:<u>16102731</u>, PubMed:<u>35714614</u>). HTR4 is coupled to G(s) G alpha proteins and mediates activation of adenylate cyclase activity (PubMed:<u>16102731</u>, PubMed:<u>35714614</u>).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Endosome membrane {ECO:0000250|UniProtKB:P97288}; Multi-pass membrane protein. Note=Interaction with SNX27 mediates recruitment to early endosomes, while interaction with NHERF1 and EZR might target the protein to specialized subcellular regions, such as microvilli. {ECO:0000250|UniProtKB:P97288}

#### Tissue Location

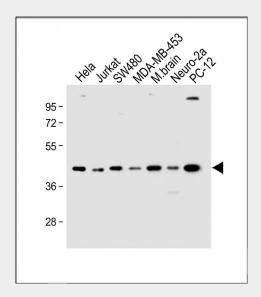
[Isoform 5-HT4(A)]: Expressed in ileum, brain, and atrium, but not in the ventricle. [Isoform 5-HT4(I)]: Expressed in all cardiovascular tissues analyzed.

## HTR4 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## HTR4 Antibody (N-term) - Images



All lanes : Anti-HTR4 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: SW480 whole cell lysate Lane 4: MDA-MB-453 whole cell lysate Lane 5: Mouse brain lysate Lane 6: Neuro-2a whole cell lysate Lane 7: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated



at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# HTR4 Antibody (N-term) - Background

This gene is a member of the family of serotonin receptors, which are G protein coupled receptors that stimulate cAMP production in response to serotonin (5-hydroxytryptamine). The gene product is a glycosylated transmembrane protein that functions in both the peripheral and central nervous system to modulate the release of various neurotransmitters. Multiple transcript variants encoding proteins with distinct C-terminal sequences have been described.

## HTR4 Antibody (N-term) - References

Hancock, D.B., et al. Nat. Genet. 42(1):45-52(2010) Maillet, M., et al. Biochem. J. 387 (PT 2), 463-471 (2005) : Brattelid, T., et al. Naunyn Schmiedebergs Arch. Pharmacol. 369(6):616-628(2004) Hiroi, T., et al. Biochem. Biophys. Res. Commun. 289(2):337-344(2001) Bender, E., et al. J. Neurochem. 74(2):478-489(2000)