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HTR4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12604a

Product Information

Application	WB, E
Primary Accession	Q13639
Other Accession	NP_001035259.1, NP_000861.1, NP_955525.1, NP_001035262.2
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32049
Calculated MW	43761
Antigen Region	1-30

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.

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:10821780, PubMed:16102731, PubMed:35714614, PubMed:9603189). Ligand binding causes a conformation change that triggers

	signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:16102731, PubMed:35714614). HTR4 is coupled to G(s) G alpha proteins and mediates activation of adenylate cyclase activity (PubMed:16102731, PubMed:35714614).
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.

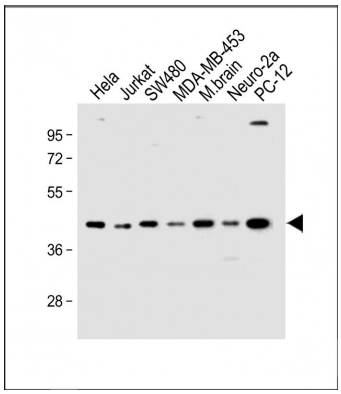
Background

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.

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)

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.