

Product datasheet for MR224713L4

Htr2b (NM_008311) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Htr2b (NM_008311) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Htr2b
Synonyms:	5-HT2B; AJ012488; AV377389
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR224713).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

ACCN:	NM_008311
ORF Size:	1437 bp



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_008311.2](#)

RefSeq Size: 2073 bp

RefSeq ORF: 1440 bp

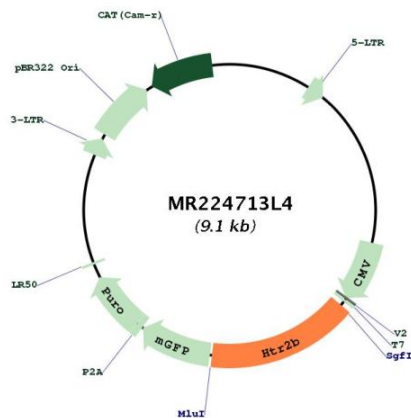
Locus ID: 15559

UniProt ID: [Q02152](#)

Cytogenetics: 1 C5

Gene Summary:

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:1426253). Also functions as a receptor for various ergot alkaloid derivatives and psychoactive substances (PubMed:1426253, PubMed:16940156). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors. Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways. Signaling activates a phosphatidylinositol-calcium second messenger system that modulates the activity of phosphatidylinositol 3-kinase and downstream signaling cascades and promotes the release of Ca(2+) ions from intracellular stores (By similarity). Plays a role in the regulation of dopamine and 5-hydroxytryptamine release, 5-hydroxytryptamine uptake and in the regulation of extracellular dopamine and 5-hydroxytryptamine levels, and thereby affects neural activity (PubMed:16940156, PubMed:18337424). May play a role in the perception of pain (PubMed:21273425). Plays a role in the regulation of behavior, including impulsive behavior (PubMed:21179162). Required for normal proliferation of embryonic cardiac myocytes and normal heart development (PubMed:10944220, PubMed:11413089). Protects cardiomyocytes against apoptosis (PubMed:12738797). Plays a role in the adaptation of pulmonary arteries to chronic hypoxia (PubMed:12244304). Plays a role in vasoconstriction (PubMed:12244304, PubMed:23346101). Required for normal osteoblast function and proliferation, and for maintaining normal bone density (PubMed:17846081). Required for normal proliferation of the interstitial cells of Cajal in the intestine (PubMed:19941613). [UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MR224713L4