

GALR2 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9347c

Specification

GALR2 Antibody (Center) Blocking Peptide -Product Information

Primary Accession 043603

GALR2 Antibody (Center) Blocking Peptide -Additional Information

Gene ID 8811

Other Names Galanin receptor type 2, GAL2-R, GALR-2, GALR2, GALNR2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GALR2 Antibody (Center) Blocking Peptide -Protein Information

Name GALR2

Synonyms GALNR2

Function

Receptor for the hormone galanin and GALP. Receptor for the hormone spexin-1 (PubMed:24517231). The activity of this receptor is mediated by G proteins that activate the phospholipase C/protein kinase C pathway (via G(q)) and

GALR2 Antibody (Center) Blocking Peptide - Background

GALR2 is an important neuromodulator present in the brain, gastrointestinal system, and hypothalamopituitary axis. It is a 30-amino acid non-C-terminally amidated peptide that potently stimulates growth hormone secretion, inhibits cardiac vagal slowing of heart rate, abolishes sinus arrhythmia, and inhibits postprandial gastrointestinal motility. The actions of galanin are mediated through interaction with specific membrane receptors that are members of the 7-transmembrane family of G protein-coupled receptors. GALR2 interacts with the N-terminal residues of the galanin peptide. The primary signaling mechanism for GALR2 is through the phospholipase C/protein kinase C pathway (via Gq), in contrast to GALR1, which communicates its intracellular signal by inhibition of adenylyl cyclase through Gi. However, it has been demonstrated that GALR2 couples efficiently to both the Gq and Gi proteins to simultaneously activate 2 independent signal transduction pathways.

GALR2 Antibody (Center) Blocking Peptide - References

Gratacos, M. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B (6), 808-816 (2009)Tofighi, R. Proc. Natl. Acad. Sci. U.S.A. 105 (7), 2717-2722 (2008)Rikova, K. Cell 131 (6), 1190-1203 (2007)



that inhibit adenylyl cyclase (via G(i)).

Cellular Location Cell membrane; Multi-pass membrane protein.

Tissue Location Expressed abundantly within the central nervous system in both hypothalamus and hippocampus. In peripheral tissues, the strongest expression was observed in heart, kidney, liver, and small intestine

GALR2 Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides