10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GNB5 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP9687a

Specification

GNB5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O14775

GNB5 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10681

Other Names
Guanine nucleotide-binding protein subunit beta-5, Gbeta5, Transducin beta chain 5, GNB5

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.

GNB5 Antibody (N-term) Blocking Peptide - Protein Information

Name GNB5

Function
Enhances GTPase-activating protein (GAP) activity of regulator of G protein signaling (RGS) proteins, such as RGS7 and RGS9, hence involved in the termination of the signaling initiated by the G protein coupled receptors (GPCRs) by accelerating the GTP hydrolysis on the G-alpha subunits, thereby promoting their inactivation (PubMed:27677260). Increases RGS7 GTPase-activating protein (GAP) activity, thereby regulating mood and cognition (By similarity). Increases RGS9 GTPase-activating protein (GAP) activity, hence contributes to the deactivation of G protein signaling initiated by D(2) dopamine receptors (PubMed:27677260). May play an important role in neuronal signaling, including in the parasympathetic, but not sympathetic, control of heart rate (By similarity).

Cellular Location
Membrane {ECO:0000250|UniProtKB:P62881}.

Tissue Location
Widely expressed..

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GNB5 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

GNB5 Antibody (N-term) Blocking Peptide - Images

GNB5 Antibody (N-term) Blocking Peptide - Background

Heterotrimeric guanine nucleotide-binding proteins (G proteins), which integrate signals between receptors and effector proteins, are composed of an alpha, a beta, and a gamma subunit. These subunits are encoded by families of related genes. This gene encodes a beta subunit. Beta subunits are important regulators of alpha subunits, as well as of certain signal transduction receptors and effectors.

GNB5 Antibody (N-term) Blocking Peptide - References

Hosgood, H.D. III, et al. Occup Environ Med 66(12):848-853(2009)# Howlett, A.C., et al. J. Biol. Chem. 284(24):16386-16399(2009)# Rao, A., et al. J. Neurosci. 27(51):14199-14204(2007)# Drenan, R.M., et al. J. Biol. Chem. 281(38):28222-28231(2006)# Stelzl, U., et al. Cell 122(6):957-968(2005)