

**GNB5 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9687a****Specification**

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**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:<a href="http://www.uniprot.org/citations/27677260" target="\_blank">27677260</a>). 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:<a href="http://www.uniprot.org/citations/27677260" target="\_blank">27677260</a>). 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..

## **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)