

**GNAS Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13065b****Specification**

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**GNAS Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q5FWY2](#)**GNAS Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 2778**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.

**GNAS Antibody (C-term) Blocking peptide - Protein Information****Name** GNAS {ECO:0000313|EMBL:AAH89157.2}**Function**

Guanine nucleotide-binding protein (G protein) involved as transducer in olfactory signal transduction controlled by G protein- coupled receptors (GPCRs). Contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP- bound state. Signaling by an activated GPCR promotes GDP release and GTP binding. The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal. Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins. GNAL/G(olf) alpha specifically mediates olfactory signal transduction within the olfactory neuroepithelium and the basal ganglia following GPCRs activation. Acts by promoting the specific activation of adenylyl cyclase ADCY3, resulting in increased levels of the signaling molecule cAMP.

**Cellular Location**

Cell membrane {ECO:0000256|ARBA:ARBA00004193}; Lipid-anchor  
{ECO:0000256|ARBA:ARBA00004193}

**GNAS Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**GNAS Antibody (C-term) Blocking peptide - Images****GNAS Antibody (C-term) Blocking peptide - Background**

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. The Gs protein is involved in hormonal regulation of adenylate cyclase: it activates the cyclase in response to beta-adrenergic stimuli. Alternative splicing of downstream exons of the GNAS gene is observed, which results in different forms of the stimulatory G protein alpha subunit, a key element of the classical signal transduction pathway linking receptor-ligand interactions with the activation of adenylyl cyclase and a variety of cellular responses. Multiple transcript variants have been found for this gene, but the full-length nature and/or biological validity of some variants have not been determined. Mutations in this gene result in pseudohypoparathyroidism type 1a, pseudohypoparathyroidism type 1b, Albright hereditary osteodystrophy, pseudopseudohypoparathyroidism, McCune-Albright syndrome, progressive osseous heteroplasia, polyostotic fibrous dysplasia of bone, and some pituitary tumors.