

Recombinant Mouse Gnai1 Protein, Myc/DDK-tagged

Cat. No. Gnai1-3254M Lot. No. (See product label)

SPECIFICATION

Product Overview Purified recombinant protein of mouse full-length guanine nucleotide binding protein (G protein), alpha inhibiting 1 (Gnai1), with C-terminal MYC/DDK tag, expressed in HEK293T cells.

Species Mouse

Source HEK293

Description Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs) in numerous signaling cascades. The alpha chain 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. Signaling is mediated via effector proteins, such as adenylyate cyclase. Inhibits adenylyate cyclase activity, leading to decreased intracellular cAMP levels. The inactive GDP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. Required for normal cytokinesis during mitosis. Required for cortical dynein-dynactin complex recruitment during metaphase.

Molecular Mass 40.4 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade after receiving vials.
Concentration	>50 µg/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	Gnai1 guanine nucleotide binding protein (G protein), alpha inhibiting 1 [<i>Mus musculus</i> (house mouse)]
Official Symbol	Gnai1
Synonyms	GNAI1; guanine nucleotide binding protein (G protein), alpha inhibiting 1; guanine nucleotide-binding protein G(i) subunit alpha-1; adenylate cyclase-inhibiting G alpha protein; guanine nucleotide binding protein, alpha inhibiting 1; Gnai-1; AU046200; Gialpha1
Gene ID	14677
mRNA Refseq	NM_010305
Protein Refseq	NP_034435
UniProt ID	B2RSH2

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA