

Product datasheet for TP521647

Gnai1 (NM_010305) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse guanine nucleotide binding protein (G protein), alpha inhibiting 1 (Gnai1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR221647 protein sequence Red =Cloning site Green =Tags(s)

MGCTLSAEDKAAVERSKMIDRNLRDGEKAAREVKLLLLGAGESGKSTIVKQMKIIHEAGYSEEECKQYK
AVVYSNTIQSIIAIRAMGRLKIDFGDSARADDARQLFVLAGAAEEGFMTAELAGVIKRLWKDSGVQACF
NRSREYQLNDSAAYLNDLDRIAQPNYIPTQQDVLTRVKTGIVETHFTFKDLHFKMFDVGGQRSERKK
WIHCFEGVTAIFCVALS DYDLVLAEDEEMNRMHESMKLFDSDICNNKWFTDTSIILFLNKKDLFEEKIKK
SPLTICYPEYAGSNTYEEAAAYIQCFEDLNKRKDTKEIYTHFTCATDTKNVQVFDAVTDVVIKNNLKD
CGLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	40.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_034435
Locus ID:	14677
UniProt ID:	B2RSH2



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RefSeq Size: 3193

Cytogenetics: 5 8.16 cM

RefSeq ORF: 1065

Synonyms: AU046200; Gialpha1; Gnai-1

Summary: 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 (By similarity). Signaling is mediated via effector proteins, such as adenylate cyclase. Inhibits adenylate cyclase activity, leading to decreased intracellular cAMP levels (By similarity). 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 (By similarity).[UniProtKB/Swiss-Prot Function]