



Recombinant Human Guanine nucleotide-binding protein G (i) subunit alpha-1 (GNAI1)

Product Code	CSB-EP009588HU
Abbreviation	Recombinant Human GNAI1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P63096
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Human Guanine nucleotide-binding protein G(i) subunit alpha-1(GNAI1)
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	GCTLSAEDKAAVERSKMIDRNLREDGEKAAREVKLLLLGAGESGKSTIVKQMKI IHEAGYSEEECKQYKAVVYSNTIQSIIAIRAMGRLKIDFGDSARADDARQLFVLA GAAEEGFMTAELAGVIKRLWKDSGVQACFNRSREYQLNDSAAYYLNDLDRIA QPNYIPTQQDVLRTVKTGTGIVETHFTFKDLHFKMFDVGGQRSEKRWIHCFE GVTAIIFCVALSDYDLVLAEDEEMNRMHESMKLFDSICNNKWFTDTSIILFLNKK DLFEKIKKSPLTICYPEYAGSNTYEEAAAYIQCFEDLNKRKDTKEIYTHFTCA TDTKNVQFVFDAVTDVIIKNNLKDCLF
Research Area	Signal Transduction
Source	E.coli
Target Names	GNAI1
Expression Region	2-354aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	47.7 kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Human GNAI1 covers amino acids 2-354. This GNAI1 protein is expected to have a theoretical molecular weight of 47.7 kDa. This GNAI1 recombinant protein is manufactured in e.coli. The GNAI1 coding gene included the N-terminal 10xHis tag and C-terminal Myc tag, which simplifies the detection and purification processes of the recombinant GNAI1 protein in following stages of expression and purification.

The human guanine nucleotide-binding protein G (i) subunit alpha-1 (GNAI1) is a member of the G-alpha subunit family, which plays a pivotal role in transducing signals from G-protein-coupled receptors (GPCRs) to intracellular effectors. GNAI1 inhibits adenylyl cyclase, leading to decreased cyclic AMP (cAMP) production and downstream signaling. This negatively regulates cellular processes such as neurotransmission, hormone secretion, and cell growth. GNAI1 is involved in various physiological functions, including the modulation of cardiovascular responses, neuronal activity, and immune cell function. Dysregulation of GNAI1 has been associated with several diseases, emphasizing its importance as a signaling molecule and a potential therapeutic target in various disorders.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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