

# Recombinant human GNAI3 protein

Catalog Number: ATGP1486

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

1-354aa

**UniProt No.**

P08754

**NCBI Accession No.**

NP\_006487

**Alternative Names**

Guanine nucleotide-binding protein G(k) subunit alpha, 87u6

## PRODUCT SPECIFICATION

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**Molecular Weight**

43 kDa (377aa) confirmed by MALDI-TOF

**Concentration**

0.5mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 100mM NaCl

**Purity**

&gt; 90% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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**Description**

GNAI3 belongs to the G-alpha family and G (i/o/t/z) subfamily. Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. G (k) is the stimulatory G protein of receptor-regulated K<sup>+</sup> channels. The active GTP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. This protein plays a role in cell division. GNAI3 has been shown to interact with RGS14, RIC8A, RGS18, S1PR1, RGS12, RGS16, RGS19, RGS10 and RGS5. Recombinant human GNAI3 protein, fused to His-tag at N-terminus, was

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expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MGSMGCTLSA EDKAAVERSK MIDRNLREDG EKAKEVKLL LLGAGESGKS TIVKQMKIHH  
EDGYSEDECK QYKVVVYSNT IQSIIAIRA MGRLLKIDFGE AARADDARQL FVLGSAEAG VMTPELAGVI KRLWRDGGVQ  
ACFSRSREYQ LNDASASYLN DLDRISQSNY IPTQQDVLRT RVKTTGIVET HFTFKDLYFK MFDVGGQRSE RKKWIHCFEG  
VTAIIFCVL SDYDLVLAED EEMNRMHESM KLFDSICNNK WFTETSILF LNKKDLFEK IKRSPLTICY PEYTGSTNTE  
EAAAYIQCF EDLNRKDKT EIYHFTCAT DTKNVQFVFD AVTDVVIKNN LKECGLY

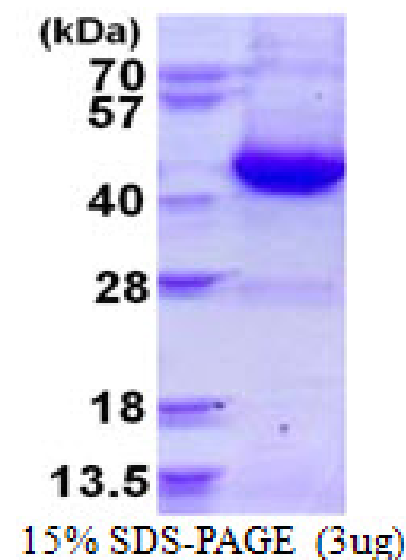
## General References

Cho H., et al. (2007) J. Cell Biol. 178:245-255

Jones, D.T., et al. (1990) J. Biol. Chem. 265: 2671-2676.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.