Recombinant human RGS14 protein

Catalog Number: ATGP1625

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-566aa

UniProt No.
O43566

NCBI Accession No.
NP_006471

Alternative Names
regulator of G-protein signaling 14

PRODUCT SPECIFICATION

Molecular Weight
63.6 kDa (586aa)

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 10% glycerol, 1mM DTT, 200mM NaCl

Purity
> 80% 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

Description
RGS14 (Regulator of G-protein signaling 14) belongs to regulator of G protein signalling family. This protein contains one RGS domain, two Raf-like Ras-binding domains (RBDs), and one GoLoco motif. RGS14 is highly enriched in CA2 pyramidal neurons and plays a role in suppression of both synaptic plasticity at these synapses and hippocampal-based learning and memory. RGS14 is a scaffolding protein that integrates G protein and H-Ras/ERK/MAP kinase signaling pathways, thereby making it well positioned to suppress plasticity in CA2 neurons. Recombinant human RGS14 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by

using conventional chromatography techniques.

Amino acid Sequence

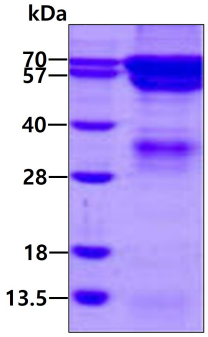
<MGSSHHHHHH SSGLVPRGSH> MPGKPKHLGV PNGRMVLAVS DGELSSTTGP QGQGEGRGSS LSIHSLPSGP SSPFPTEEQP VASWALSFER LLQDPLGLAY FTEFLKKEFS AENVTFWKAC ERFQQIPASD TQQLAQEARN IYQEFLSSQA LSPVNIDRQA WLGEEVLAEP RPDMFRAQQL QIFNLMKFDS YARFVKSPLY RECLLAEAEG RPLREPGSSR LGSPDATRKK PKLKPGKSLP LGVEELGQLP PVEGPGGRPL RKSFRRELGG TANAALRRES QGSLNSSASL DLGFLAFVSS KSESHRKSLG STEGESESRP GKYCCVYLPD GTASLALARP GLTIRDMLAG ICEKRGLSLP DIKVYLVGNE QALVLDQDCT VLADQEVRLE NRITFELELT ALERVVRISA KPTKRLQEAL QPILEKHGLS PLEVVLHRPG EKQPLDLGKL VSSVAAQRLV LDTLPGVKIS KARDKSPCRS QGCPPRTQDK ATHPPPASPS SLVKVPSSAT GKRQTCDIEG LVELLNRVQS SGAHDQRGLL RKEDLVLPEF LQLPAQGPSS EETPPQTKSA AQPIGGSLNS TTDSAL

General References

Lee SE, et al. (2010) Proc Natl Acad Sci u S A. 107(39):16994-8.
Martin-McCaffrey L., et al. (2005) Cell Cycle 4:953-960

DATA

SDS-PAGE



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