

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

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using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MPGKPKHLGV PNGRMVLAVS DGELSSTTGP QGQGEGRGSS LSIHSLPSGP
SSPFPTEEQP VASWALSFER LLQDPLGLAY FTEFLKKEFS AENVTFWKAC ERFQQIPASD TQQLAQEARN IYQEFLLSSQA
LSPVNIDRQA WLGEVLAEP RPD MFRAQQL QIFNLMKFDS YARFVKSPY RECLLAEAE RPLREPGSSR LGSPDATRKK
PKLKP GKSLP LGVEELGQLP PVEGPGGRPL RKSFRRELGG TANAALRRES QGSLNSSASL DLGFLAFVSS KSESHRKS LG
STEGESES RP GKYCCVYLPD GTASLALARP GLTIRDMLAG ICEKRGLSLP DIKVYLVGNE QALVLDQDCT VLADQEVRL E
NRITFELELT ALERVVRISA KPTKRLQEAL QPILEKHGLS PLEVVLHRPG EKQPLDLGKL VSSVAAQRLV LDTLPGVKIS
KARDKSPCRS QGCPPTQDK ATHPPPASP SLVKVPSSAT GKRQTCDIEG LVELLN RVQS SGAHDQRGLL RKEDLVLP EF
LQLPAQGPSS EETPPQTKSA AQPIGGSLNS TTDSAL

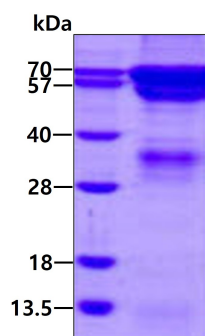
General References

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.