

# Recombinant human RGS14 protein

Catalog Number: ATGP1625

## PRODUCT INFORMATION

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### 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

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### 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

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### 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  
SSPFTEEQP VASWALSFER LLQDPLGLAY FTEFLKKEFS AENVTFWKAC ERFQQIPASD TQQLAQEARN IYQEFLLSSQA  
LSPVNIDRQA WLGEVLAEP RPD MFRAQQL QIFNLMKFDS YARFVKSPY RECLLAEAEAG RPLREPGSSR LGSPDATTRK  
PKLPGKSLP LGVEELGQLP PVEGPGGRPL RKSFRRELGG TANAALRRES QGSLNSSASL DLGFLAFVSS KSESHRKS LG  
STEGESERP GKYCCVYLPD GTASLALARP GLTIRDMLAG ICEKRGLSLP DIKVYLVGNE QALVLDQDCT VLADQEVRL  
NRITFELELT ALERVVRISA KPTKRLQEAL QPILEKHGLS PLEVVLHRPG EKQPLDLGKL VSSVAAQRLV LDTLPGVKIS  
KARDKSPCRS QGCPRTQDK ATHPPPASP SLVKVPSSAT GKRQTCDIEG LVELLN RVQS SGAHDQRGLL RKEDLVLPEF  
LQLPAQGPSS EETPPQTKSA AQPIGGSLNS TTDSAL

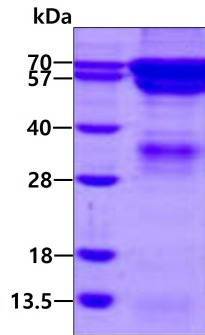
## General References

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.