

Recombinant Human Regulator Of G-Protein Signaling 14, His-tagged

Cat. No. RGS14-6943H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human RGS14 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
ProteinLength	1-566aa
Description	RGS14 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.
Form	Liquid. In 20 mM Tris-HCl buffer, pH7.5, 10% glycerol, 1mM DTT, 200mM NaCl.
Molecular Mass	63.6 kDa (586aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MPGKPKHLGV PNGRMVLAVS DGELSSTTGP QGQGEGRGSS LSIHSLPSGP SSPFPTEEQP VASWALSFER LLQDPLGLAY FTEFLKKEFS AENVTFWKAC ERFQQIPASD TQQLAQEARN IYQEFLSSQA

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

LSPVNIDRQA WLGEELVAEP RPDMFRAQQL QIFNLMKFDS YARFVKSPLY
 RECLLAEEAG RPLREPGSSR LGSPDATRKK PKLKPGKSLP LGVEELGQLP
 PVEGPGGRPL RKSFRRELGG TANAALRRES QGSLNSSASL DLGFLAFVSS
 KSESHRKS LG STEGESESRP GKYCCVYLPD GTASLALARP GLTIRDMLAG
 ICEKRGSLP DIKVYLVGNE QALVLDQDCT VLADQEVRLR NRITFELELT
 ALERVVRISA KPTKRLQEAL QPILEKHGLS PLEVVLHRPG EKQPLDLGKL
 VSSVAAQRLV LDTLPGVKIS KARDKSPCRS QGCPPTQDK ATHPPASPS
 SLVKVPSSAT GKRQTCDIEG LVELLNVRQS SGAHDQRGLL RKEDLVLP EF
 LQLPAQGPSS EETPPQTKSA AQPIGGSLNS TTDSAL

Purity >80% by SDS - PAGE

Applications SDS-PAGE

Storage Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Concentration 0.5 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name [RGS14 regulator of G-protein signaling 14 \[Homo sapiens \]](#)

Official Symbol RGS14

Synonyms RGS14; regulator of G-protein signaling 14; regulator of G protein signalling 14; regulator of G-protein signalling 14;

Gene ID [10636](#)

mRNA Refseq [NM_006480](#)

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Protein Refseq	NP_006471
MIM	602513
UniProt ID	O43566
Chromosome Location	5q35.3
Pathway	Calcium Regulation in the Cardiac Cell, organism-specific biosystem; G alpha (i) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem; Myometrial Relaxation and Contraction Pathways, organism-specific biosystem; Signal Transduction, organism-specific biosystem; Signaling by GPCR, organism-specific biosystem;
Function	GDP-dissociation inhibitor activity; GTPase activating protein binding; GTPase activator activity; GTPase activator activity; microtubule binding; protein kinase binding; receptor signaling complex scaffold activity; receptor signaling protein activity;

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