## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

1-209aa
UniProt No.
Q08116

## NCBI Accession No.

NP_002913

## Alternative Names

Regulator of G-protein signaling 1, 1R20; BL34; IER1; IR20

## PRODUCT SPECIFICATION

## Molecular Weight

26.4 kDa (233aa) confirmed by MALDI-TOF

## Concentration

$0.25 \mathrm{mg} / \mathrm{ml}$ (determined by Bradford assay)

## Formulation

Liquid in. 20 mM Tris- HCl buffer (pH 8.0) containing $0.15 \mathrm{M} \mathrm{NaCl}, 10 \%$ glycerol, 1 mM DTT

## Purity

> $90 \%$ by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE

## Storage Condition

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

## BACKGROUND

## Description

RGS1 is a member of the regulator of G-protein signalling family. This protein is located on the cytosolic side of the plasma membrane and contains a conserved, 120 amino acid motif called the RGS domain. The protein attenuates the signalling activity of G-proteins by binding to activated, GTP-bound G alpha subunits and acting as a GTPase activating protein (GAP), increasing the rate of conversion of the GTP to GDP. This hydrolysis allows the G alpha subunits to bind G beta/gamma subunit heterodimers, forming inactive G -protein heterotrimers, thereby terminating the signal. Recombinant human RGS1 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 MGSH>MRAAAI STPKLDKMPG MFFSANPKEL KGTTHSLLDD KMQKRRPKTF GMDMKAYLRS MIPHLESGMK SSKSKDVLSA AEVMQWSQSL EKLLANQTGQ NVFGSFLKSE FSEENIEFWL ACEDYKKTES DLLPCKAEEI YKAFVHSDAA KQINIDFRTR ESTAKKIKAP TPTCFDEAQK VIYTLMEKDS YPRFLKSDIY LNLLNDLQAN SLK

## General References

Bowman EP., et al. (1998). J. Biol. Chem. 273 (43): 28040-8.
Hoffmann M., et al. (2001). J. Neurochem. 78 (4): 797-806

DATA

## SDS-PAGE



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

