

3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

RGS1, His-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5126** Storage Temperature –70 °C

Synonyms: IR20, IER1, 1R20, BL34

Product Description

RGS1 is a member of the regulator of G-protein signaling family and attenuates the signaling activity of G-proteins. RGS1 binds to activated GTP-bound G alpha subunit and acts as a GTPase activating protein (GAP), thereby, increasing the rate of conversion of GTP to GDP and terminating the signal. RGS1 is extensively upregulated in renal cell carcinoma (RCC) tissues and melanoma. In melanoma, RGS1 expression is significantly correlated with increased tumor thickness, mitotic rate, and presence of vascular involvement. Furthermore, there is significant association between increasing RGS1 expression and reduced relapse-free survival as well as disease-specific survival (DSS) survival.²

Recombinant, full-length, human RGS1 Protein was expressed in *E. coli* cells using an N-terminal His tag. The gene accession number is BC015510. Recombinant protein stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 2 mM DTT, and 25% glycerol.

Molecular mass: ~26 kDa

Purity: 70-95% (SDS-PAGE, see Figure 1)

Precautions and Disclaimer

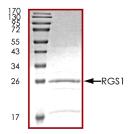
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70 °C is recommended. After opening, aliquot into smaller quantities and store at -70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.

SDS-PAGE Gel of Typical Lot 70–95% (densitometry)



References

- 1. Sierra, D.A. et al., Evolution of the regulators of G-protein signaling multigene family in mouse and human. Genomics, **79**, 177-185 (2002).
- Rangel, J. et al., Novel role for RGS1 in melanoma progression. Am. J. Surg. Pathol., 32(8), 1207-12 (2008).

RC,MAM 11/11-1