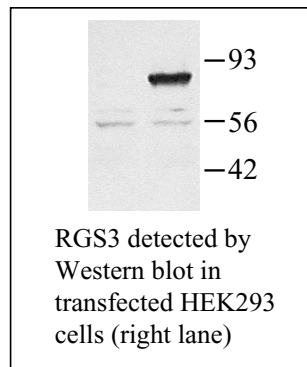# Purified Rabbit Anti-human RGS3

Catalog Number: TP372

Lot Number: 032000

Content: Protein A purified rabbit IgG, 200 µg, with 0.1% sodium azide, lyophilized.

(Reconstitute to 1 mg/ml by adding 200 µl PBS)

RGS3 detected by Western blot in transfected HEK293 cells (right lane)

Product Description and Usage: <u>For research use only.</u> This polyclonal antibody, which reacts with the RGS3 protein, was generated using *E. coli*-expressed human RGS3 (a.a. 401-519; corresponding to the C-terminal 119 residues) as an immunogen. The tested titer for Western blot is 1:5,000. The Ab can also be used for immunoprecipit-ation, and it cross-reacts with RGS3T, a N-terminal truncated form of RGS3.

Storage Condition: 4°C for short term storage or -20°C in small aliquots for long term storage. Avoid repeated freeze and thaw.

Background: RGS3 (regulator of G protein signaling 3) is a 519-residue protein that is widely expressed. The protein contains an RGS domain near the carboxy terminus that serve as a GTPase-activating protein (GAP). RGS3 negatively regulates the activation of $G_i\alpha$ and $G\alpha q$. A truncated RGS3 (RGS3T), with its N-terminal 313 residues removed, has been shown to negatively regulate acenylyl cyclase and PLC. RGS3T may be localized in the nucleus and RGS3 is found in cytoplasm. Translocation to membrane is important for the RGS proteins to interact with heterotrimeric G proteins.

References:

1. Druey, K.M. et al. (1996) Inhibition of G-protein-mediated MAP kinase activation by a new mammalian gene family. *Nature* 379:742-6.
2. Dulin, N.O. et al. (1999) RGS3 inhibits G protein-mediated signaling via translocation to the membrane and binding to $G\alpha 11$. *Mol. Cell. Biol*. 19:714-23.
3. Chatterjee, T.K. et al. (1997) A truncated form of RGS3 negatively regulates G protein-coupled receptor stimulation of adenylyl cyclase and phospholipase C. *J. Biol. Chem.* 272:15481-7.