



### ARHGEF1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP14869a

#### **Specification**

ARHGEF1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession <u>Q92888</u>

ARHGEF1 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID** 9138

#### **Other Names**

Rho guanine nucleotide exchange factor 1, 115 kDa guanine nucleotide exchange factor, p115-RhoGEF, p115RhoGEF, Sub15, ARHGEF1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ARHGEF1 Antibody (N-term) Blocking Peptide - Protein Information

#### Name ARHGEF1

#### **Function**

Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) subunits (PubMed:<a href="http://www.uniprot.org/citations/9641915" target="\_blank">9641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/9641916"

### ARHGEF1 Antibody (N-term) Blocking Peptide - Background

Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that workthrough G protein coupled receptors. The encoded protein may formcomplex with G proteins and stimulate Rho-dependent signals. Multiple alternatively spliced transcript variants have been foundfor this gene, but the full-length nature of some variants has notbeen defined.

## ARHGEF1 Antibody (N-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Loirand, G., et al. Med Sci (Paris) 26 (6-7), 561-563 (2010) :Takefuji, M., et al. J. Hum. Genet. 55(1):42-49(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Slattum, G., et al. J. Cell Biol. 186(5):693-702(2009)



target="\_blank">9641916</a>). Acts as GTPase-activating protein (GAP) for GNA12 and GNA13, and as quanine nucleotide exchange factor (GEF) for RhoA GTPase (PubMed:<a href="http://www.uniprot.org/c itations/9641915" target=" blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/ci tations/9641916" target="\_blank">9641916</a>, PubMed: <a href="http://www.uniprot.org/ci"> tations/8810315" target=" blank">8810315</a>, PubMed:<a href="http://www.uniprot.org/ci tations/30521495" target=" blank">30521495</a>). Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain (PubMed:<a href="htt p://www.uniprot.org/citations/9641916" target=" blank">9641916</a>). This GEF activity is inhibited by binding to activated GNA12 (PubMed:<a href="http://www.unipr ot.org/citations/9641916" target=" blank">9641916</a>). Mediates angiotensin-2-induced RhoA activation (PubMed:<a href="http://www.uniprot.org/c itations/20098430" target=" blank">20098430</a>).

#### **Cellular Location**

Cytoplasm. Membrane. Note=Translocated to the membrane by activated GNA13 or LPA stimulation

**Tissue Location**Ubiquitously expressed.

# ARHGEF1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides