

**ARHGEF4 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP18666b****Specification**

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**ARHGEF4 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9NR80](#)**ARHGEF4 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 50649**Other Names**

Rho guanine nucleotide exchange factor 4, APC-stimulated guanine nucleotide exchange factor 1, Asef, Asef1, ARHGEF4, KIAA1112

**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.

**ARHGEF4 Antibody (C-term) Blocking Peptide - Protein Information****Name** ARHGEF4**Synonyms** KIAA1112**Function**

Acts as a guanine nucleotide exchange factor (GEF) for RHOA, RAC1 and CDC42 GTPases. Binding of APC may activate RAC1 GEF activity. The APC-ARHGEF4 complex seems to be involved in cell migration as well as in E-cadherin-mediated cell-cell adhesion. Required for MMP9 up-regulation via the JNK signaling pathway in colorectal tumor cells. Involved in tumor angiogenesis and may play a role in intestinal adenoma formation and tumor progression.

**Cellular Location**

[Isoform 3]: Cytoplasm. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associated with membrane ruffles

**Tissue Location**

Expressed at high levels in the brain, skeletal muscle and testis and at low levels in the kidney, lung, small intestine, ovary and prostate. Expression is aberrantly enhanced in most colorectal tumors.

## **ARHGEF4 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **ARHGEF4 Antibody (C-term) Blocking Peptide - Images**

## **ARHGEF4 Antibody (C-term) Blocking Peptide - Background**

Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate Rho-dependent signals. This protein is similar to rat collybistin protein. Alternative splicing of this gene generates two transcript variants which encoded different isoforms. Also there is possibility for the usage of multiple polyadenylation sites for this gene.

## **ARHGEF4 Antibody (C-term) Blocking Peptide - References**

Lyons, R., et al. Leuk. Res. 34(1):109-115(2010) Kawasaki, Y., et al. J. Biol. Chem. 284(33):22436-22443(2009) Itoh, R.E., et al. J. Cell. Sci. 121 (PT 16), 2635-2642 (2008)  
:Kurzik-Dumke, U., et al. Cell. Signal. 19(9):1973-1985(2007) Kuraguchi, M., et al. PLoS Genet. 2 (9), E146 (2006) :