

**ARHGEF5 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16745b****Specification**

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**ARHGEF5 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q12774](#)**ARHGEF5 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 7984**Other Names**

Rho guanine nucleotide exchange factor 5, Ephexin-3, Guanine nucleotide regulatory protein TIM, Oncogene TIM, Transforming immortalized mammary oncogene, p60 TIM, ARHGEF5, TIM

**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.

**ARHGEF5 Antibody (C-term) Blocking Peptide - Protein Information****Name** ARHGEF5**Synonyms** TIM**Function**

Guanine nucleotide exchange factor which activates Rho GTPases (PubMed: [15601624](http://www.uniprot.org/citations/15601624)). Strongly activates RHOA (PubMed: [15601624](http://www.uniprot.org/citations/15601624)). Also strongly activates RHOB, weakly activates RHOC and RHOG and shows no effect on RHOD, RHOV, RHOQ or RAC1 (By similarity). Involved in regulation of cell shape and actin cytoskeletal organization (PubMed: [15601624](http://www.uniprot.org/citations/15601624)). Plays a role in actin organization by generating a loss of actin stress fibers and the formation of membrane ruffles and filopodia (PubMed: [14662653](http://www.uniprot.org/citations/14662653)). Required for SRC-induced podosome formation (By similarity). Involved in positive regulation of immature dendritic cell migration (By similarity).

**Cellular Location**

Cytoplasm. Nucleus Cell projection, podosome {ECO:0000250|UniProtKB:E9Q7D5}

**Tissue Location**

Ubiquitously expressed with highest levels in placenta. High levels are also found in colon, kidney, trachea, prostate, liver, pancreas, pituitary gland, thyroid gland and mammary gland. In fetal tissues, expressed at high levels in kidney, lung and liver (PubMed:15601624). Expressed at low levels in lung and heart (PubMed:14662653).

**ARHGEF5 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ARHGEF5 Antibody (C-term) Blocking Peptide - Images****ARHGEF5 Antibody (C-term) Blocking Peptide - Background**

Rho GTPases play a fundamental role in numerous cellular processes initiated by extracellular stimuli that work through Gprotein coupled receptors. The encoded protein may form a complex with G proteins and stimulate Rho-dependent signals. This protein may be involved in the control of cytoskeletal organization.

**ARHGEF5 Antibody (C-term) Blocking Peptide - References**

Bailey, S.D., et al. Diabetes Care (2010) In press :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Wang, Z., et al. J. Biol. Chem. 284(42):28599-28606(2009)Lin, Y.M., et al. Mol. Carcinog. 47(12):925-933(2008)Zhang, Y., et al. Mol. Cell Proteomics 4(9):1240-1250(2005)