

**ARHG7 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12266b****Specification**

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**ARHG7 Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [Q14155](#)

**ARHG7 Antibody (C-term) Blocking peptide - Additional Information**

**Gene ID** 8874

**Other Names**

Rho guanine nucleotide exchange factor 7, Beta-Pix, COOL-1, PAK-interacting exchange factor beta, p85, ARHGEF7, COOL1, KIAA0142, P85SPR, PAK3BP, PIXB

**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.

**ARHG7 Antibody (C-term) Blocking peptide - Protein Information**

**Name** ARHGEF7

**Synonyms** COOL1, KIAA0142, P85SPR, PAK3BP, PIXB

**Function**

Acts as a RAC1 guanine nucleotide exchange factor (GEF) and can induce membrane ruffling. Functions in cell migration, attachment and cell spreading. Promotes targeting of RAC1 to focal adhesions (By similarity). May function as a positive regulator of apoptosis. Downstream of NMDA receptors and CaMKK-CaMK1 signaling cascade, promotes the formation of spines and synapses in hippocampal neurons.

**Cellular Location**

Cell junction, focal adhesion. Cell projection, ruffle. Cytoplasm, cell cortex Cell projection, lamellipodium. Note=Detected at cell adhesions. A small proportion is detected at focal adhesions

**ARHG7 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **ARHG7 Antibody (C-term) Blocking peptide - Images**

#### **ARHG7 Antibody (C-term) Blocking peptide - Background**

Rho GTPases play a fundamental role in numerous cellular processes triggered by extracellular stimuli that work through Gprotein coupled receptors. The encoded protein belongs to a family of cytoplasmic proteins that activate the Ras-like family of Rho proteins by exchanging bound GDP for GTP. It forms a complex with the small GTP binding protein Rac1 and recruits Rac1 to membrane ruffles and to focal adhesions. This protein can induce membrane ruffling. Multiple alternatively spliced transcript variants encoding different isoforms have been described for this gene.

#### **ARHG7 Antibody (C-term) Blocking peptide - References**

Hsu, Y.H., et al. Am. J. Pathol. 176(6):3050-3061(2010) Lee, J.S., et al. J. Biol. Chem. 285(11):8104-8113(2010) Hsu, R.M., et al. Mol. Biol. Cell 21(2):287-301(2010) Johnson, A.D., et al. Hum. Mol. Genet. 18(14):2700-2710(2009) Stolk, L., et al. Nat. Genet. 41(6):645-647(2009)