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ARHGAP10 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10695b

Specification

ARHGAP10 Antibody (Center) Blocking peptide - Product Information

Primary Accession A1A4S6

ARHGAP10 Antibody (Center) Blocking peptide - Additional Information

Gene ID 79658

Other Names
Rho GTPase-activating protein 10, GTPase regulator associated with focal adhesion kinase 2, Graf-related protein 2, Rho-type GTPase-activating protein 10, ARHGAP10, GRAF2

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.

ARHGAP10 Antibody (Center) Blocking peptide - Protein Information

Name ARHGAP10

Synonyms GRAF2

Function
GTPase-activating protein that catalyzes the conversion of active GTP-bound Rho GTPases to their inactive GDP-bound form, thus suppressing various Rho GTPase-mediated cellular processes (PubMed:11432776). Also converts Cdc42 to an inactive GDP-bound state (PubMed:11432776). Essential for PTKB2 regulation of cytoskeletal organization via Rho family GTPases. Inhibits PAK2 proteolytic fragment PAK-2p34 kinase activity and changes its localization from the nucleus to the perinuclear region. Stabilizes PAK-2p34 thereby increasing stimulation of cell death (By similarity). Associates with MICAL1 on the endosomal membrane to promote Rab8-Rab10-dependent tubule extension. After dissociation with MICAL1, recruits WDR44 which connects the endoplasmic reticulum (ER) with the endosomal tubule, thereby participating in the export of a subset of neosynthesized proteins (PubMed:32344433).

Cellular Location

Cytoplasm. Cytoplasm, perinuclear region. Cell membrane. Endosome membrane. Note=Association to cell membrane is dependent on PH domain. Colocalized with MICAL1, RAB8A, RAB8B and RAB10 on endosomal tubules (PubMed:32344433). {ECO:0000250, ECO:0000269|PubMed:32344433}

Tissue Location
High levels of expression in heart and skeletal muscle.

ARHGAP10 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

ARHGAP10 Antibody (Center) Blocking peptide - Images

ARHGAP10 Antibody (Center) Blocking peptide - Background

GTPase activator for the small GTPases RhoA and Cdc42 by converting them to an inactive GDP-bound state. Essential for PTKB2 regulation of cytoskeletal organization via Rho family GTPases. Inhibits PAK2 proteolytic fragment PAK-2p34 kinase activity and changes its localization from the nucleus to the perinuclear region. Stabilizes PAK-2p34 thereby increasing stimulation of cell death (By similarity).

ARHGAP10 Antibody (Center) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Azzato, E.M., et al. Cancer Epidemiol. Biomarkers Prev. 19(4):1140-1143(2010)Lind, P.A., et al. Twin Res Hum Genet 13(1):10-29(2010)Takefuji, M., et al. J. Hum. Genet. 55(1):42-49(2010)Marroni, F., et al. Circ Cardiovasc Genet 2(4):322-328(2009)