

ARHGEF2 Antibody

Catalog No: #34998

Package Size: #34998-1 50ul #34998-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

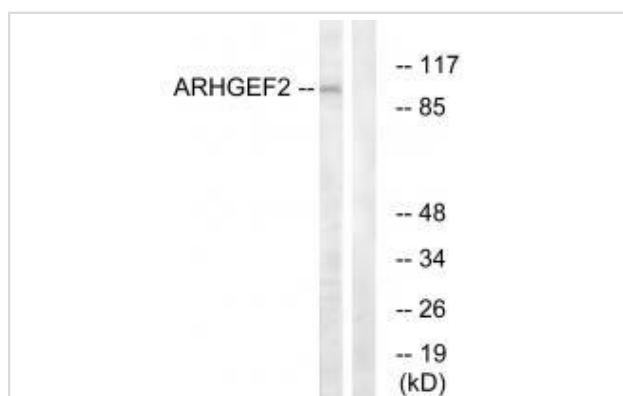
Description

Product Name	ARHGEF2 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of total ARHGEF2 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human ARHGEF2.
Target Name	ARHGEF2
Other Names	GEF-H1; GEFH1; Guanine nucleotide exchange factor GEF-H1; proliferating cell nucleolar antigen p40; rho/rac guanine nucleotide exchange factor 2
Accession No.	Swiss-Prot: Q92974NCBI Gene ID: 9181
Uniprot	Q92974
GeneID	9181;
SDS-PAGE MW	101kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from RAW264.7 cells, using ARHGEF2 antibody #34998.

Background

Activates Rho-GTPases by promoting the exchange of GDP for GTP. May be involved in epithelial barrier permeability, cell motility and polarization, dendritic spine morphology, antigen presentation, leukemic cell differentiation, cell cycle regulation, innate immune response, and cancer. Binds Rac-GTPases, but does not seem to promote nucleotide exchange activity toward Rac-GTPases, which was uniquely reported in May stimulate instead the cortical activity of Rac. Inactive toward CDC42, TC10, or Ras-GTPases. Forms an intracellular sensing system along with NOD1 for the detection of microbial effectors during cell invasion by pathogens. Required for RHOA and RIP2 dependent NF-kappaB signaling pathways activation upon *S.flexneri* cell invasion. Involved not only in sensing peptidoglycan (PGN)-derived muropeptides through NOD1 that is independent of its GEF activity, but also in the activation of NF-kappaB by *Shigella* effector proteins (IpgB2 and OspB) which requires its GEF activity and the activation of RhoA. Involved in innate immune signaling transduction pathway promoting cytokine IL6/interleukin-6 and TNF-alpha secretion in macrophage upon stimulation by bacterial peptidoglycans; acts as a signaling intermediate between NOD2 receptor and RIPK2 kinase. Contributes to the tyrosine phosphorylation of RIPK2 through Src tyrosine kinase leading to NF-kappaB activation by NOD2.

Ren Y., J. Biol. Chem. 273:34954-34960(1998).

Krendel M., Nat. Cell Biol. 4:294-301(2002).

Ishikawa K., DNA Res. 5:169-176(1998).

Note: This product is for in vitro research use only