

Product Name: KD-Validated ARHGEF1 Mouse Oligoclonal Antibody**Catalog #: KVA00355**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG
Clonality	Mouse oligoclonal antibody
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 102.4kDa

Antigen Information

Gene Name	ARHGEF1 ARHGEF1; Rho Guanine Nucleotide Exchange Factor 1; P115-RHOGEF; SUB1.5; LBCL2; Rho
Alternative Names	Guanine Nucleotide Exchange Factor (GEF) 1; 115 KDa Guanine Nucleotide Exchange Factor; P115RhoGEF; 115-KD Protein; Lsc Homolog; P115-RhoGEF; Sub1.5; IMD62; GEF1; LSC
Gene ID	9138.0
SwissProt ID	Q92888
Immunogen	Recombinant protein of human ARHGEF1

Background

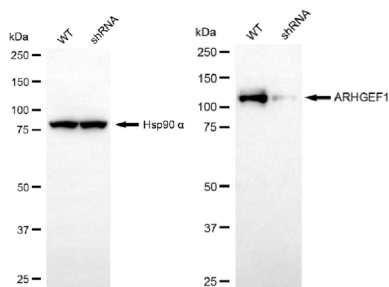
Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate Rho-dependent signals.

Multiple alternatively spliced transcript variants have been found for this gene, but the full-length nature of some variants has not been defined. [provided by RefSeq, Jul 2008]

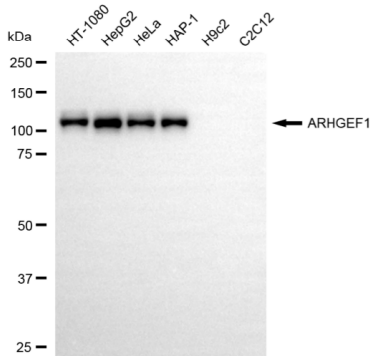
Research Area

Signal Transduction

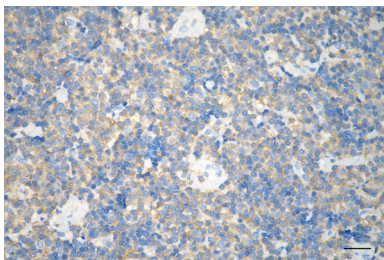
Image Data



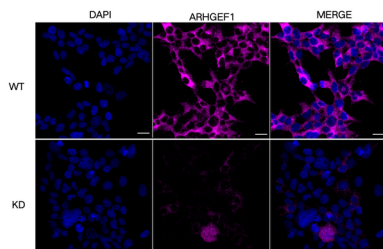
Western blotting analysis using ARHGEF1 antibody (KVA00355). ARHGEF1 expression in wild-type (WT) and ARHGEF1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ARHGEF1 antibody (KVA00355, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



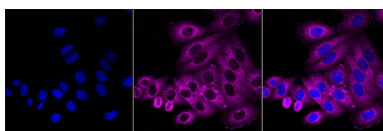
Western blotting analysis using ARHGEF1 antibody (KVA00355). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ARHGEF1 antibody (KVA00355, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



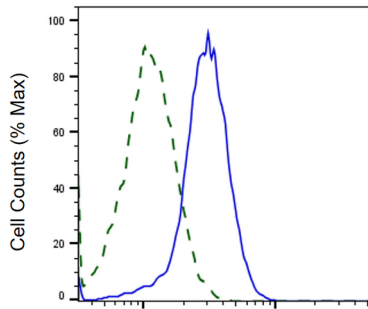
Immunohistochemistry was performed on paraffin-embedded human lymphoma using ARHGEF1 antibody (KVA00355, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using ARHGEF1 antibody (KVA00355, 1:1,000). Top panel: wild-type (WT); Bottom panel: ARHGEF1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; ARHGEF1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.

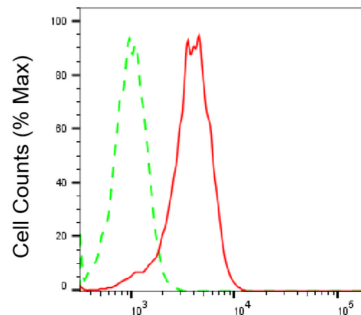


Immunocytochemical staining of HepG2 cells with ARHGEF1 antibody (KVA00355, 1:1,000). Nuclei were stained blue with DAPI; ARHGEF1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



ARHGEF1-Alexa Fluor® 647

Validation of ARHGEF1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ARHGEF1 antibody (KVA00355, 1:2,000) and analyzed using BD flow cytometer.



ARHGEF1-Alexa Fluor® 647

Flow cytometric analysis of ARHGEF1 expression in HepG2 cells using ARHGEF1 antibody (KVA00355, 1:2,000). Green, isotype control; red, ARHGEF1.