[KD Validated] Anti-ARHGEF2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021629

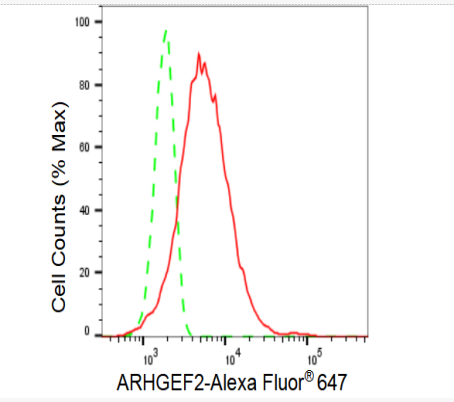
Product Information

Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	57E18J84
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human GEF H1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-ARHGEF2 Rabbit mAb [57E18J84] is for research use only and not for use in diagnostic or therapeutic procedures.

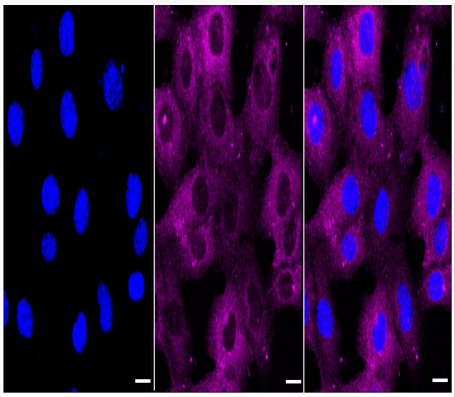
Protein Information

Synonyms	ARHGEF2; Rho/Rac Guanine Nucleotide Exchange Factor 2; GEF-H1; LFP40; Rho/Rac Guanine Nucleotide Exchange Factor (GEF); KIAA0651; GEFH1; P40; Rho Guanine Nucleotide Exchange Factor; Proliferating Cell Nucleolar Antigen P40; Guanine Nucleotide Exchange Factor H1; Microtubule-Regulated Rho-GEF; Lfc; NEDMHM; GEF; LFC.
Calculated MW	Calculated MW: 111 kDa, Observed MW: 112 kDa
Uniprot ID	Q92974
Gene ID	9181
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. Alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Jun 2009].
Cellular Location	Cytoplasm. Cell junction > tight junction. Golgi apparatus. Cytoplasm > cytoskeleton > spindle. Cell projection > ruffle membrane. Localizes to the tips of cortical microtubules of the mitotic spindle during cell division, and is further released upon microtubule depolymerization. Recruited into membrane ruffles induced by S.flexneri at tight junctions of polarized epithelial cells.

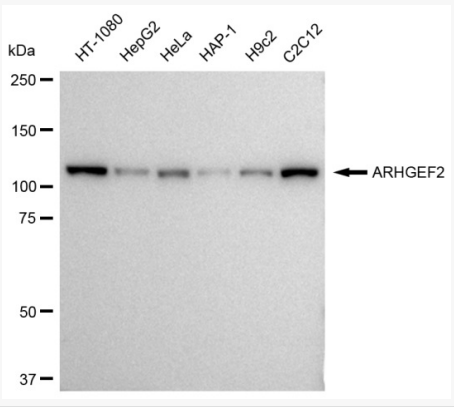
Validation Images



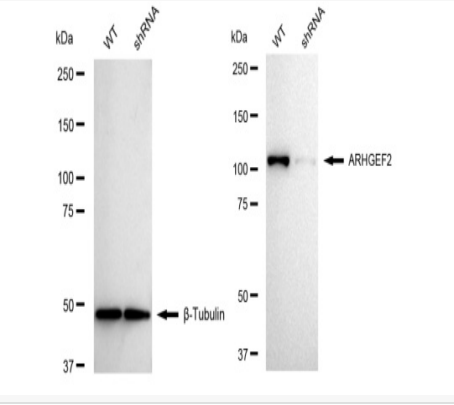
Flow cytometric analysis of ARHGEF2 expression in HT-1080 cells using ARHGEF2 antibody (R021629, 1:2,000). Green, isotype control; red, ARHGEF2.



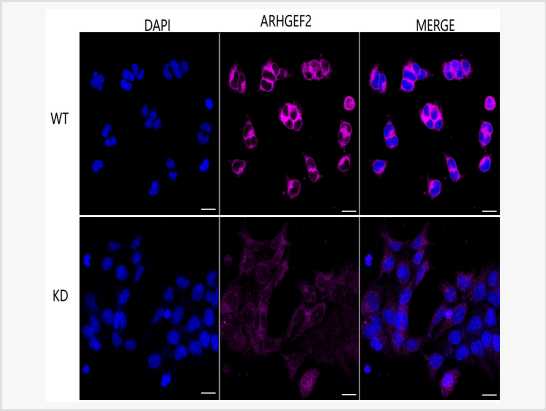
Immunocytochemical staining of HT-1080 cells with ARHGEF2 antibody (R021629, 1:1,000) . Nuclei were stained blue with DAPI; ARHGEF2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



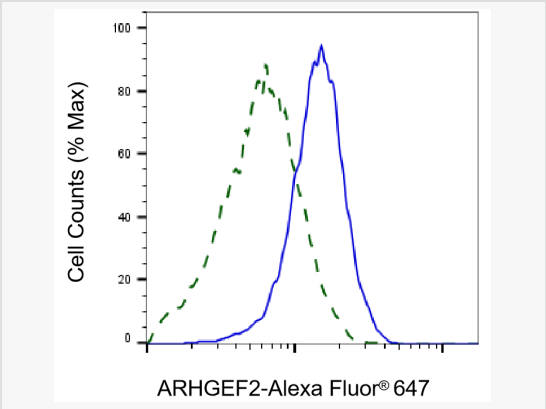
Western blotting analysis using ARHGEF2 antibody (R021629). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ARHGEF2 antibody (R021629, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using ARHGEF2 antibody (R021629). ARHGEF2 expression in wild type (WT) and ARHGEF2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ARHGEF2 antibody (R021629, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Immunocytochemical staining of HeLa cells using ARHGEF2 antibody (R021629, 1:1,000), Top panel: wild-type (WT); Bottom panal: ARHGEF2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; ARHGEF2 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of ARHGEF2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ARHGEF2 antibody (R021629, 1:2,000) and analyzed using BD flow cytometer.