

**Product Name: KD-Validated ARHGEF2 Recombinant Rabbit Monoclonal Antibody**  
**Catalog #: KVA01556**

For research use only.

## Summary

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

## Application

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000 |
| <b>Molecular Weight</b> | Calculated MW: 111.5kDa                                 |

## Antigen Information

|                          |                                                                                                                                                                                                                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | ARHGEF2                                                                                                                                                                                                                                                                                                                     |
| <b>Alternative Names</b> | 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 |
| <b>Gene ID</b>           | 9181.0                                                                                                                                                                                                                                                                                                                      |
| <b>SwissProt ID</b>      | Q92974                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen</b>         | A synthesized peptide derived from human GEF H1                                                                                                                                                                                                                                                                             |

## Background

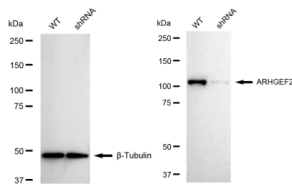
Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through

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]

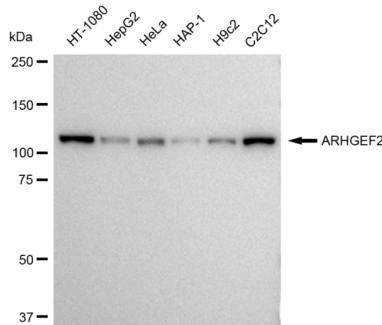
## Research Area

Signal Transduction,Cancer

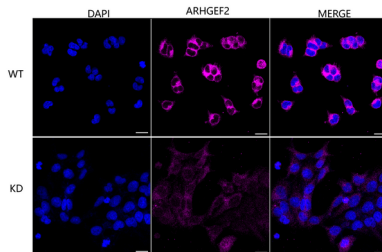
## Image Data



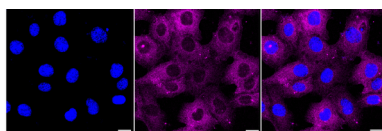
Western blotting analysis using ARHGEF2 antibody (KVA01556). ARHGEF2 expression in wild type (WT) and ARHGEF2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ARHGEF2 antibody (KVA01556, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



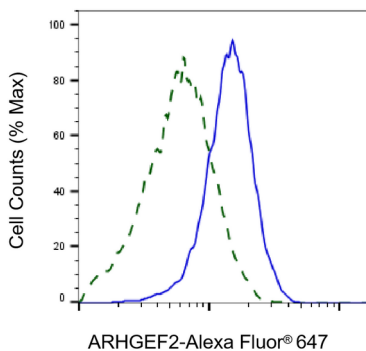
Western blotting analysis using ARHGEF2 antibody (KVA01556). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ARHGEF2 antibody (KVA01556, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



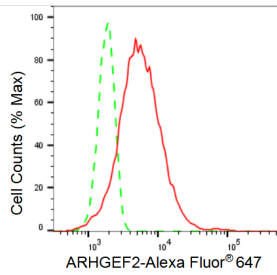
Immunocytochemical staining of HeLa cells using ARHGEF2 antibody (KVA01556, 1:1,000), Top panel: wild-type (WT); Bottom panel: ARHGEF2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; ARHGEF2 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HT-1080 cells with ARHGEF2 antibody (KVA01556, 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.



Validation of ARHGEF2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ARHGEF2 antibody (KVA01556, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ARHGEF2 expression in HT-1080 cells using ARHGEF2 antibody (KVA01556, 1:2,000). Green, isotype control; red, ARHGEF2.