

Product Name: KD-Validated RhoA Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00012**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
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 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 21.8kDa

Antigen Information

Gene Name	RHOA
Alternative Names	Ras Homolog Family Member A; RHOH12; Rho12; ARH12; ARHA; Transforming Protein RhoA; Epididymis Secretory Sperm Binding Protein; Ras Homolog Gene Family, Member A; Aplysia Ras-Related Homolog 12; Small GTP Binding Protein RhoA; Rho CDNA Clone 12; Oncogene RHO H12; EC 3.6.5.2; EDFAOB; RHO12; H12
Gene ID	387.0
SwissProt ID	P61586
Immunogen	A synthesized peptide derived from human Rho A

Background

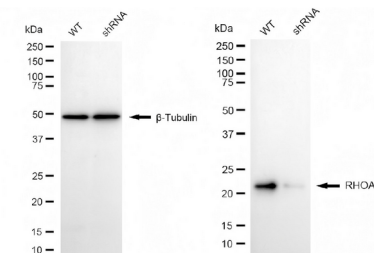
This gene encodes a member of the Rho family of small GTPases, which cycle between inactive GDP-bound and active GTP-

bound states and function as molecular switches in signal transduction cascades. Rho proteins promote reorganization of the actin cytoskeleton and regulate cell shape, attachment, and motility. Overexpression of this gene is associated with tumor cell proliferation and metastasis. Multiple alternatively spliced variants have been identified. [provided by RefSeq, Sep 2015]

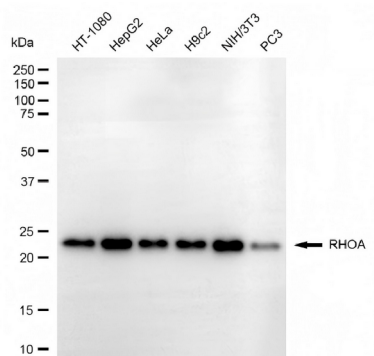
Research Area

Signal Transduction,Cancer

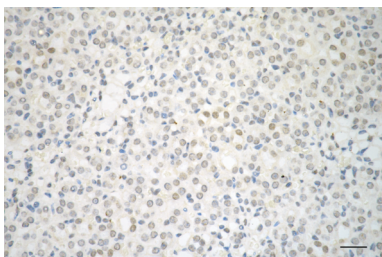
Image Data



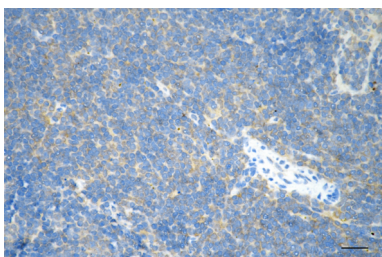
Western blotting analysis using RHOA antibody (KVA00012). RHOA expression in wild-type (WT) and RHOA shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with RHOA antibody (KVA00012, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



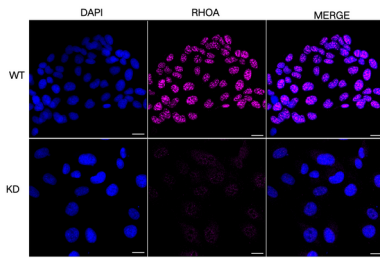
Western blotting analysis using RHOA antibody (KVA00012). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with RHOA antibody (KVA00012, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



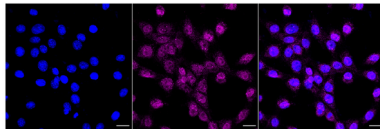
Immunohistochemistry was performed on paraffin-embedded mouse kidney using RHOA antibody (KVA00012, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



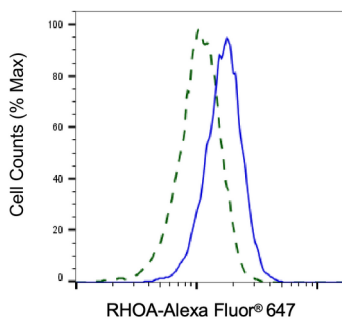
Immunohistochemistry was performed on paraffin-embedded mouse spleen using RHOA antibody (KVA00012, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



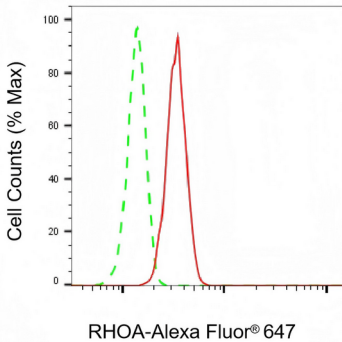
Immunocytochemical staining of HT-1080 cells using RHOA antibody (KVA00012, 1:1,000), Top panel: wild-type (WT); Bottom panel: RHOA shRNA knockdown (KD). Nuclei were stained blue with DAPI; RHOA was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.



Immunocytochemical staining of C2C12 cells with RHOA antibody (KVA00012, 1:1,000). Nuclei were stained blue with DAPI; RHOA 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 RHOA knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with RHOA antibody (KVA00012, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of RHOA expression in C2C12 cells using RHOA antibody (KVA00012, 1:2,000). Green, isotype control; red, RHOA.