

Product Name: KO-Validated ROCK1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00085**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
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
Molecular Weight	Calculated MW: 158.2kDa

Antigen Information

Gene Name	ROCK1
Alternative Names	ROCK1; Rho Associated Coiled-Coil Containing Protein Kinase 1; P160ROCK; Renal Carcinoma Antigen NY-REN-35; Rho-Associated ProteinKinase 1; P160 ROCK-1; EC 2.7.11.1; ROCK-I; Rho-Associated,Coiled-Coil-Containing Protein Kinase 1; Rho-Associated, Coiled-Coil-Containing Protein Kinase I; EC 2.7.11
Gene ID	6093.0
SwissProt ID	Q13464
Immunogen	A synthesized peptide derived from human ROCK1

Background

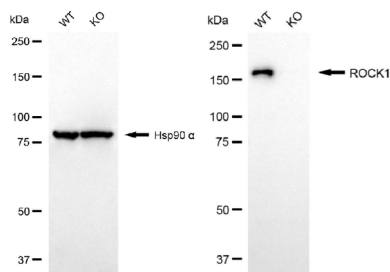
This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small

GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. A pseudogene, related to this gene, is also located on chromosome 18. [provided by RefSeq, Aug 2015]

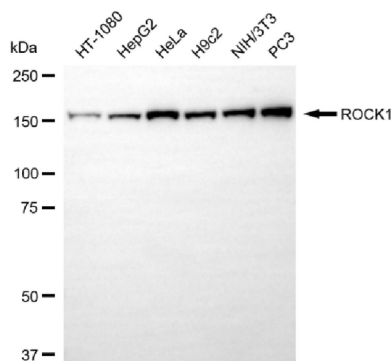
Research Area

Signal Transduction, Cell Biology, Cancer

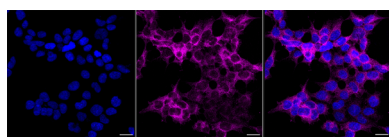
Image Data



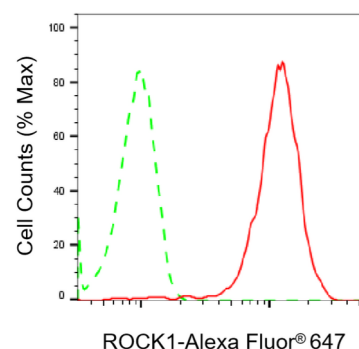
Western blotting analysis using ROCK1 antibody (KVA00085). ROCK1 expression in wild-type (WT) and ROCK1 knockout (KO) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ROCK1 antibody (KVA00085, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using ROCK1 antibody (KVA00085). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ROCK1 antibody (KVA00085, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with ROCK1 protein antibody (KVA00085, 1:1,000). Nuclei were stained blue with DAPI; ROCK1 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.



Flow cytometric analysis of ROCK1 expression in HeLa cells using ROCK1 antibody (KVA00085, 1:2,000). Green, isotype control; red, ROCK1.