

[KD Validated] Anti-KRIT1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

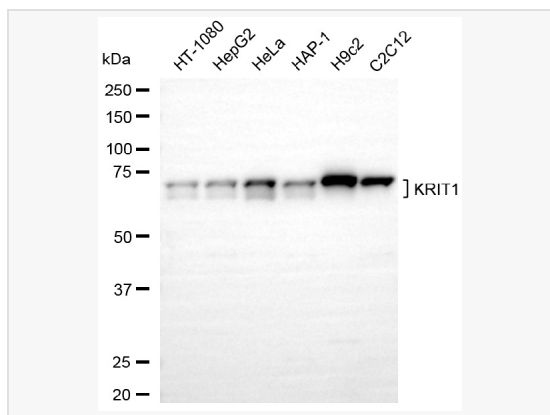
Catalog # R020406

Product Information

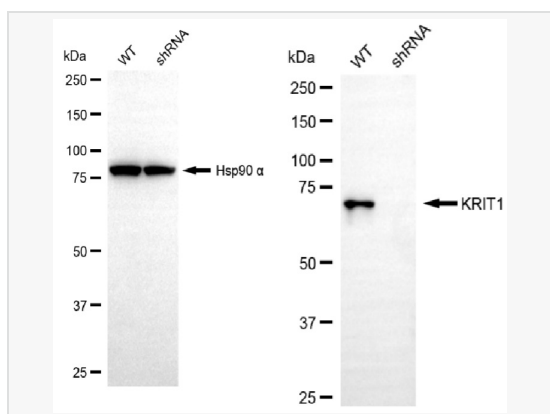
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	74F54T95
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human KRIT1
Format	Affinity purified monoclonal antibody supplied 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-KRIT1 Rabbit mAb [74F54T95] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

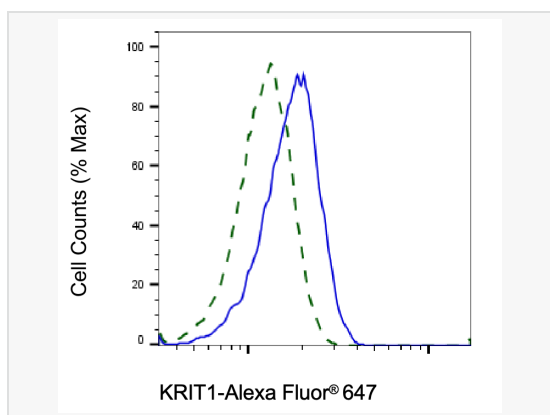
Synonyms	KRIT1; KRIT1 Ankyrin Repeat Containing; Krev Interaction Trapped 1; CCM1; CAM; Cerebral Cavernous Malformations 1 Protein; Krev Interaction Trapped Protein 1; Ankyrin Repeat-Containing Protein Krit1; Cerebral Cavernous Malformations 1; KRIT1, Ankyrin Repeat Containing.
Calculated MW	Calculated MW: 84 kDa; Observed MW: 68-73 kDa
Uniprot ID	O00522
Gene ID	889
Background	This gene encodes a protein containing four ankyrin repeats, a band 4.1/ezrin/radixin/moesin (FERM) domain, and multiple NPXY sequences. The encoded protein is localized in the nucleus and cytoplasm. It binds to integrin cytoplasmic domain-associated protein-1 alpha (ICAP1alpha), and plays a critical role in beta1-integrin-mediated cell proliferation. It associates with junction proteins and RAS-related protein 1A (Rap1A), which requires the encoded protein for maintaining the integrity of endothelial junctions. It is also a microtubule-associated protein and may play a role in microtubule targeting. Mutations in this gene result in cerebral cavernous malformations. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2009]
Cellular Location	Cytoplasm.Cytoskeleton.Cell membrane.Peripheral membrane protein.Cell junction.KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions. Association with RAP1 relocalizes KRIT1 from microtubules to cell junction membranes. Translocates from the cytoplasm along microtubules to the cell membrane in a ITGB1BP1-dependent manner.



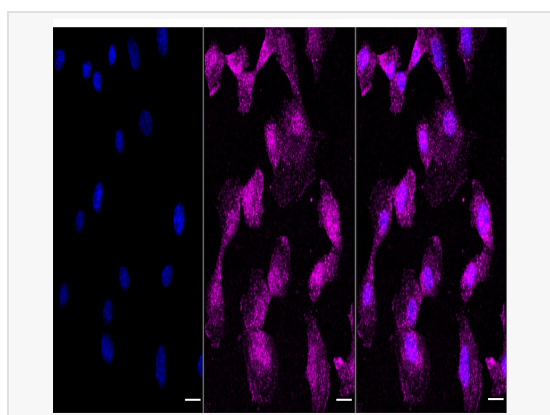
Western blotting analysis using KRIT1 antibody (R020406). Total cell lysates (20 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with KRIT1 antibody (R020406, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using KRIT1 antibody (R020406). KRIT1 expression in wild-type (WT) and KRIT1 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with KRIT1 antibody (R020406, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of KRIT1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with KRIT1 antibody (R020406, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of C2C12 cells with KRIT1 antibody (R020406, 1:1,000). Nuclei were stained blue with DAPI; KRIT1 was stained magenta with Alexa Fluor[®] 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 μ m.