

Product Name: KO-Validated Actinin Alpha 4 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00159

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: 104.9kDa

Antigen Information

Gene Name	ACTN4
Alternative Names	ACTN4; Actinin Alpha 4; Focal Segmental Glomerulosclerosis 1; Non-Muscle Alpha-Actinin 4; Alpha-Actinin-4; FSGS1; ACTININ-4; FSGS
Gene ID	81.0
SwissProt ID	O43707
Immunogen	A synthesized peptide derived from human alpha Actinin 4

Background

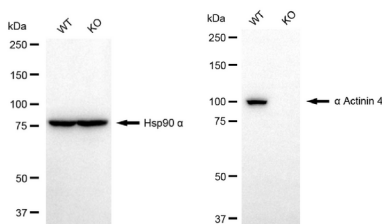
Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is

involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a nonmuscle, alpha actinin isoform which is concentrated in the cytoplasm, and thought to be involved in metastatic processes. Mutations in this gene have been associated with focal and segmental glomerulosclerosis. [provided by RefSeq, Jul 2008]

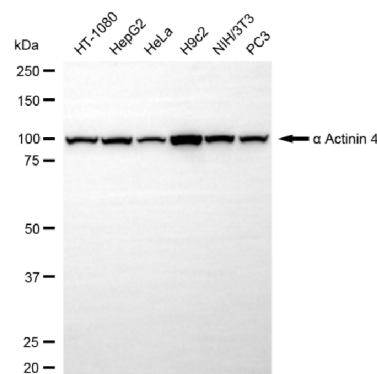
Research Area

Signal Transduction,Cancer,Metabolism

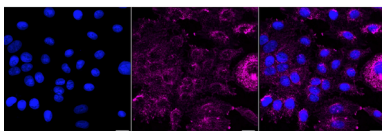
Image Data



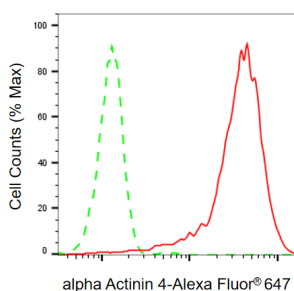
Western blotting analysis using alpha actinin 4 antibody (KVA00159). Alpha actinin 4 expression in wild type (WT) and alpha actinin 4 (ACTN4) knockout (KO) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with alpha actinin 4 antibody (KVA00159, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using alpha Actinin 4 antibody (KVA00159). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with alpha Actinin 4 antibody (KVA00159, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with alpha Actinin 4 antibody (KVA00159, 1:1,000). Nuclei were stained blue with DAPI; alpha Actinin 4 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 alpha Actinin 4 expression in HepG2 cells using alpha Actinin 4 antibody (KVA00159, 1:2,000). Green, isotype control; red, alpha Actinin 4.