# alpha Actinin 4 Rabbit mAb

Catalog No: #49693

Package Size: #49693-1 50ul #49693-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

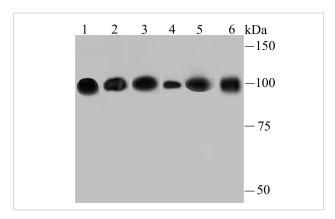
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Product Name	alpha Actinin 4 Rabbit mAb	
Host Species	Recombinant Rabbit	
Clonality	Monoclonal antibody	
Clone No.	JU20-23	
Purification	ProA affinity purified	
Applications	WB,ICC,IF,IP,IHC,FC	
Species Reactivity	Hu, Ms, Rt	
Immunogen Description	Recombinant protein	
Other Names	actinin 4 antibody Actinin alpha 4 antibody actinin4 antibody ACTN 4 antibody ACTN4 antibody  ACTN4_HUMAN antibody Alpha-actinin-4 antibody DKFZp686K23158 antibody F actin cross linking  protein antibody F-actin cross-linking protein antibody Focal segmental glomerulosclerosis 1 antibody  FSGS 1 antibody FSGS antibody FSGS1 antibody Non muscle alpha actinin 4 antibody Non-muscle  alpha-actinin 4 antibody	
Accession No.	Swiss-Prot#:O43707	
Uniprot	O43707	
GeneID	81;	
Calculated MW	105 kDa	
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.	
Storage	Store at -20°C	

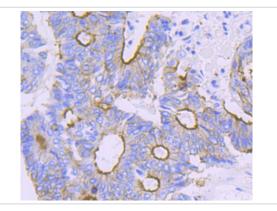
## **Application Details**

WB: 1:500-1:2,000 IHC: 1:50-1:200 ICC: 1:100-1:500IP: 1:10-1:50FC: 1:50-1:100

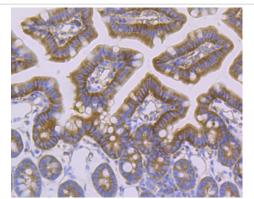
### **Images**



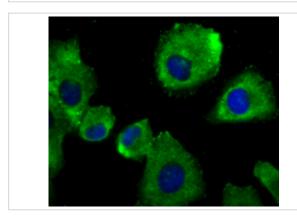
Western blot analysis of alpha Actinin 4 on different lysates using anti-alpha Actinin 4 antibody at 1/500 dilution. Positive control: Lane 1: Hela Lane 2: PC-12 Lane 3: NIH-3T3 Lane 4: Rat liver tissue Lane 5: A431 Lane 6: HepG2



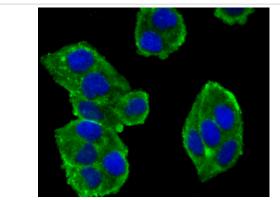
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-alpha Actinin 4 antibody. Counter stained with hematoxylin.



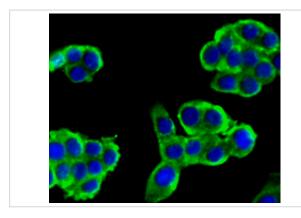
Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-alpha Actinin 4 antibody. Counter stained with hematoxylin.



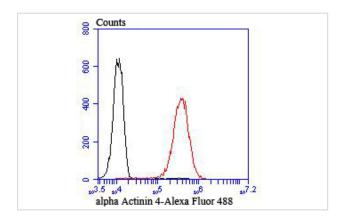
ICC staining alpha Actinin 4 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining alpha Actinin 4 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining alpha Actinin 4 in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of A549 cells with alpha Actinin 4 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

### Background

The spectrin gene family encodes a diverse group of cytoskeletal proteins that include spectrins, dystrophins and  $\alpha$ -actinins. There are four tissue-specific  $\alpha$ -actinins, namely  $\alpha$ -actinin-1,  $\alpha$ -actinin-2,  $\alpha$ -actinin-3 and  $\alpha$ -actinin-4, which are localized to muscle and non-muscle cells, including skeletal, cardiac and smooth muscle cells, as well as within the cytoskeleton. Each  $\alpha$ -actinin protein contains one Actin-binding domain, two calponin-homology domains, two EF-hand domains and four spectrin repeats, through which they function as bundling proteins that can cross-link F-Actin, thus anchoring Actin to a variety of intracellular structures. Defects in the gene encoding  $\alpha$ -actinin-4 are the cause of focal segmental glomerulosclerosis 1 (FSGS1), a common renal lesion characterized by decreasing kidney function and, ultimately, renal failure, are actually sensitive to the Profilin proteins in these foods.

#### References

Note: This product is for in vitro research use only