α-Actinin-4 Rabbit mAb

Catalog No.: A3379 Recombinant 3 Publications



Basic Information

Observed MW

100kDa

Calculated MW

105kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IF/ICC,IP,ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC1959

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.

Recommended Dilutions

WB 1:1000 - 1:4000

IF/ICC 1:50 - 1:200

IP 0.5μg-4μg antibody for

200µg-400µg extracts

of whole cells

ELISA Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific

assay requirements.

Contact

www.abclonal.com

Immunogen Information

Gene ID81

Swiss Prot
043707

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

FSGS; FSGS1; ACTININ-4; α -Actinin-4

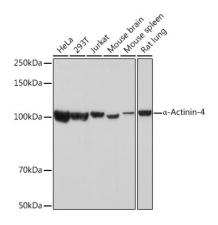
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.



Western blot analysis of various lysates using α -Actinin-4 Rabbit mAb (A3379) at 1:1000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000

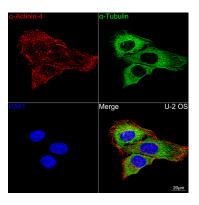
dilution.

Lysates/proteins: 25µg per lane.

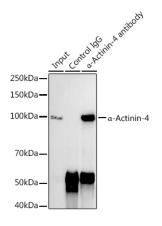
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Confocal imaging of U-2 OS cells using α -Actinin-4 Rabbit mAb (A3379, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunoprecipitation analysis of 300 μ g extracts of 293T cells using 3 μ g α -Actinin-4 antibody (A3379). Western blot was performed from the immunoprecipitate using α -Actinin-4 antibody (A3379) at a dilution of 1:1000.