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ACTN4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ACTN4.
Catalog # AT1033a

Product Information

Application	WB, IHC, IF, E
Primary Accession	O43707
Other Accession	NM_004924
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4D10
Calculated MW	104854

Additional Information

Gene ID	81
Other Names	Alpha-actinin-4, F-actin cross-linking protein, Non-muscle alpha-actinin 4, ACTN4
Target/Specificity	ACTN4 (NP_004915, 592 a.a. ~ 701 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ACTN4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

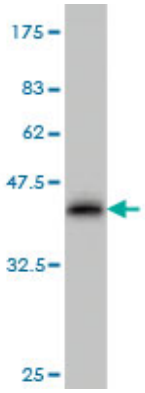
Background

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.

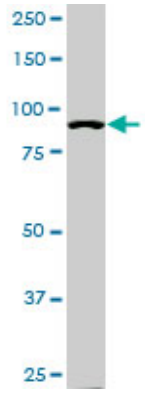
References

1.RNAi-mediated down-regulation of alpha-actinin-4 decreases invasion potential in oral squamous cell carcinoma.Yamada S, Yanamoto S, Yoshida H, Yoshitomi I, Kawasaki G, Mizuno A, Nemoto TK.Int J Oral Maxillofac Surg. 2009 Nov 11. [Epub ahead of print]

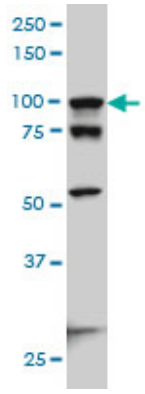
Images



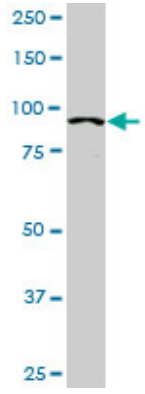
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



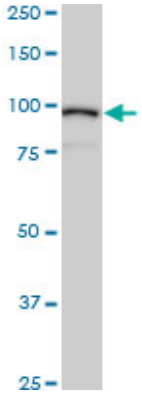
ACTN4 monoclonal antibody (M01), clone 4D10. Western Blot analysis of ACTN4 expression in PC-12 ((Cat # AT1033a)



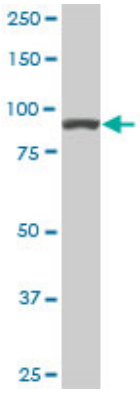
ACTN4 monoclonal antibody (M01), clone 4D10 Western Blot analysis of ACTN4 expression in Hela S3 NE ((Cat # AT1033a)



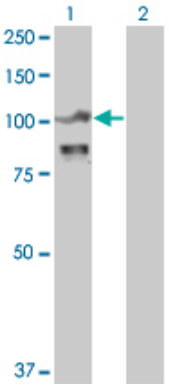
ACTN4 monoclonal antibody (M01), clone 4D10. Western Blot analysis of ACTN4 expression in Raw 264.7 ((Cat # AT1033a)



ACTN4 monoclonal antibody (M01), clone 4D10. Western Blot analysis of ACTN4 expression in MCF-7 ((Cat # AT1033a)

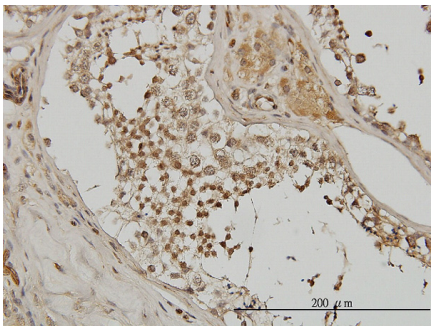


ACTN4 monoclonal antibody (M01), clone 4D10. Western Blot analysis of ACTN4 expression in NIH/3T3 ((Cat # AT1033a)

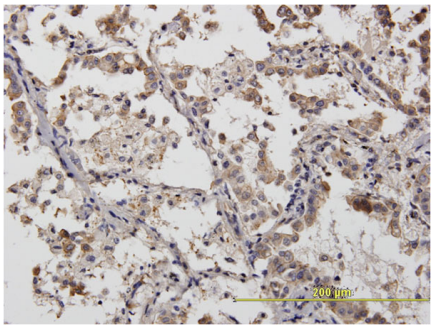


Western Blot analysis of ACTN4 expression in transfected 293T cell line by ACTN4 monoclonal antibody (M01), clone 4D10.

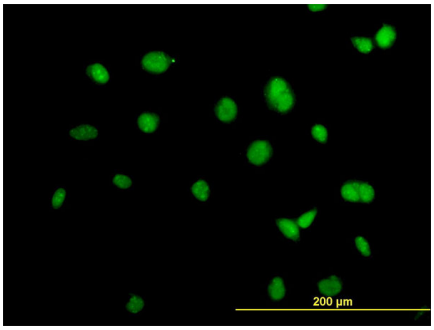
Lane 1: ACTN4 transfected lysate(104.9 KDa).
Lane 2: Non-transfected lysate.



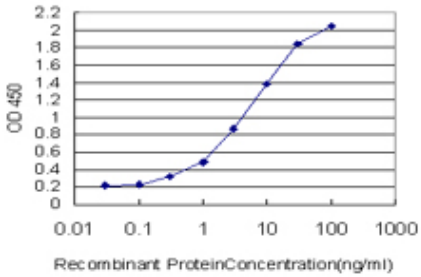
Immunoperoxidase of monoclonal antibody to ACTN4 on formalin-fixed paraffin-embedded human testis. [antibody concentration 3 ug/ml]



Immunoperoxidase of monoclonal antibody to ACTN4 on formalin-fixed paraffin-embedded human lung adenocarcinoma. [antibody concentration 3 ug/ml]



Immunofluorescence of monoclonal antibody to ACTN4 on HeLa cell. [antibody concentration 20 ug/ml]



Detection limit for recombinant GST tagged ACTN4 is approximately 0.1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.