10320 Camino Santa Fe, Suite G
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ACTN4 Antibody (monoclonal) (M01)

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

Specification

ACTN4 Antibody (monoclonal) (M01) - Product Information

Application	**IF, WB, IHC, E**
Primary Accession	O43707
Other Accession	NM_004924
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**104854**

ACTN4 Antibody (monoclonal) (M01) - 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

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.

ACTN4 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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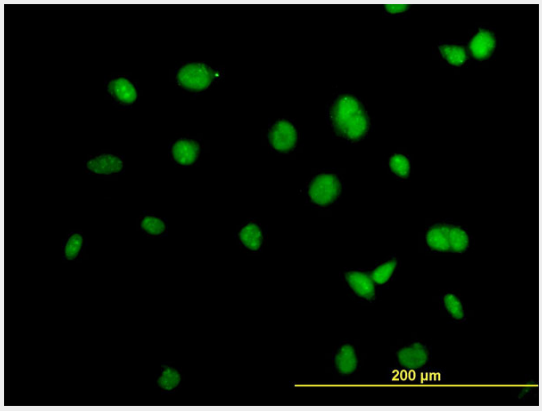
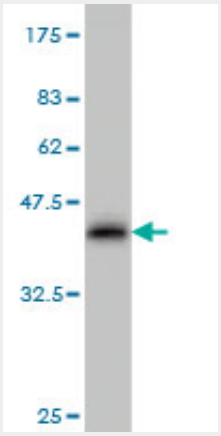
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

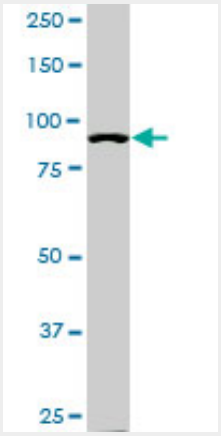
ACTN4 Antibody (monoclonal) (M01) - Images



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



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)

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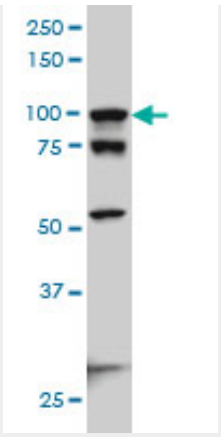
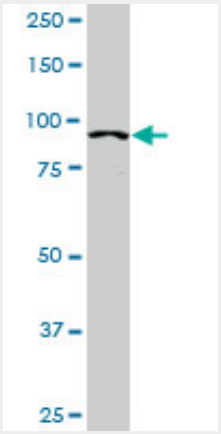
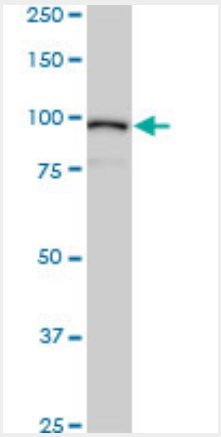


ACTN4 monoclonal antibody (M01), clone 4D10 Western Blot analysis of ACTN4 expression in Hela S3 NE ((Cat # AT1033a)



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)

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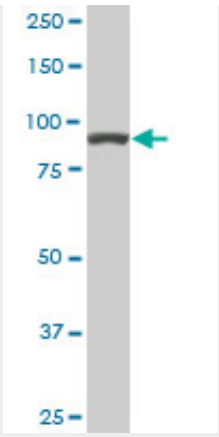
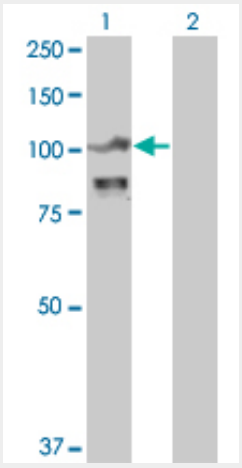
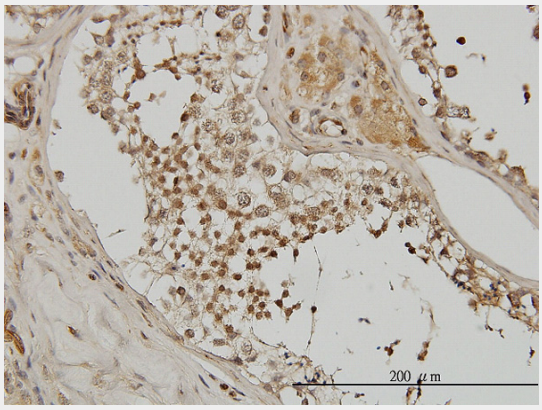


ACTN4 monoclonal antibody (M01), clone 4D10. Western Blot analysis of ACTN4 expression in NIH/3T3 ((Cat # AT1033a)



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]

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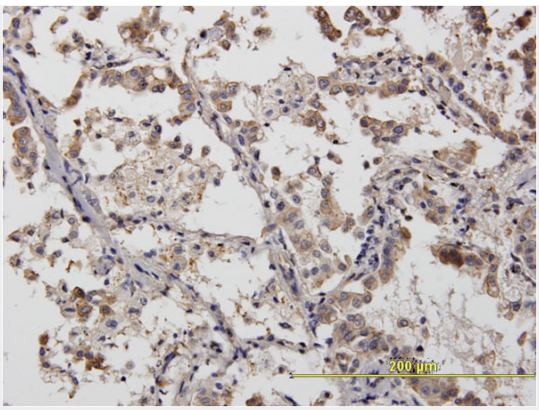
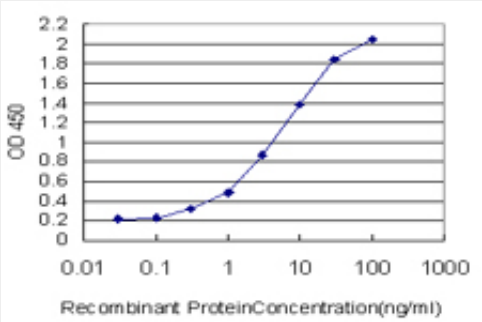


Immunoperoxidase of monoclonal antibody to ACTN4 on formalin-fixed paraffin-embedded human lung adenocarcinoma. [antibody concentration 3 ug/ml]



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

ACTN4 Antibody (monoclonal) (M01) - 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.

ACTN4 Antibody (monoclonal) (M01) - 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]