

# Product Datasheet

## alpha-Actinin 1 Antibody (OTI7A4) NBP1-48251

Unit Size: 0.1 ml

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

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### Publications: 2

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**NBP1-48251**

alpha-Actinin 1 Antibody (OTI7A4)

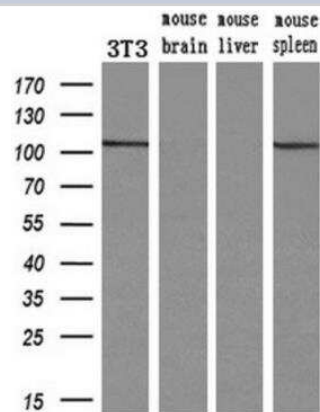
Product Information	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	1 mg/ml
<b>Storage</b>	Store at -20C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	OTI7A4
<b>Preservative</b>	0.02% Sodium Azide
<b>Isotype</b>	IgG2a
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS (pH 7.3), 1.0% BSA and 50% Glycerol
<b>Target Molecular Weight</b>	102.9 kDa

Product Description	
<b>Description</b>	Novus Biologicals Knockout (KO) Validated Mouse alpha-Actinin 1 Antibody (OTI7A4) (NBP1-48251) is a monoclonal antibody validated for use in IHC, WB and ICC/IF. Anti-alpha-Actinin 1 Antibody: Cited in 2 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	87
<b>Gene Symbol</b>	ACTN1
<b>Species</b>	Human, Mouse, Rat
<b>Reactivity Notes</b>	Mouse reactivity reported in scientific literature (PMID: 27512039). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
<b>Marker</b>	Z-disk Marker
<b>Specificity/Sensitivity</b>	This antibody is specific for Homo sapiens actinin, alpha 1 (ACTN1), transcript variant 2.
<b>Immunogen</b>	Human recombinant protein fragment corresponding to amino acids 650-893 of human alpha-actinin (NP_001093) produced in E.coli.

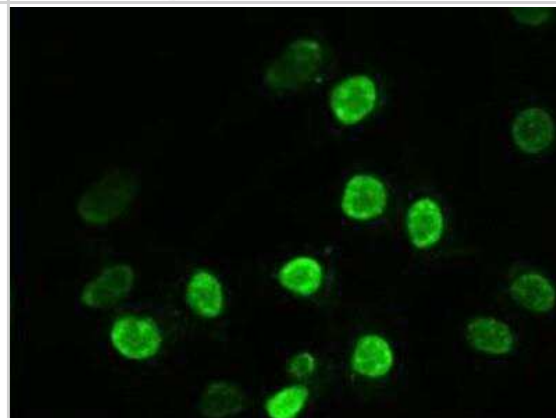
Product Application Details	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Knockout Validated
<b>Recommended Dilutions</b>	Western Blot 1:2000, Immunohistochemistry 1:50, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:50, Knockout Validated

## Images

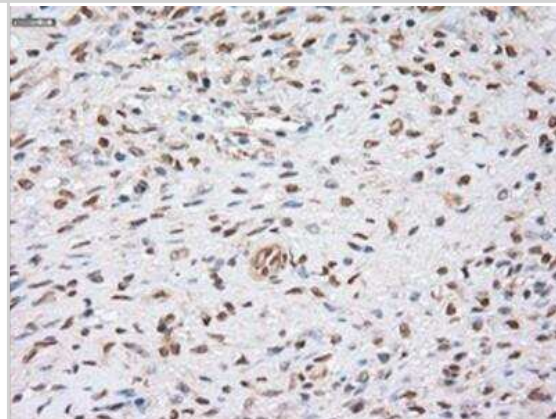
Western Blot: alpha-Actinin 1 Antibody (OT17A4) [NBP1-48251] - Analysis of extracts (10ug) from a mouse cell line and 3 different mouse tissues by using anti-ACTN1 monoclonal antibody (1:200).



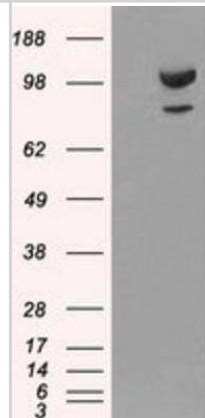
Immunocytochemistry/Immunofluorescence: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of Hela cells transiently transfected by pCMV6-ENTRY Alpha Actinin 1.



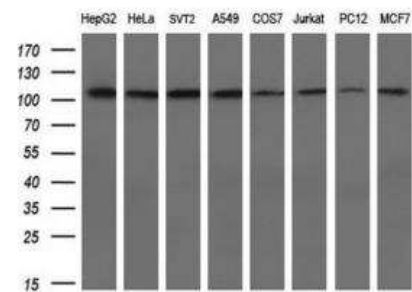
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human Ovary tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



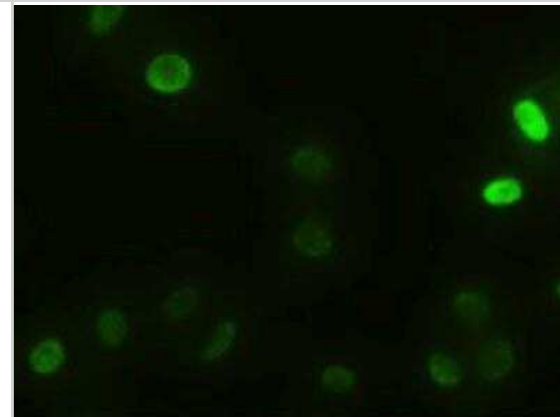
Western Blot: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY Alpha Actinin 1 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-Alpha Actinin 1.



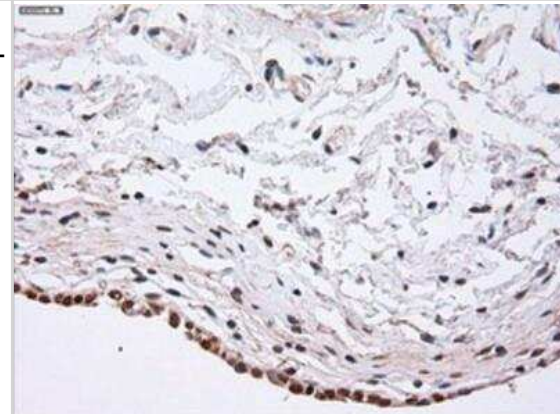
Western Blot: alpha-Actinin 1 Antibody (OT17A4) [NBP1-48251] - Analysis of extracts (10ug) from 8 different cell lines by using anti-ACTN1 monoclonal antibody at 1:200 dilution.



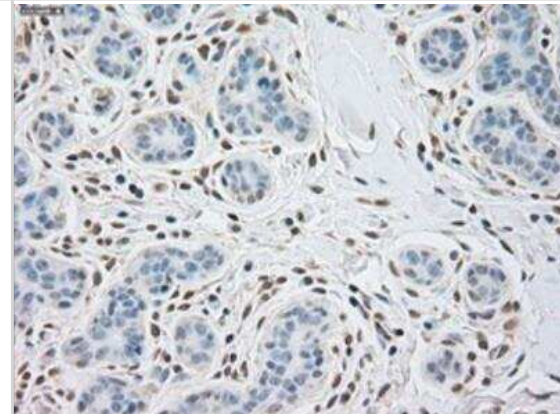
Immunocytochemistry/Immunofluorescence: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of HeLa cells using anti-Alpha Actinin 1 mouse monoclonal antibody.



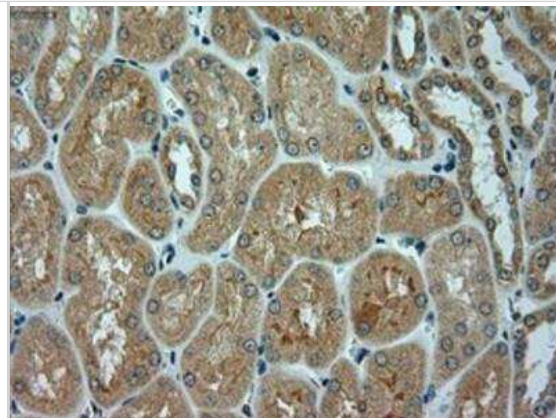
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human bladder tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



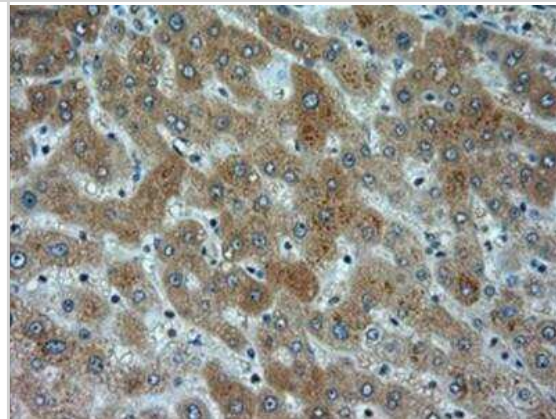
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human breast tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



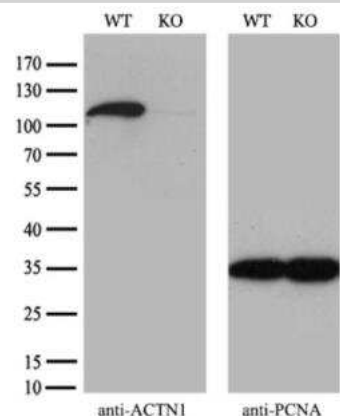
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human Kidney tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human liver tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



Western Blot: alpha-Actinin 1 Antibody (OT17A4) [NBP1-48251] - Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, and ACTN1-Knockout HeLa cells (KO) were separated by SDS-PAGE and immunoblotted with anti-ACTN1 monoclonal antibody (1:500). Then the blotted membrane was stripped and reprobed with anti-PCNA antibody as a loading control.



Simple Western: alpha-Actinin 1 Antibody (OT17A4) [NBP1-48251] Simple Western analysis of endogenous protein Cytokeratin 8 from HELA lysates (0.5 mg/mL) using Cytokeratin 8 (KRT8) Mouse Monoclonal Antibody. The virtual lane view (left) shows the target (as indicated) at 1:50 dilution of primary antibody. The corresponding electropherogram view (right) plots chemiluminescence by molecular weight along the capillary at a 1:50 dilution of primary antibody. This experiment was performed under reducing conditions on the Jess Simple Western instrument from ProteinSimple, a Bio-Techne brand, using the 12-230 kDa Separation Module.



## Publications

Huang B, Lin C, Wang C, Kao S. Upregulation of heat shock protein 70 and the differential protein expression induced by tumor necrosis factor-alpha enhances migration and inhibits apoptosis of hepatocellular carcinoma cell HepG2. *International Journal of Medical sciences*. 2017-02-25 [PMID: 28367089] (IF/IHC, Human)

Shen X, Soibam B, Benham A et al. miR-322/-503 cluster is expressed in the earliest cardiac progenitor cells and drives cardiomyocyte specification. *Proc. Natl. Acad. Sci. U.S.A.* 2016-08-23 [PMID: 27512039] (IF/IHC, Mouse)





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### **Products Related to NBP1-48251**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-96778	Mouse IgG2a Isotype Control (M2A)

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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