

# 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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**NBP1-48251**

alpha-Actinin 1 Antibody (OTI7A4)

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

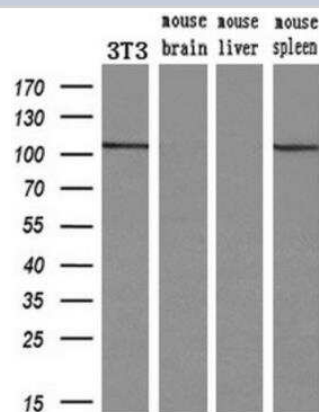
| Product Description     |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description             | 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.                                                                                                                         |
| Host                    | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene ID                 | 87                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Gene Symbol             | ACTN1                                                                                                                                                                                                                                                                                                                                                                                                                |
| Species                 | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                    |
| Reactivity Notes        | 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. |
| Marker                  | Z-disk Marker                                                                                                                                                                                                                                                                                                                                                                                                        |
| Specificity/Sensitivity | This antibody is specific for Homo sapiens actinin, alpha 1 (ACTN1), transcript variant 2.                                                                                                                                                                                                                                                                                                                           |
| Immunogen               | Human recombinant protein fragment corresponding to amino acids 650-893 of human alpha-actinin (NP_001093) produced in E.coli.                                                                                                                                                                                                                                                                                       |

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

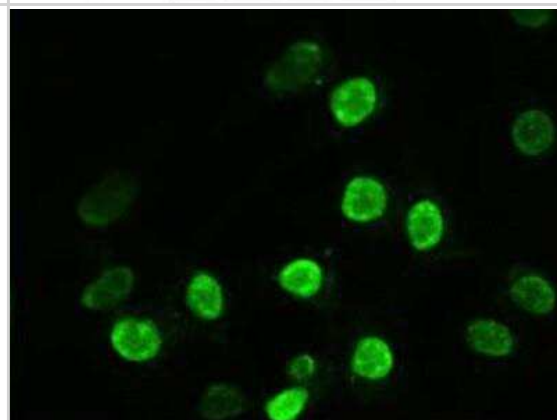


## Images

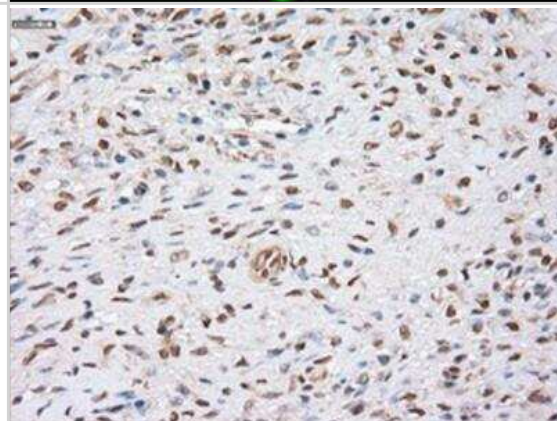
Western Blot: alpha-Actinin 1 Antibody (OTI7A4) [NBP1-48251] - Analysis of extracts (10ug) from a mouse cell line and 3 different mouse tissues by using anti-ACTN1 monoclonal antibody (1:200).



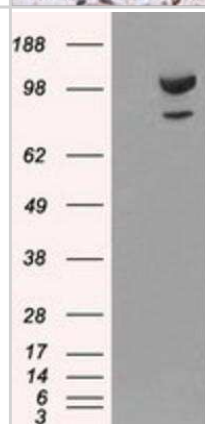
Immunocytochemistry/Immunofluorescence: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of Hela cells transiently transfected by pCMV6-ENTRY Alpha Actinin 1.



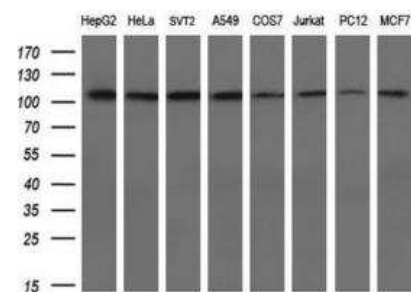
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human Ovary tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



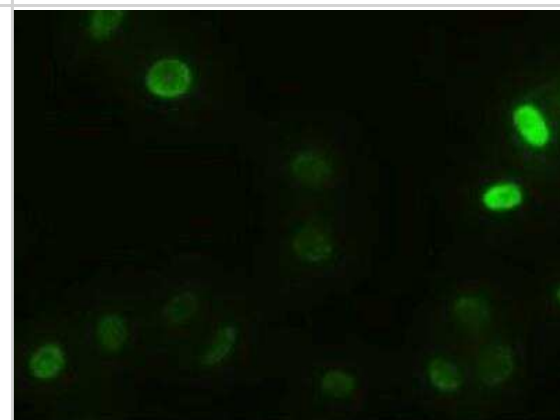
Western Blot: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY Alpha Actinin 1 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with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



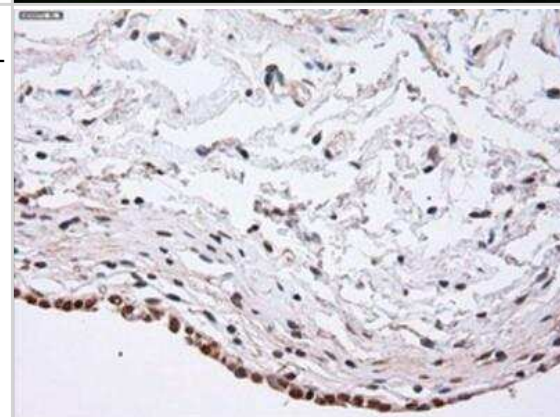
Western Blot: alpha-Actinin 1 Antibody (OTI7A4) [NBP1-48251] - Analysis of extracts (10ug) from 8 different cell lines by using anti-ACTN1 monoclonal antibody at 1:200 dilution.



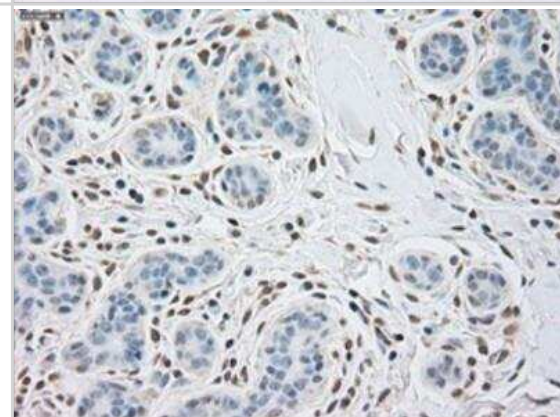
Immunocytochemistry/Immunofluorescence: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of HeLa cells using anti-Alpha Actinin 1 mouse monoclonal antibody.



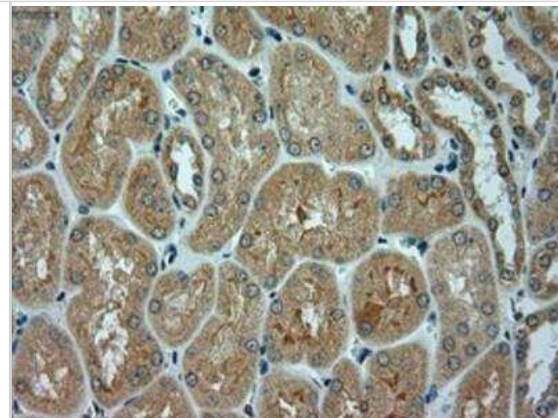
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human bladder tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



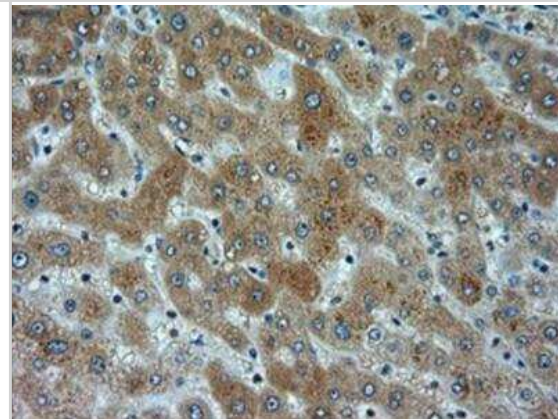
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human breast tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



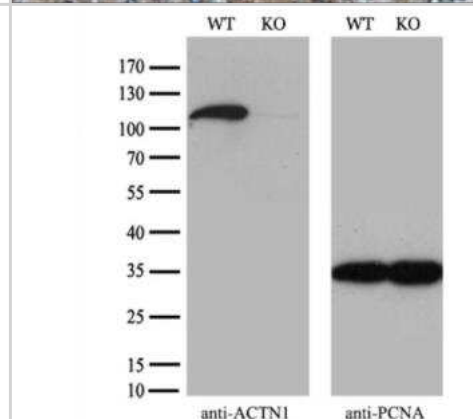
Immunohistochemistry-Paraffin: alpha-Actinin 1 Antibody (7A4) [NBP1-48251] - Staining of paraffin-embedded Human Kidney tissue using anti-Alpha Actinin 1 mouse monoclonal antibody.



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 (OTI7A4) [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.



## 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**

|                  |                                                         |
|------------------|---------------------------------------------------------|
| HAF007           | Goat anti-Mouse IgG Secondary Antibody [HRP]            |
| NB720-B          | Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin] |
| NBP1-96778       | Mouse IgG2a Isotype Control (M2A)                       |
| NBP2-59725-0.1mg | Recombinant Human alpha-Actinin 1 His Protein           |

**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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