

Product Datasheet

Profilin 1 Antibody (OTI1D5) NBP2-02577

Unit Size: 0.1 ml

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

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NBP2-02577

Profilin 1 Antibody (OTI1D5)

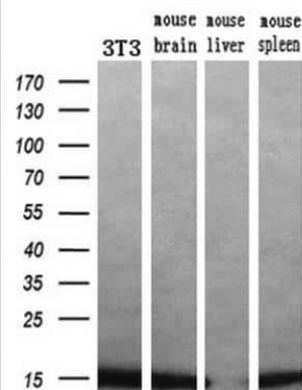
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	OTI1D5
Preservative	0.02% Sodium Azide
Isotype	IgG2a
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.3), 1.0% BSA and 50% Glycerol
Target Molecular Weight	14.9 kDa

Product Description	
Host	Mouse
Gene ID	5216
Gene Symbol	PFN1
Species	Human, Mouse, Rat, Canine, Monkey
Reactivity Notes	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.
Immunogen	Full length human recombinant protein of human PFN1 (NP_005013) produced in HEK293T cell.

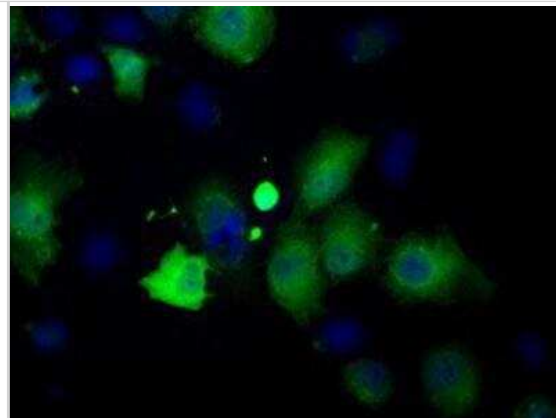
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:1000-2000, Flow Cytometry 1:100, Immunohistochemistry 1:50, Immunocytochemistry/ Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:50

Images

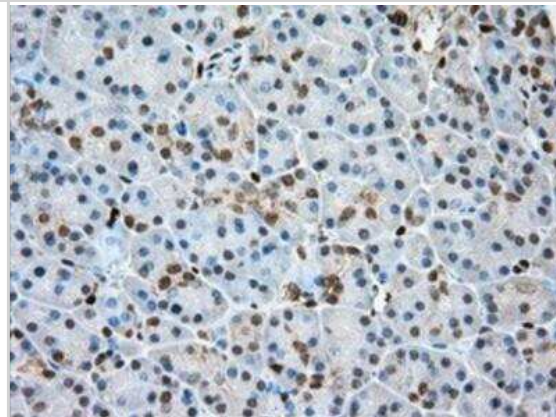
Western Blot: Profilin 1 Antibody (OTI1D5) [NBP2-02577] - Analysis of extracts (10ug) from a mouse cell line and 3 different mouse tissues by using anti-PFN1 monoclonal antibody.(1:200)



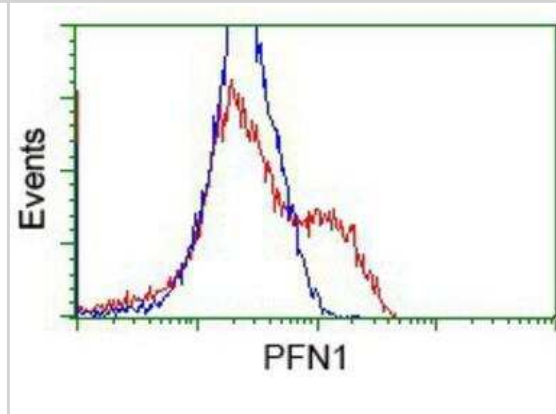
Immunocytochemistry/Immunofluorescence: Profilin 1 Antibody (1D5) [NBP2-02577] - Staining of COS7 cells transiently transfected by pCMV6-ENTRY Profilin 1.



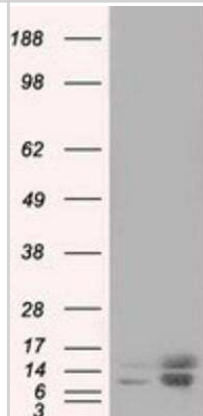
Immunohistochemistry-Paraffin: Profilin 1 Antibody (1D5) [NBP2-02577] - Staining of paraffin-embedded Human pancreas tissue using anti-Profilin 1 mouse monoclonal antibody.



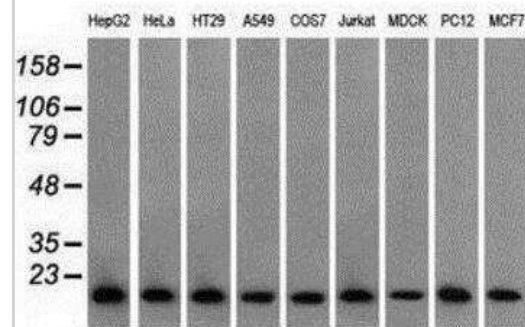
Flow Cytometry: Profilin 1 Antibody (1D5) [NBP2-02577] - HEK293T cells transfected with either overexpression plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-Profilin 1 antibody, and then analyzed by flow cytometry.



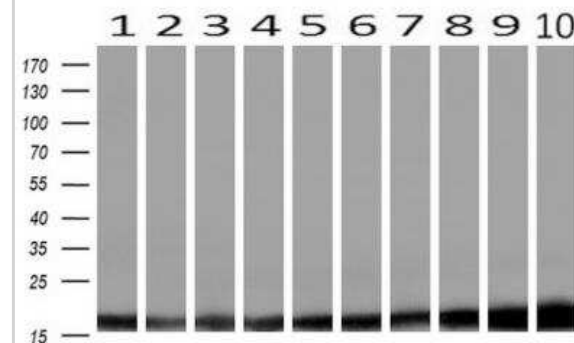
Western Blot: Profilin 1 Antibody (1D5) [NBP2-02577] - HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY Profilin 1 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-Profilin 1.



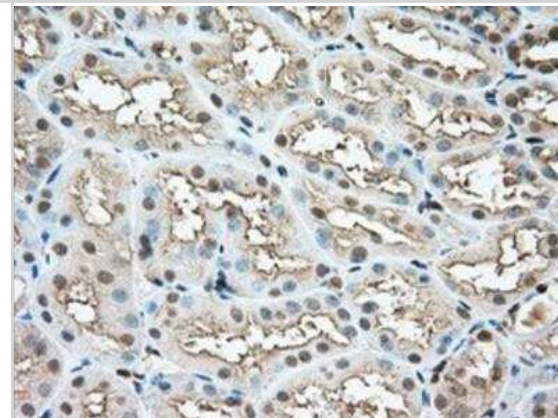
Western Blot: Profilin 1 Antibody (1D5) [NBP2-02577] - Analysis of extracts (35ug) from 9 different cell lines by using anti-Profilin 1 monoclonal antibody.



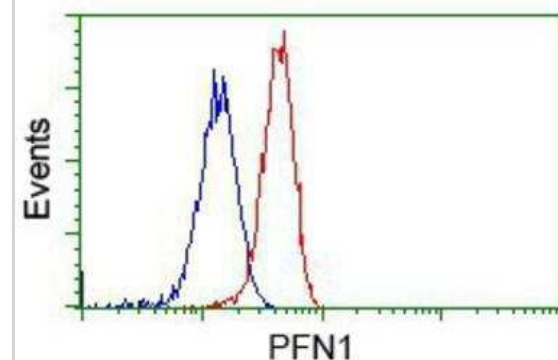
Western Blot: Profilin 1 Antibody (OT11D5) [NBP2-02577] - Analysis of extracts (10ug) from 10 Human tissue by using anti-PFN1 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon; 10: spleen).



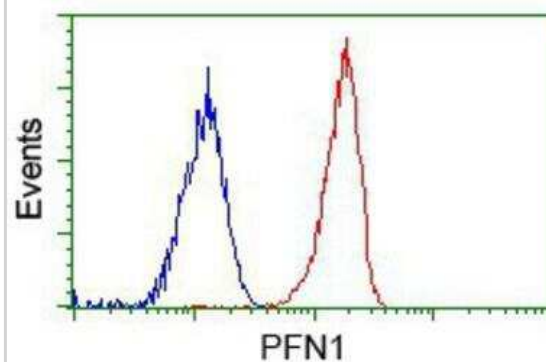
Immunohistochemistry-Paraffin: Profilin 1 Antibody (1D5) [NBP2-02577] - Staining of paraffin-embedded Human Kidney tissue using anti-Profilin 1 mouse monoclonal antibody.



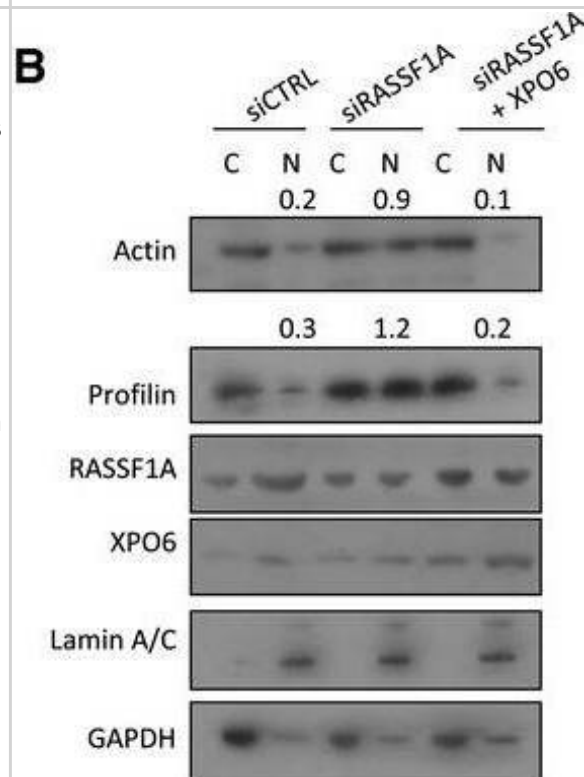
Flow Cytometry: Profilin 1 Antibody (1D5) [NBP2-02577] - Analysis of Hela cells, using anti-Profilin 1 antibody, (Red), compared to a nonspecific negative control antibody (Blue).



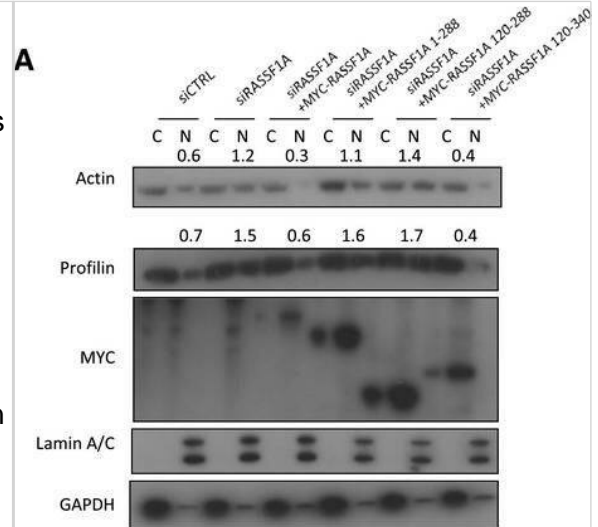
Flow Cytometry: Profilin 1 Antibody (1D5) [NBP2-02577] - Analysis of Jurkat cells, using anti-Profilin 1 antibody, (Red), compared to a nonspecific negative control antibody (Blue).



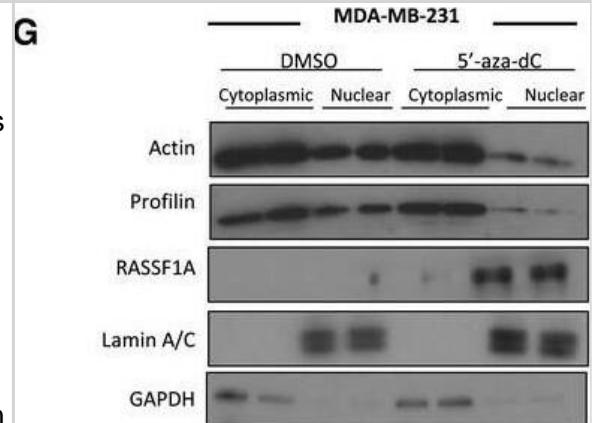
Immunoprecipitation: Profilin 1 Antibody (OT11D5) [NBP2-02577] - RASSF1A depletion does not affect nuclear F-actin levels Western blot analysis of actin & profilin levels in nuclear & cytoplasmic fractions of cells transfected with truncated RASSF1A mutants. Western blot analysis of actin & profilin levels in nuclear & cytoplasmic fractions of cells transfected with siRASSF1A & siRASSF1A together with XPO6 plasmid. Western blot analysis of actin & profilin levels in nuclear & cytoplasmic fractions of cells transfected with siRNA-resistant FLAG-RASSF1A plasmid. Western blot analysis of actin & profilin levels in nuclear & cytoplasmic fractions of cells transfected with siMST2. Quantification of nuclear actin & profilin relative to Lamin A/C is shown. Error bars derive from three independent experiments & represent the SEM. Western blot analysis of exportin-6 (XPO6) & importin-9 (IPO9) in the absence of RASSF1A. GAPDH was used as a loading control. Confocal images of endogenous filamentous actin (F-actin) in siCTRL & siRASSF1A cells using phalloidin staining (Alexa Fluor 568-conjugated, red). DNA was stained with DAPI. Scale bars = 10 μ m. Western blot analysis of actin, profilin, GAPDH & Lamin A/C levels in nuclear & cytoplasmic fractions of MDA-MB-231 cells treated with DMSO or 5'-aza-dC. The graph shows the nuclear levels of actin & profilin relative to Lamin A/C in MDA-MB-231 cells expressing RASSF1A. Error bars derive from two independent experiments & represent the SEM. Data information: Two-tailed Student's t-test was used for statistical analysis. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. Source data are available online for this figure. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31414556>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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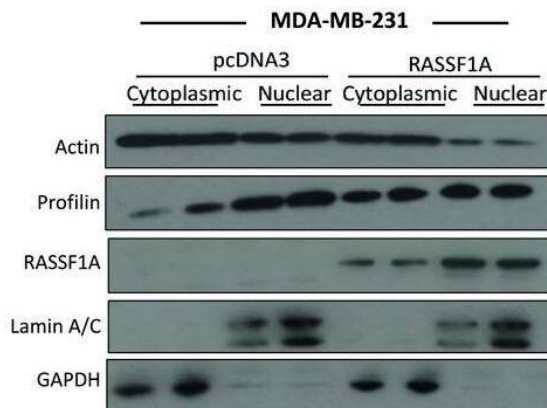


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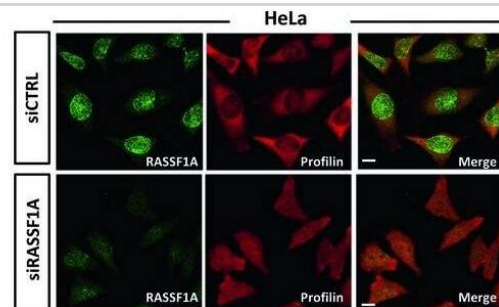
Immunoprecipitation: Profilin 1 Antibody (OT11D5) [NBP2-02577] - RASSF1A is involved in actin & profilin nuclear export process HeLa cells treated with control or RASSF1A siRNA were fractionated into cytoplasmic & nuclear extracts. Lysates from each fraction were probed for actin & profilin alongside GAPDH (as a marker of the cytoplasmic fraction) & Lamin A/C (as a marker of the nuclear fraction). Right: quantification of nuclear actin & profilin relative to Lamin A/C is shown. Error bars derive from two independent experiments & represent the SEM. Immunofluorescence images of profilin in control & RASSF1A siRNA-transfected HeLa cells. Right: the profilin localisation was scored as nuclear/cytoplasmic or predominantly cytoplasmic in approximately 100 cells. Error bars derive from three independent experiments & represent the SEM. Confocal images of endogenous monomeric globular actin (G-actin) in siCTRL & siRASSF1A cells using DNase I staining (Alexa Fluor 488-conjugated, green). Scale bars = 10 μ m. Western blot analysis of actin, profilin, GAPDH & Lamin A/C levels in nuclear & cytoplasmic fractions of MDA-MB-231 cells treated with control pcDNA3 or RASSF1A vector. The graph shows the nuclear levels of actin & profilin relative to Lamin A/C in MDA-MB-231 cells expressing RASSF1A. Error bars derive from two independent experiments & represent the SEM. Data information: Two-tailed Student's t-test was used for statistical analysis. *P < 0.05, **P < 0.01. Source data are available online for this figure. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31414556>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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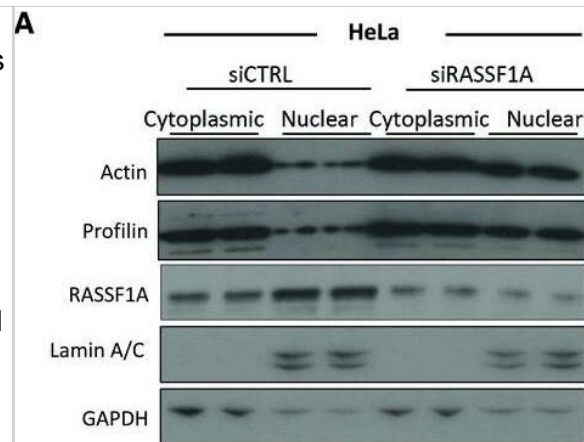


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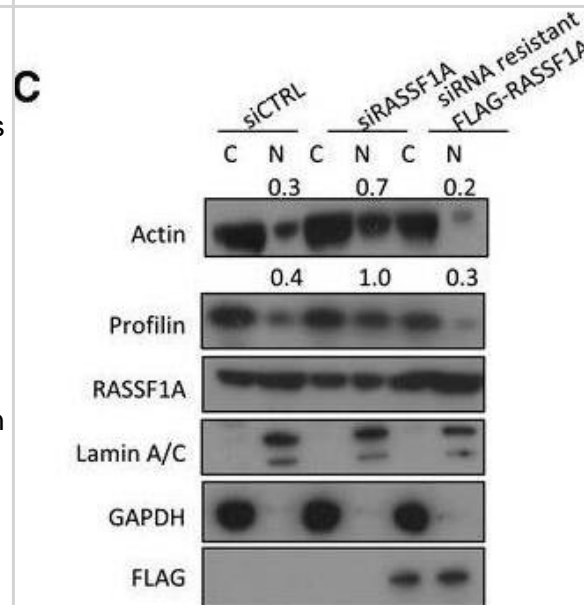
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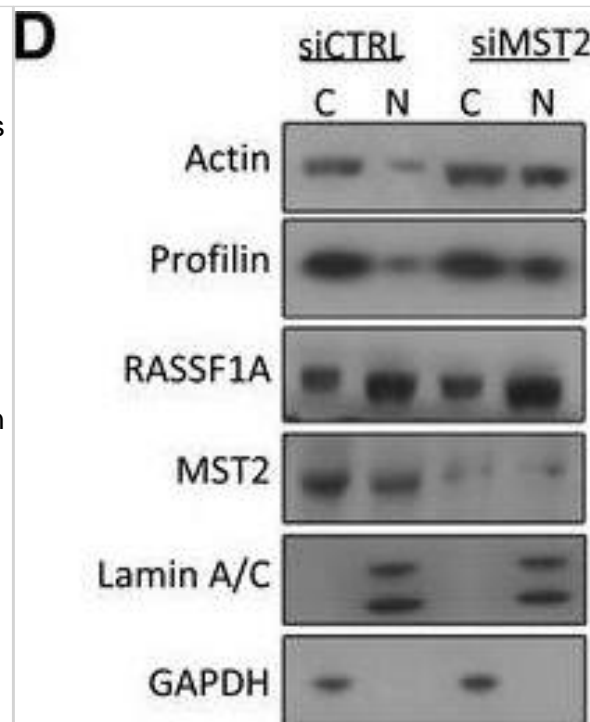
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Publications

Chatzifrangkeskou, M, Pefani, D E Et al. RASSF1A is required for the maintenance of nuclear actin levels. *EMBO J* 2019-08-15 [PMID: 31414556] (IF/IHC, Human)

Chatzifrangkeskou M, Pefani D E et al. RASSF1A is required for the maintenance of nuclear actin levels. *EMBO J* 2019-07-06 [PMID: 31175105] (WB, ICC/IF, Human)

Heo SH, Kang E, Kim YM et al. Fabry disease: characterisation of the plasma proteome pre- and post-enzyme replacement therapy. *J. Med. Genet.* 2017-08-23 [PMID: 28835480] (WB, Human)



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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)
NBP1-19344PEP	Profilin 1 Antibody Blocking Peptide

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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