Product Datasheet

Matrin 3 Antibody NB100-1761

Unit Size: 0.1 ml

Store at 4C. Do not freeze.



Reviews: 1 Publications: 13

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Updated 10/23/2024 v.20.1

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NB100-1761

Matrin 3 Antibody

Product Information	
Unit Size	0.1 ml
Concentration	0.2 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	TBS and 0.1% BSA
Product Description	
Host	Rabbit
Gene ID	9782
Gene Symbol	MATR3
Species	Human, Mouse
Immunogen	The immunogen recognized by this antibody maps to a region between residue 800 and the C-terminus (residue 847) of human Matrin 3 using the numbering given in entry NP_061322.2 (GeneID 9782).
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Knockout Validated
Recommended Dilutions	Western Blot 1:5000-1:15000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:250-1:1000, Immunoprecipitation 1-4 ug/mg of lysate, Immunohistochemistry-Paraffin 1:10-1:500, Knockout Validated
Application Notes	Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.

Images

Western blot shows lysates of HAP1 human near-haploid cell line and Matrin 3 knockout HAP1 cell line (KO). Nitrocellulose membrane was probed with Matrin 3 Antibody (Catalog # NB100-1761) O/N at 4C, followed by HRP-conjugated Secondary Antibody and ECL detection. A specific band was detected for Matrin 3 (as indicated) in the parental HAP1 cell line, but is not detectable in knockout HAP1 cell line. Primary antibody dilution used: 1/5000. The Ponceau stained transfers of each blot are shown. Image, protocol and testing courtesy of YCharOS Inc. (ycharos.com).











Western Blot: Matrin 3 Antibody [NB100-1761] - The identification of host proteins immunoprecipitated with L1 ORF1p-FLAG. Validation of putative ORF1p-FLAG interacting proteins: Western blot images of the pJM101/L1.3FLAG and pJM101/L1.3 immunoprecipitation (IP) reactions. The pCEP4 lanes denote whole cell lysates derived from HeLa cells transfected with an empty pCEP4 vector (~ 1.0% input). Primary antibodies used to probe western blots are indicated to the left of the images. Immunoprecipitation reactions were conducted in either the absence (left) or presence (right) of RNaseA (10 ug/mL). The putative cellular functions of the ORF1p-FLAG interacting proteins are indicated on the right hand side of the blots. Image collected and cropped by CiteAb from the following publication

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Immunohistochemistry: Matrin 3 Antibody [NB100-1761] - Striking muscle pathology of gastrocnemius in Tg mice from Fo. 1579. Matrin 3 immunohistochemistry of transverse and longitudinal sections. * indicates rounded fiber. Arrow head indicates subsarcolemmal nucleus. Arrow indicates nuclear chain. Scale bars measure 25 um Image collected and cropped by CiteAb from the following publication (https://actaneurocomms.biomedcentral.com/articles/10.1186/s40478-016-0393-5), licensed under a CC-BY license.

Immunohistochemistry: Matrin 3 Antibody [NB100-1761] - Striking muscle pathology of gastrocnemius in Tg mice from Fo. 1579. Matrin 3 immunohistochemistry of transverse sections from phenotypic Tg show an increase in Matrin 3 immunoreactivity compared to NT transverse and longitudinal sections. * indicates rounded fiber. Arrow head indicates subsarcolemmal nucleus. Arrow indicates nuclear chain. Scale bars measure 25 um Image collected and cropped by CiteAb from the following publication

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Immunoprecipitation: Matrin 3 Antibody [NB100-1761] - IP of human fibroblasts. Image from verified customer review.



HAP1 WT and Matrin 3 KO cells were labelled with a green or a far-red fluorescent dye, respectively. Cells were stained with Rab1A antibody and with the corresponding Alexa-fluor 555 coupled secondary antibody including DAPI. Acquisition of the blue (nucleus-DAPI), green (identification of WT cells), red (antibody staining) and far-red (identification of KO cells) channels was performed. Representative images of the blue and red (grayscale) channels are shown. WT and KO cells are outlined with green and magenta dashed line, respectively. Antibody dilution used: 1/200. Image, protocol and testing courtesy of YCharOS Inc. (ycharos.com).



Western Blot: Matrin 3 Antibody [NB100-1761] - TRAP150 inhibits the RRM-dependent binding activity of PSF, & inhibition of binding requires more than the minimal RRM binding domain. (A) UV crosslinking of ESS1 RNA with full-length PSF (PSF-FL) either alone (-), in the presence of BSA as a control or in the presence of increasing amounts of full-length FLAG-tagged TRAP150. (B) Same as panel (A), but competing binding of exRRMs of PSF with indicated truncations of GST-TRAP150 or GST alone. (C) Same as panel (A) but competing for binding of the minRRMs & hnRNP L by GST-TRAP(PID). (D) Western blots of immunoprecipitation of PSF from unstimulated (TRAP150 bound) & stimulated (TRAP150 unbound) JSL1 cells showing relative binding of TRAP150 & other known PSF-interacting partners. The source of the doublet for PSPC1 & p54nrb/NONO in stimulated cells is unknown, but is the same in input & IP samples. Image collected & cropped by CiteAb from the following publication (https://academic.oup.com/nar/article-lookup/doi/10.1093/nar/gkv816), licensed under a CC-BY license. Not internally tested by Novus Biologicals.





Publications

Guo Q, Han S The effect on m6A methylation writer complex by the reduced MATR3 in pterygium Acta histochemica 2023-10-30 [PMID: 37913560]

Haikerwal A, Barrera MD, Bhalla N et al. Inhibition of Venezuelan Equine Encephalitis Virus Using Small Interfering RNAs Viruses 2022-07-26 [PMID: 35893693] (IP, KD, WB, Human)

Details:

See Supplementary figure for KD

Moloney C, Rayaprolu S, Howard J et al. Analysis of spinal and muscle pathology in transgenic mice overexpressing wild-type and ALS-linked mutant MATR3 Acta Neuropathol Commun 2018-12-19 [PMID: 30563574] (WB, Mouse)

Marangi G, Lattante S, Doronzio PN et al. Matrin 3 variants are frequent in Italian ALS patients. Neurobiol Aging 2017 -01-01 [PMID: 28029397]

Rayaprolu S, D'Alton S, Crosby K et al. Heterogeneity of Matrin 3 in the developing and aging murine central nervous system. J Comp Neurol 2016-10-01 [PMID: 26878116] (Mouse)

Moloney C, Rayaprolu S, Howard J et al. Transgenic mice overexpressing the ALS-linked protein Matrin 3 develop a profound muscle phenotype. Acta Neuropathol Commun. 2016-11-18 [PMID: 27863507] (WB, Mouse)

Christopher A. Yarosh, Iulia Tapescu, Matthew G. Thompson et al. TRAP150 interacts with the RNA-binding domain of PSF and antagonizes splicing of numerous PSF-target genes in T cells. Nucleic Acid Research 2015-08-10 [PMID: 26261210] (WB, Human)

Depreux FF, Puckelwartz MJ, Augustynowicz A et al. Disruption of the lamin A and matrin-3 interaction by myopathic LMNA mutations. Hum. Mol. Genet. 2015-05-06 [PMID: 25948554] (IP, WB, Mouse)

Moldovan JB, Moran JV. The Zinc-Finger Antiviral Protein ZAP Inhibits LINE and Alu Retrotransposition. PLoS Genet 2015-05-01 [PMID: 25951186] (ICC/IF, WB, Human)

Lee YW, Terranova C, Birkaya B et al. A novel nuclear FGF Receptor-1 partnership with retinoid and Nur receptors during developmental gene programming of embryonic stem cells. J Cell Biochem 2012-09-01 [PMID: 22539306]

Salton M, Elkon R, Borodina T et al. Matrin 3 binds and stabilizes mRNA. PLoS One 2011-01-01 [PMID: 21858232]

Erazo A, Yee MB, Banfield BW et al. The alphaherpesvirus US3/ORF66 protein kinases direct phosphorylation of the nuclear matrix protein matrin 3. J Virol 2011-01-01 [PMID: 20962082]

More publications at http://www.novusbio.com/NB100-1761





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Products Related to NB100-1761

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00009782-P01-2ug	Recombinant Human Matrin 3 GST (N-Term) 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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