Product Datasheet

CRM1 Antibody - BSA Free
NB100-79802

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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Publications: 17

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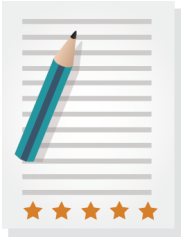
Updated 9/9/2025 v.20.1



NB100-79802

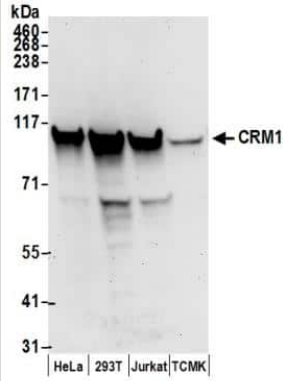
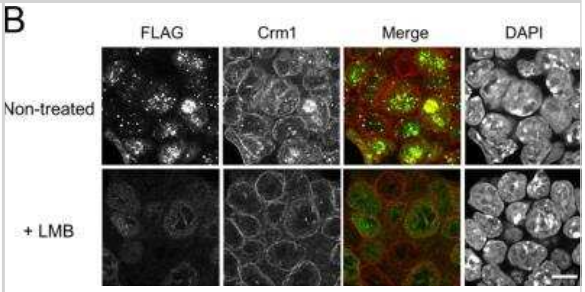
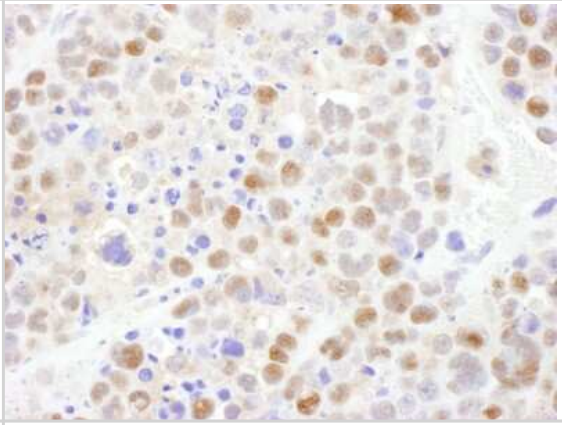
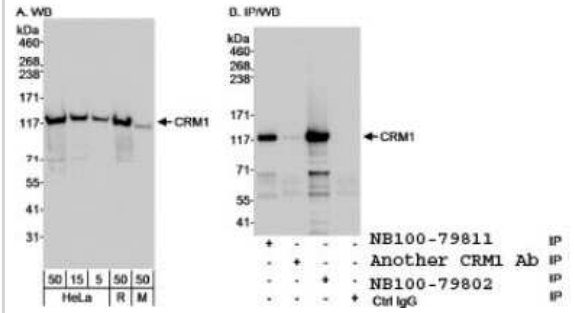
CRM1 Antibody - BSA Free

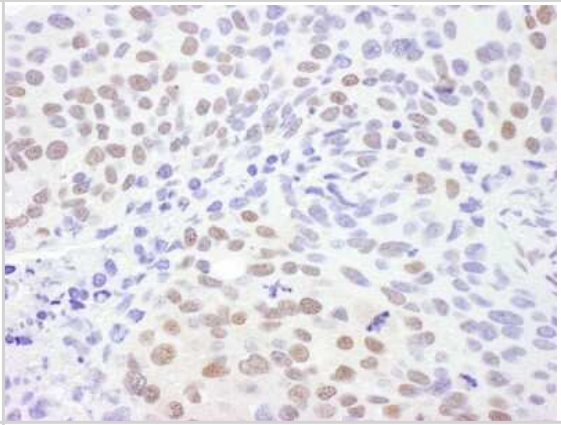
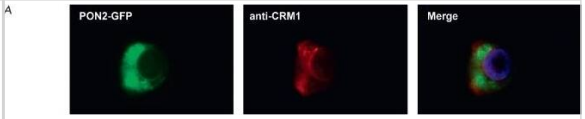
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris-Citrate/Phosphate (pH 7.0 - 8.0)
Target Molecular Weight	123 kDa

Product Description	
Description	Novus Biologicals Rabbit CRM1 Antibody - BSA Free (NB100-79802) is a polyclonal antibody validated for use in IHC, WB, ICC/IF, Simple Western and IP. Anti-CRM1 Antibody: Cited in 16 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7514
Gene Symbol	XPO1
Species	Human, Mouse, Rat
Reactivity Notes	Rat reactivity reported in scientific literature (PMID:33188200).
Immunogen	The immunogen recognized by this antibody maps to a region between residue 1025 and the C-terminus (residue 1071) of human Chromosome Region Maintenance 1 (Exportin 1) (NP_003391.1).

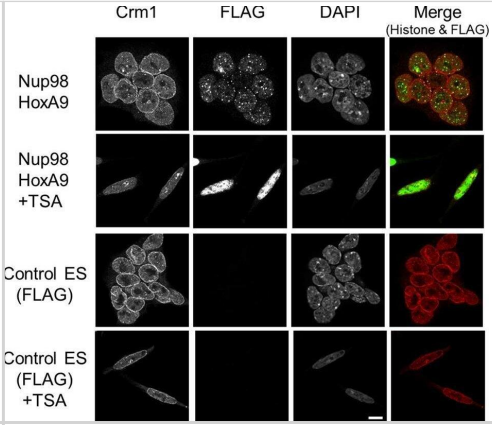
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 1:2000-1:10000, Simple Western 1:500, Immunohistochemistry 1:1000-1:5000, Immunocytochemistry/ Immunofluorescence 1:1000 to 1:10000, Immunoprecipitation 2-10 ug/mg lysate, Immunohistochemistry-Paraffin 1:1000-1:5000
Application Notes	Epitope retrieval with citrate buffer pH 6.0 is recommended for FFPE tissue sections. See Simple Western Antibody Database for Simple Western validation: Tested in NIH-3T3 lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:500, apparent MW was 110 kDa

Images

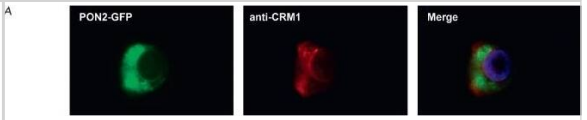
Western Blot: CRM1 Antibody [NB100-79802] - Detection of Human and Mouse CRM1 by Western Blot. Samples: Whole cell lysate (50 ug) prepared using NETN buffer from HeLa, 293T, Jurkat, and mouse TCMK-1 cells. Antibodies: Affinity purified rabbit anti-CRM1 antibody NB100-79802 used for WB at 0.1 ug/ml. Detection: Chemiluminescence with an exposure time of 30 seconds.	
Immunocytochemistry/Immunofluorescence: CRM1 Antibody [NB100-79802] - Association between Nup98-HoxA9 and CRM1 is critical for the Hox Gene activation mediated by Nup98-HoxA9. (B) The effect of LMB treatment on the cellular localization of Nup98-HoxA9. Nup98-HoxA9 ES cells were cultured either in the presence or absence of 5 nM LMB for 2 hr, fixed and stained with antibodies against FLAG (M2) and CRM1. Merged images of FLAG (green) and CRM1 (red) are shown. Nuclei were stained with DAPI. Bar, 10um. Image collected and cropped by CiteAb from the following publication (https://elifesciences.org/articles/09540) licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: CRM1 Antibody [NB100-79802] - Mouse teratoma. Antibody: Affinity purified rabbit anti-CRM1 used at a dilution of 1:1,000 (1ug/ml). Detection: DAB	
Western Blot: CRM1 Antibody [NB100-79802] - A) Whole cell lysate from HeLa (5, 15 and 50 mcg), Ramos (50 mcg) and mouse NIH3T3 (50 mcg) cells. B) Whole cell lysate (1 mg/IP; 1/4 of reaction loaded/lane) from HeLa cells. NB100-79802 used at 0.1 mcg/ml for WB (A and B) and at 3 mcg/mg lysate for IP. CRM1 was also less efficiently immunoprecipitated by NB100-79811, which recognize upstream epitopes on CRM1.	

Immunocytochemistry/Immunofluorescence: CRM1 Antibody [NB100-79802] - Association between Nup98-HoxA9 and CRM1 is critical for the Hox Gene activation mediated by Nup98-HoxA9. Top panel: Nup98-HoxA9 interacts and sequesters CRM1 onto Nup98-HoxA9 dots. HeLa cells were transfected with the EGFP-Nup98-HoxA9 expressing plasmid. After 24 hr, cells were fixed and stained with an anti-CRM1 antibody. Arrows indicate the cells transfected. Bottom panel: Nup98-HoxA9 ES cells were fixed and co-stained with anti-FLAG (M2) and anti-CRM1 antibodies. Merged image of FLAG (green) and CRM1 (red) is shown. Bar, 5um. Image collected and cropped by CiteAb from the following publication (https://elifesciences.org/articles/09540) licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: CRM1 Antibody [NB100-79802] - Human lung cancer. Antibody: Affinity purified rabbit anti-CRM1 used at a dilution of 1:5,000 (0.2ug/ml). Detection: DAB	
Simple Western: CRM1 Antibody [NB100-79802] - Simple Western lane view shows a specific band for CRM1 in 0.5 mg/ml of NIH-3T3 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	
A – Fluorescence images of cells transfected with thepTurboGFP-N-PON2 plasmid and then stained with anti-CRM1 antibodies. B– Fluorescence images of cells transfected with plasmidsencoding different fragments of PON2 (1–27 a.a.; 1–83 a.a.;1–168 a.a.) or GFP alone as a control	

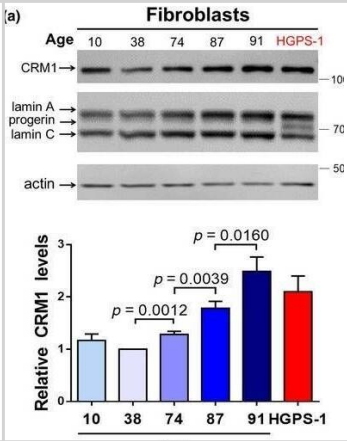
Immunocytochemistry/ Immunofluorescence: CRM1 Antibody [NB100-79802] - Effect of TSA treatment on the subcellular localization of Crm1.Control ES or Nup98-HoxA9 expressing ES cells were cultured in the presence or absence of 50 nM TSA for 24 hr. Then, the cells were fixed & stained with antibodies against FLAG (M2) & Crm1. Merged images of FLAG (green) & Crm1 (red) are shown. Nuclei were stained with DAPI. Bar, 10 µm. DAPI, 4',6-diamidino-2-phenylindole; ES, embryonic stem; TSA, trichostatin A.DOI:http://dx.doi.org/10.7554/eLife.09540.020 Image collected & cropped by CiteAb from the following publication (https://elifesciences.org/articles/09540), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



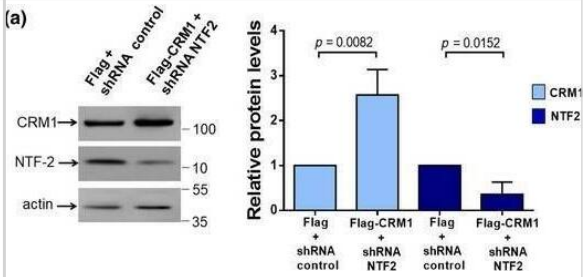
Immunocytochemistry/ Immunofluorescence: CRM1 Antibody [NB100-79802] - A – Fluorescence images of cells transfected with thepTurboGFP-N-PON2 plasmid & then stained with anti-CRM1 antibodies. B– Fluorescence images of cells transfected with plasmidsencoding different fragments of PON2 (1–27 a.a.; 1–83 a.a.;1–168 a.a.) or GFP alone as a control Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30397533), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



CRM1 expression and activity increased during normal aging. (a) Primary human fibroblast from healthy individuals of varying ages or HGPS□1 fibroblasts were analyzed by Western blotting using antibodies against CRM1, lamin A/C, and actin (control). CRM1 expression is shown (bottom panel; unpaired t test). (b) Localization of the NES□containing proteins STAT3, Z0□2, and B23 was evaluated in the indicated fibroblast cultures, treated with LMB or vehicle alone for 24 hr. Typical images are shown. Bar, 20 uM. (c) The n/c ratio of STAT3, Z0□2, and B23 was calculated as peer Methods (n = 50 cells; Mann–Whitney U test) Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/31305018), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



(a□b) Enhanced nuclear export activity due to CRM1 overexpression overcomes deficient Ran gradient in HeLa cells. Cells were double□transfected to stably expressed Flag□CRM1 or Flag alone, and a shRNA against NTF2 gene or a shRNA control. (a) Lysates from the transfected cells were analyzed by Western blotting using antibodies against CRM1, NTF2, and actin (control). Middle. Relative protein levels were assessed from three independent experiments (unpaired t test). Right. Distribution of STAT3 was analyzed in the indicated transfected cells. Bar, 20 uM. (b) Transfected cell lysates were analyzed by Western blotting with antibodies against lamin B1, H3K9me, and actin (control). Middle. Data correspond to 3 independent experiments (unpaired t test). Right. Distribution of H3K9me3 was analyzed in the indicated transfected cells. Bar, 20 uM. (c–e) Restoration of lamin B1 expression in HGPS cells (c) HGPS□1 cells were transiently transfected to express GFP□lamin B1 or GFP alone. Transfected cells were immunolabeled for lamin A/C (d) and H3K9m3 (e) to estimate the percentage of cells with aberrant nuclear morphology and heterochromatin loss, respectively. Bar, 10 uM Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/31305018), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Neggers JE, Vanstreels E, Baloglu E et al. Heterozygous mutation of cysteine528 in XPO1 is sufficient for resistance to selective inhibitors of nuclear export Oncotarget 2016-10-18 [PMID: 27634897]

Steyaert J, Scheveneels W, Vanneste J et al. FUS-Induced neurotoxicity in drosophila is prevented by downregulating nucleocytoplasmic transport proteins Human Molecular Genetics 2018-08-24 [PMID: 30379317]

Reicher A, Reini J, Ciobanu M et Al. Pooled multicolour tagging for visualizing subcellular protein dynamics Nat Cell Biol 2024-04-19 [PMID: 38641660]

Kim, WK;Buckley, AJ;Lee, DH;Hiroto, A;Nenninger, CH;Olson, AW;Wang, J;Li, Z;Vikram, R;Adzavon, YM;Yau, TY;Bao, Y;Kahn, M;Geradts, J;Xiao, GQ;Sun, Z; Androgen deprivation induces double-null prostate cancer via aberrant nuclear export and ribosomal biogenesis through HGF and Wnt activation Nature communications 2024-02-09 [PMID: 38336745]

Liao Y, Andronov L, Liu X et al. UBAP2L drives scaffold assembly of nuclear pore complexes at the intact nuclear envelope bioRxiv 2023-08-22 (WB, Human)

Wang XQD, Fan D, Han Q et al. Mutant NPM1 Hijacks Transcriptional Hubs to Maintain Pathogenic Gene Programs in Acute Myeloid Leukemia Cancer discovery 2023-03-01 [PMID: 36455589] (IP, ICC/IF)

Details:
Cut & Run

Gorostieta-Salas E, Moreno-Blas D, GerOnimo-Olvera C Et al. Enhanced Activity of Exportin-1/CRM1 in Neurons Contributes to Autophagy Dysfunction and Senescent Features in Old Mouse Brain Oxidative medicine and cellular longevity 2021-08-13 [PMID: 34434486] (WB, ICC/IF, Mouse)

Meiners A, Backer S, Hadrovic I et al. Specific inhibition of the Survivin-CRM1 interaction by peptide-modified molecular tweezers Nature communications 2021-03-08 [PMID: 33686072]

Balukoff NC, Ho JJD, Theodoridis PR et al. A translational program that suppresses metabolism to shield the genome Autophagy 2020-11-08 [PMID: 33188200] (WB, Rat)

Agote-Aran A, Schmucker S, Jerabkova K et al. Spatial control of nucleoporin condensation by fragile X-related proteins EMBO J. 2020-07-24 [PMID: 32706158] (ICC/IF, Human)

Garcia-Aguirre I, Alamillo-Iniesta A, Rodriguez-Perez R et al. Enhanced nuclear protein export in premature aging and rescue of the progeria phenotype by modulation of CRM1 activity Aging Cell 2019-07-15 [PMID: 31305018] (ICC/IF, WB, Human)

Velez-Aguilera G, de Dios Gomez-Lopez J, Jimenez-Gutierrez GE et al. Control of nuclear beta-dystroglycan content is crucial for the maintenance of nuclear envelope integrity and function Biochim. Biophys. Acta 2017-11-21 [PMID: 29175376] (WB, Mouse)

More publications at http://www.novusbio.com/NB100-79802

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Products Related to NB100-79802

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

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