Product Datasheet

MX2 Antibody - BSA Free
NBP1-81018

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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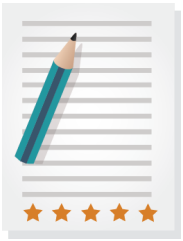


NBP1-81018

MX2 Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol
Target Molecular Weight	82 kDa

Product Description

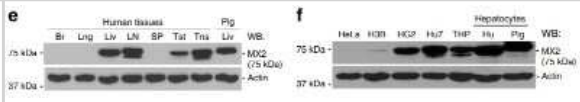
Description	Novus Biologicals Rabbit MX2 Antibody - BSA Free (NBP1-81018) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-MX2 Antibody: Cited in 19 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	4600
Gene Symbol	MX2
Species	Human
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: PYRRRSQFSSRKYLKKEMNSFQQQPPPFGTVPPQMMFPPNWQGAEKDAAFL AKDFNFLTLNNQPPPGNRSQPRAMG

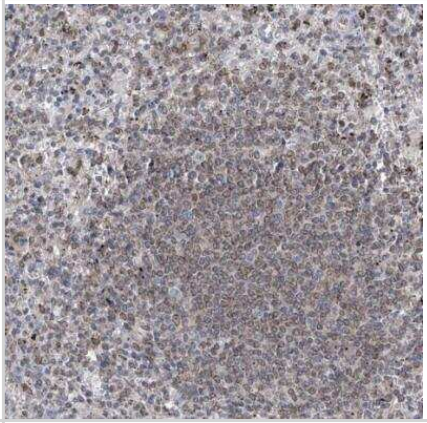
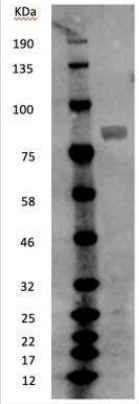
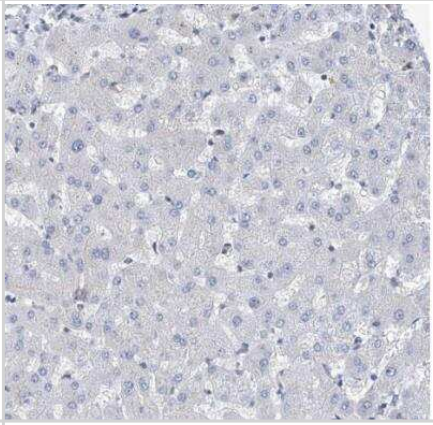
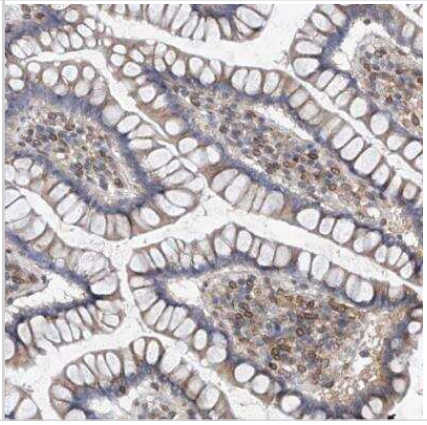
Product Application Details

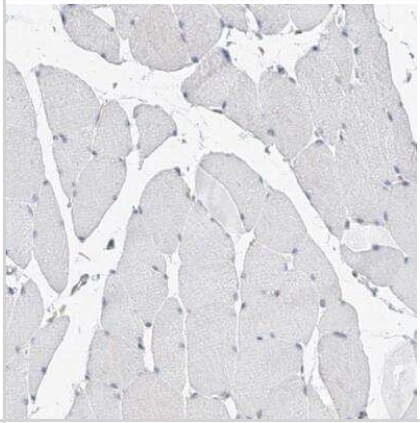
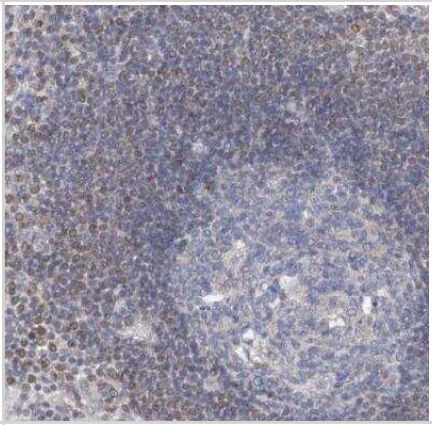
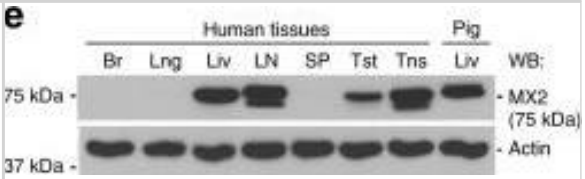
Applications	Immunohistochemistry-Paraffin, Immunohistochemistry
Recommended Dilutions	Immunohistochemistry 1:200 - 1:500, Immunohistochemistry-Paraffin 1:200 - 1:500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended.

Images

Western Blot: MX2 Antibody [NBP1-81018] - MX2 is localized to mitochondria in cultured cells. Western blotting of four distinct cell lines comparing endogenous MX2 expression under control conditions vs. treatment with 1,000 IU/ ml-1 of IFN-alpha-2alpha. HeLa, Hep3B and HepG2 cells induced MX2 expression by IFN treatment, but not Huh7 cells. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41467-020-14727-w), licensed under a CC-BY license.



Immunohistochemistry-Paraffin: MX2 Antibody [NBP1-81018] - Staining of human spleen shows strong positivity in nuclear membrane in cells in red pulp.	
Western Blot: MX2 Antibody [NBP1-81018] - Human glioma U87 cell lysate. WB image submitted by a verified customer review.	
Immunohistochemistry-Paraffin: MX2 Antibody [NBP1-81018] - Staining of human liver shows no postivity in hepatocytes as expected.	
Immunohistochemistry-Paraffin: MX2 Antibody [NBP1-81018] - Staining of human colon shows moderate postivity in nuclear membrane in lymphoid cells in the lamina propria.	

Immunohistochemistry-Paraffin: MX2 Antibody [NBP1-81018] - Staining of human skeletal muscle shows no postivity in myocytes as expected.	
Immunohistochemistry-Paraffin: MX2 Antibody [NBP1-81018] - Staining of human lymph node shows moderate positivity in nuclear membrane in non-germinal center cells.	
Western Blot: MX2 Antibody [NBP1-81018] - MxB is localized to mitochondria in cultured cells.Fluorescence images of Hep3B cells or HeLa cells, stained with a polyclonal antibody (IJ-GP) to MxB (a, c), or expressing exogenous human MxB-GFP (b, d). All cells were stained for the inner mitochondrial membrane marker CoxIV. MxB is visualized as small or large puncta that align closely with mitochondrial membranes. Boxed regions provide a higher magnification for color overlays showing the alignment of MxB (green) with mitochondria (red) in both cell types. Scale bars, 10 µm. e Western blot analysis of different human tissues (Br = brain, Lng = lung, Liv = liver, LN = lymph node, SP = spleen, Tst = testis, Tns = tonsil) for endogenous MxB that appears enriched in the liver, lymph node, testis, tonsil, & pig liver. f Western blotting comparing MxB expression in HeLa cells, three different hepatocyte cell lines, & a human monocyte cell line (THP-1), as well as primary human & pig hepatocytes. Expression levels are exceptionally high in primary hepatocytes, the HepG2 & Huh7 cell lines (H3B = Hep3B, HG2 = HepG2, Hu7 = Huh7, THP = THP-1, Hu = human hepatocytes). g Western blotting of four distinct cell lines comparing endogenous MxB expression under control conditions vs. treatment with 1,000 IU/ ml-1 of IFN-α−2A. HeLa, Hep3B & HepG2 cells induced MxB expression by IFN treatment, but not Huh7 cells. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32102993), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

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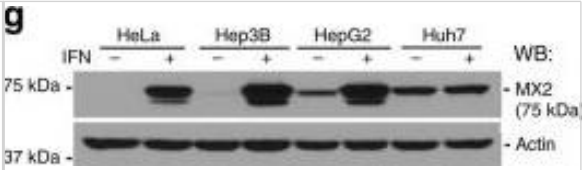

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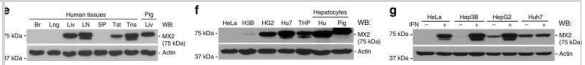

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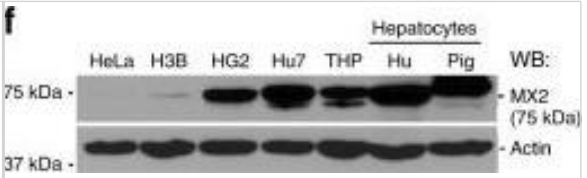

Publications

Haoran Guo, Wanying Yang, Huili Li, Jiaxin Yang, Yuehan Huang, Yubin Tang, Shijin Wang, Fushun Ni, Weiming Yang, Xiao-Fang Yu, Wei Wei The SAMHD1-MX2 axis restricts HIV-1 infection at postviral DNA synthesis. mBio 2024 -06-18 [PMID: 38888311]

Hesham Nasser, Naofumi Takahashi, Youssef M Eltalkhawy, Omnia Reda, Sameh Lotfi, Kanako Nasu, Jun-Ichi Sakuragi, Shinya Suzu Inhibitory and Stimulatory Effects of IL-32 on HIV-1 Infection. Journal of immunology (Baltimore, Md. : 1950) 2022-09-23 [PMID: 36130125]

Layish B, Goli R, Flick H et al. Virus specificity and nucleoporin requirements for MX2 activity are affected by GTPase function and capsid-CypA interactions bioRxiv : the preprint server for biology 2023-11-17 [PMID: 38014352]

Makokha GN, Chayama K, Hayes CN et al. Deficiency of SCAP inhibits HBV pathogenesis via activation of the interferon signaling pathway Virology 2023-08-01 [PMID: 37437369] (WB, Human)

Lin Y The study of MxB subcellular localization at different stages of cell cycle Thesis (WB, Human)

Albanese M, Ruhle A, Mittermaier J et al. Rapid, efficient and activation-neutral gene editing of polyclonal primary human resting CD4+ T cells allows complex functional analyses Nature methods 2021-12-23 [PMID: 34949807] (WB, Human)

Arwert, E N, Milford, E L Et al. STING and IRF3 in stromal fibroblasts enable sensing of genomic stress in cancer cells to undermine oncolytic viral therapy. Nat Cell Biol 2020-07-01 [PMID: 32483388] (WB, Human)

Kurebayashi Y, Bajimaya S, Watanabe M et al. Human parainfluenza virus type 1 regulates cholesterol biosynthesis and establishes quiescent infection in human airway cells PLOS Pathogens 2021-09-16 [PMID: 34529742] (ICC/IF, Human)

Betancor G, Jimenez-GuardeNo JM, Lynham S et al. MX2-mediated innate immunity against HIV-1 is regulated by serine phosphorylation Nature microbiology 2021-08-01 [PMID: 34282309] (WB)

Betancor G, Jimenez-Guardeno J, Lynham S Phosphorylation of MX2 regulates innate immunity against HIV-1 Research Square 2021-01-01 (WB)

Juraleviciute M, Nsengimana J, Newton-Bishop J et al. MX2 mediates establishment of interferon response profile, regulates XAF1, and can sensitize melanoma cells to targeted therapy Cancer medicine 2021-03-18 [PMID: 33734579] (WB, Human)

Choi J, Zhang T, Vu A et al. Massively parallel reporter assays of melanoma risk variants identify MX2 as a gene promoting melanoma Nat Commun 2020-06-01 [PMID: 32483191] (WB)

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NBP2-24891	Rabbit IgG Isotype Control

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