Product Datasheet

MMP-2 Antibody (2C1) - (Pro and Active) - BSA Free NB200-113

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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NB200-113

MMP-2 Antibody (2C1) - (Pro and Active) - BSA Free

Product Information		
Unit Size	0.1 ml	
Concentration	1.0 mg/ml	
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.	
Clonality	Monoclonal	
Clone	2C1	
Preservative	0.02% Sodium Azide	
Isotype	IgG1 Kappa	
Purity	Protein G purified	
Buffer	PBS	
Product Description		
Host	Mouse	
Gene ID	4313	
Gene Symbol	MMP2	
Species	Human, Mouse, Rat, Guinea Pig	
Specificity/Sensitivity	This is specific for pro and active MMP-2.	
Immunogen	Activated recombinant human MMP2. [UniProt# P08253]	
Product Application Details		
Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation	
Recommended Dilutions	Western Blot 2-5 ug/ml, Flow Cytometry, ELISA 1 ug/ml, Immunohistochemistry 5 ug/ml, Immunocytochemistry/ Immunofluorescence reported in scientific literature (PMID 30681163), Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin reported in scientific literature (PMID 24828425), Immunohistochemistry-Frozen 5 ug/ml	

Images

Western Blot: MMP-2 Antibody (2C1) - (Pro and Active) [NB200-11 Recombinant human MMP-2 expressed from CHO cells was was separated on a 7.5 % gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membran probed with 2.0 ug/ml anti-MMP-2 in blocking buffer and detected anti-mouse HRP secondary antibody using chemiluminescence.	250- e was 150-
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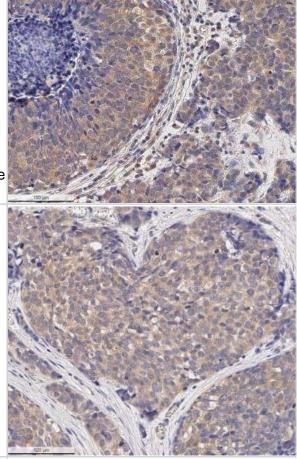


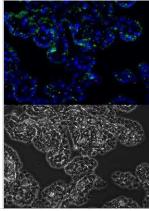
Western Blot: MMP-2 Antibody (2C1) - (Pro and Active) [NB200-113] -Samples: 1) Human Recombinant MMP-2, and 2)Schwann Cell Culture Medium Run on 10% SDS-PAGE, followed by electroblot to nitrocellulose and slot blot immunolabeling. Antibodies: primary - NB200-113, secondary - anti-mouse-biotin. Detection: avidin-HRP. Chromagen: DAB/H202.

Immunohistochemistry-Paraffin: MMP-2 Antibody (2C1) - (Pro and Active) [NB200-113] - Analysis of a FFPE human breast cancer section using 5 ug/ml conc. of MMP2 antibody (clone 2C1) on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) with 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching using peroxide block. The sections were incubated with primary antibody for 30 minutes. Bond Polymer Refine Detection (Leica Biosystems) and DAB were used for signal detection which followed counterstaining with hematoxylin. Whole slide scanning and capturing of representative images (20X) were performed using Aperio AT2 (Leica Biosystems). MMP2 immunoreactivity was observed in the cytoplasm of the cancer cells and the stromal cells, and in the inter-cellular spaces (secreted MMP2). The cancer cells present in the core of tumor areas were found to be negative for MMP2 staining.

Immunohistochemistry-Paraffin: MMP-2 Antibody (2C1) - (Pro and Active) [NB200-113] - Analysis of a FFPE human breast cancer section using 5 ug/ml conc. of MMP2 antibody (clone 2C1) on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) with 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching using peroxide block. The sections were incubated with primary antibody for 30 minutes. Bond Polymer Refine Detection (Leica Biosystems) and DAB were used for signal detection which followed counterstaining with hematoxylin. Whole slide scanning and capturing of representative images (20X) were performed using Aperio AT2 (Leica Biosystems). This MMP2 antibody generated an expected immunoreactivity of MMP2 protein in the cytoplasm of most of the cancer cells and the stromal cells, and in the inter-cellular spaces (secreted pool of MMP2). Staining was performed by Histowiz.

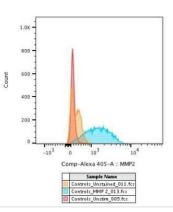
Immunohistochemistry-Paraffin: MMP-2 Antibody (2C1) - (Pro and Active) [NB200-113] - Upper image: MMP-2 FITC (green), DAPI (blue) Lower image: phase contrast of human choroid plexus (Alzheimer's disease). Image from verified customer review.







Flow Cytometry: MMP-2 Antibody (2C1) - (Pro and Active) [NB200-113] -Flow Cytometry: MMP-2 Antibody (2C1) [Alexa Fluor® 405] [NB200-113AF405] - CD4+ T cells were activated for 24h before being fixed and permeabilized to detect MMP-2. Image using the Alexa Fluor 405 form of this antibody. Image from verified customer review.



Publications

Najjar R Raspberry Polyphenols Target Molecular Pathways of Heart Failure Thesis 2023-01-01

Yu T, Xie X, Wei H et al. Electroacupuncture Improves Choroidal Blood Flow to Inhibit the Development of Lens-Induced Myopia in Guinea Pigs Evidence-Based Complementary and Alternative Medicine 2022-06-24 [PMID: 35783515] (WB, Guinea Pig)

Schilling BK, Schusterman MA 2nd, Kim DY et al. Adipose-derived stem cells delay muscle atrophy after peripheral nerve injury in the rodent model Muscle Nerve 2019-01-26 [PMID: 30681163] (ICC/IF, Rat)

Scheede-Bergdahl C, Bergdahl A, Schjerling P et al. Exercise-induced regulation of matrix metalloproteinases in the skeletal muscle of subjects with type 2 diabetes Diab Vasc Dis Res. 2014-06-04 [PMID: 24903024] (WB, Human)

Details:

MMP2 antibody used for WB (1:1000 dilution) on human skeletal muscle lysates from type 2 diabetes patients (T2DM / NIDDM) and control subjects (Full Text has detailed method on tissue lysis). Antibody detected the 72 kDa band of pro-MMP-2 and 62 kDa band of active-MMP-2 (Figure 3)

Xu H, Zhang Y, Sun H et al. Effects of Acupuncture at GV20 and ST36 on the Expression of Matrix Metalloproteinase 2, Aquaporin 4, and Aquaporin 9 in Rats Subjected to Cerebral Ischemia/Reperfusion Injury. PLoS ONE. 2014-05-15 [PMID: 24828425] (IHC-P, WB, Rat)

Rork TH, Hadzimichalis NM, Kappil MA, Merrill GF. Acetaminophen attenuates peroxynitrite-activated matrix metalloproteinase-2-mediated troponin I cleavage in the isolated guinea pig myocardium. J Mol Cell Cardiol 40(4):553 -61. 2006-04-01 [PMID: 16530785] (WB, Guinea Pig)





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Products Related to NB200-113

NB200-113F	MMP-2 Antibody (2C1) [FITC]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]

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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