Product Datasheet

MMP-2 Antibody
NB200-193SS

Unit Size: 0.025 ml

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

Reviews: 2  Publications: 18


Updated 6/15/2014 v.20.1
### NB200-193SS
#### MMP-2 Antibody

### Product Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.025 ml</td>
</tr>
<tr>
<td>Concentration</td>
<td>1 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.05% Sodium Azide</td>
</tr>
<tr>
<td>Purity</td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td>Buffer</td>
<td>PBS</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>74 kDa</td>
</tr>
</tbody>
</table>

### Product Description

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Gene ID</td>
<td>4313</td>
</tr>
<tr>
<td>Gene Symbol</td>
<td>MMP2</td>
</tr>
<tr>
<td>Species</td>
<td>Human, Mouse, Rat, Chicken</td>
</tr>
<tr>
<td>Species Reactivity</td>
<td>Human, rat, chicken, and mouse.</td>
</tr>
<tr>
<td>Specificity/Sensitivity</td>
<td>This antibody is specific for pro and active forms of MMP2. It does not react with other MMPs tested.</td>
</tr>
<tr>
<td>Immunogen</td>
<td>A synthetic peptide made to an internal region of the human MMP2 protein (between residues 400-500) [UniProt P08253]</td>
</tr>
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</table>

### Product Application Details

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin</td>
</tr>
<tr>
<td>Recommended Dilutions</td>
<td>Flow Cytometry 1:10-1:1000, Immunocytochemistry/Immunofluorescence 1:100-1:500, Immunohistochemistry 2-4 ug/ml, Immunohistochemistry-Frozen 2-4 ug/ml, Immunohistochemistry-Paraffin 2-4 ug/ml, Western Blot 1:1500-1:3500</td>
</tr>
<tr>
<td>Application Notes</td>
<td>This MMP2 antibody is useful for Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, and Immunohistochemistry on frozen and paraffin-embedded sections. In Western Blot, bands can be seen at approximately 72kDa (proform) and 62kDa (active form). Antigen retrieval is not required for IHC.</td>
</tr>
</tbody>
</table>
Western Blot: MMP-2 Antibody [NB200-193] - Analysis of MMP2 in recombinant mouse MMP-2 (Lane 7), MMP3 (Lane 2), MMP7 (Lane 3), MMP9 (Lane 4), and MMP16 (Lane 5). Does not react with other MMPs.


Western Blot: MMP-2 Antibody [NB200-193] - WB analysis of recombinant pro and active forms of Human MMP-2 protein (left lane) and crude homogenate of the injured Rat peripheral nerve (right lane) using MMP-2 antibody at 0.5 ug/ml concentration. The antibody detected both pro as well as cleaved/active forms of MMP-2.
<table>
<thead>
<tr>
<th>Method</th>
<th>Antibody</th>
<th>Tissue Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunohistochemistry-Frozen</td>
<td>MMP-2 Antibody</td>
<td>Detection of MMP2 in frozen injured rat nerve tissue section.</td>
</tr>
<tr>
<td>Immunohistochemistry-Paraffin</td>
<td>MMP-2 Antibody</td>
<td>Detection of MMP-2 in paraffin-embedded human neurofibroma section.</td>
</tr>
</tbody>
</table>
Publications


Details:
MMP2 antibody used for IHC-P in human and mouse tongues as well as murine gastrocnemius muscle (mixture of slow twitch and fast twitch muscle fibers; from 18 weeks old C57BL/6J male mice subjected to normal activity and 1hr treadmill running/day for 5 days) - Zinc-based fixative fixation, primary diluted 1:300, HRP-DAB detection or Cy5 labelled secondary antibody. Antibody also used for electron microscopic immunogold detection of MMP-2 on murine gastrocnemius samples. Images: Figure 1A and B - Mouse Tongue - MMP2 immunostaining-DAB; Figure 1C-F: immunogold electron microscopic MMP-2 staining of mouse gastrocnemius muscle (localized in Z-bands, myofibrils surroundings, mitochondria, nuclear membrane); Figure 3A - IHC-IF staining of mouse tongue; Figure 5 A-D - IHC-IF staining murine gastrocnemius muscle


More publications at http://www.novusbio.com/NB200-193
Procedures

Immunohistochemistry-Paraffin Protocol Specific for NB200-193: MMP2 Antibody

Materials

1) 1 Phosphate buffered saline (pH 7.6): NaCl 137mmol/L, KCl 2.7mmol/L, Na2HPO4 4.3mmol/L, KH2PO4 1.4 mmol/L
2) Citrate buffer, 0.01 M, pH6.0, Sodium Citrate 3g, Citric acid 0.4g
3) 3% Hydrogen peroxide
4) Primary antibody
5) Blocking serum (normal serum)
6) Biotinylated secondary antibody
7) DAB staining kit

Methods

1. Dewax and hydration of slides using xylene and EtOH:
   Dry slides for 20 min in a 60 C oven
   Add Xylene, 2 x 10 min
   100%, 95%, 80%, and 70% EtOH, 5 min each EtOH concentration
   Rinse in PBS, 5'

2 Antigen retrieval method (only for paraffin slides)
1a. High-pressure antigen retrieval procedure (recommended method)
   Place slides in a glass slide holder (ensure that the slide holder is completely filled with slides, slides without sections
   if necessary, to ensure even heating. The entire slide holder is immersed in 1000 ml of Citrate buffer (0.01M, pH6.0)
   within a pressure cooker
   Once steam is produced, and ONLY when steam is visible, from the pressure cooker (usually 15-20 min), the
   required high-pressure will have been reached, and slides will be incubated for 2 min.
   Turn off heat, and allow buffer and slides to cool to room temperature
   Slides are then rinsed in PBS for 5 minutes

2. Add 3% hydrogen peroxide solution, 10'at RT, then PBS, 3X5'
3. Normal blocking serum, 20'at RT
4. Incubate with Primary Ab, 4C overnight or 1.5 hours at 37C
5. Rinse with PBS, 3 X 5' each rinse
6. Add Biotin-conjugated second antibody, 10'at RT
7. Rinse with PBS, 3 X 5' each rinse
8. Add Streptavidin-Peroxidase, 10'at RT
9. Rinse with PBS, 3 X 5' each rinse
10. Staining with DAB solution, 2-5'under microscope
11. Stop the reaction by washing in tap water
12. Counterstain in Haematoxylin for 3-5 minutes
13. 75%, 80%, 95% and 100% ethanol, 5x2', xylene 2 x 10'
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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.