Product name: Anti-3-Nitrotyrosine antibody [39B6] ab61392

Description: Mouse monoclonal [39B6] to 3-Nitrotyrosine

Host species: Mouse

Specificity: No detectable crossreactivity with non-nitrated tyrosine. Not species specific.

Tested applications: Suitable for: IHC-P, IHC-Fr, IHC-FoFr, WB, ELISA, IP

Immunogen: 3-(4-Hydroxy-3-nitrophenyl acetamido) propionic acid-BSA conjugate.


Overview:

Form: Liquid

Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer: Preservative: 0.09% Sodium azide
Constituents: PBS, 50% Glycerol

Purity: Protein G purified

Clonality: Monoclonal

Clone number: 39B6

Isotype: IgG2a

Light chain type: kappa

Properties:

Applications:

Our Abpromise guarantee covers the use of ab61392 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
Protein tyrosine nitration results in a post-translational modification that is increasingly receiving attention as an important component of nitric oxide signaling. While multiple nonenzymatic mechanisms are known to be capable of producing nitrated tyrosine residues, most tyrosine nitration events involve catalysis by metalloproteins such as myeloperoxidase, eosinophil peroxidase, myoglobin, the cytochrome P-450s, superoxide dismutase and prostacyclin synthase. Various studies have shown that protein tyrosine nitration is limited to specific proteins and that the process is selective. For example, exposure of human surfactant protein A, SP-A, to oxygen-nitrogen intermediates generated by activated alveolar macrophages resulted in specific nitration of SP-A at tyrosines 164 and 166, while addition of 1.2 mM CO2 resulted in additional nitration at tyrosine 161. The presence of nitrotyrosine-containing proteins has shown high correlation to disease states such as atherosclerosis, Alzheimer’s disease, Parkinson’s disease and amyotrophic lateral sclerosis.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P</td>
<td>🟢🟢🟢🟢🟢</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>IHC-Fr</td>
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<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-FoFr</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 20708681</td>
</tr>
<tr>
<td>WB</td>
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<tr>
<td>ELISA</td>
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<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Images

ab61392 staining 3-nitrotyrosine in Bouin’s fixed paraffin-embedded backskin sections of transgenic mice.

Blocker: 5% goat serum in buffer. Buffer: 99% washing buffer (7g BSA and 222ul gelatin topped up to 1L dH2O), 1% heat inactivated goat serum. Primary Dilution: 1/100 for 1 hour at room temperature.

Secondary: FITC-conjugated goat anti-mouse IgG, 1/50 for 1 hour at room temperature.
**Western blot - Anti-3-Nitrotyrosine antibody [39B6]** (ab61392)

This image is courtesy of an anonymous Abreview.

All lanes:
- Anti-3-Nitrotyrosine antibody [39B6] (ab61392) at 1/3000 dilution
- Mouse skeletal muscle

Lysates/proteins at 20 µg per lane.

Secondary:
- Goat anti-Mouse HRP conjugated at 1/6000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Exposure time:** 4 seconds

Blocked with 5% milk for 2 hours.

ab61392 staining of Nitrotyrosine residues at 1/100 in rat liver formaldehyde fixed sections three days after zymosan treatment. Staining was detected with a fluorescein secondary antibody and counterstained with DAPI.

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-3-Nitrotyrosine antibody [39B6] (ab61392)**
Formalin-fixed, paraffin-embedded mouse inflamed colon tissue stained for Nitrotyrosine using ab61392 at 1/1000000 dilution in immunohistochemical analysis.

Secondary Antibody: Biotin Goat Anti-Mouse at 1/2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 µl for 2 minutes at RT.

Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for Nitrotyrosine using ab61392 at 1/25000 dilution in immunohistochemical analysis.

Secondary Antibody: Biotin Goat Anti-Mouse at 1/2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 µl for 2 minutes at RT.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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