# abcam

## Product datasheet

## Anti-3-Nitrotyrosine antibody [39B6] ab61392

★★★★★ 9 Abreviews 130 References 6 Images

Overview

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

**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, WB

Species reactivity Reacts with: Species independent

**Immunogen** Full length protein corresponding to 3-Nitrotyrosine. 3-(4-hydroxy-3-nitrophenylacetamido)

propionic acid-bovine serum albumin

Positive control SIN-1 (3-morpholinosydnonimine) treated BSA. Use between 1-2.5mM SIN-1 for 1-24 hours, grow

cells under normal growth conditions. Please see Yasuda S, Idell S, Liu MC. Biochem J. 2007 Jan

 $15;\!401(2):\!497\text{-}503.\ PMID\colon 17002600.\ IHC\text{-}P\colon Mouse\ back\ skin\ and\ inflammed\ colon\ tissue;$ 

Human colon carcinoma tissue. Rat liver tissue. WB: A549 cell lysate.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

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

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**lsotype** lgG2a **Light chain type** kappa

## **Applications**

## The Abpromise guarantee

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.

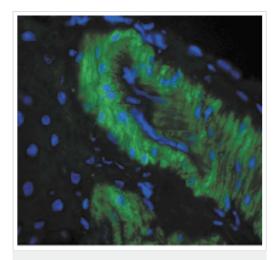
Application	Abreviews	Notes
IHC-P	<b>★★★★</b> (3)	1/100.
WB	★★★☆☆ (6)	1/1000.  We would recommend a 1:1000 dilution for the antibody, for 2 hours at RT. For blocking, use milk.

#### **Target**

#### Relevance

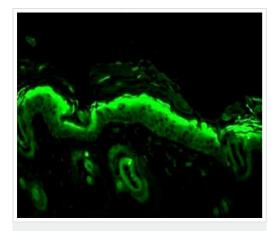
Protein tyrosine nitration results in a post-translational modification that is increasingly receiving attention as an important component of nitric oxide signaling. While multiple nonenzymatic mechanisms are known to be capable of producing nitrated tyrosine residues, most tyrosine nitration events involve catalysis by metalloproteins such as myeloperoxidase, eosinophilperoxidase, myoglobin, the cytochrome P-450s, superoxide dismutase and prostacyclin synthase. Various studies have shown that protein tyrosinenitration 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 mMCO 2 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.

## **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-3-Nitrotyrosine antibody [39B6] (ab61392)

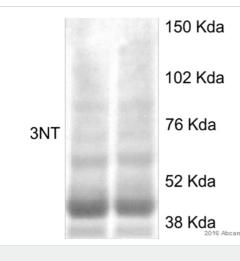
ab61392 staining 3-nitrotyrosine in Bouin's fixed paraffinembedded Rat liver tissue at 1/1000 dilution. FITC-conjugated goat anti-mouse IgG(green) was used as a secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-3-Nitrotyrosine antibody [39B6] (ab61392)

ab61392 staining 3-nitrotyrosine in Bouin's fixed paraffinembedded 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 lgG, 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

All lanes: Mouse skeletal muscle

Lysates/proteins at 20 µg per lane.

## Secondary

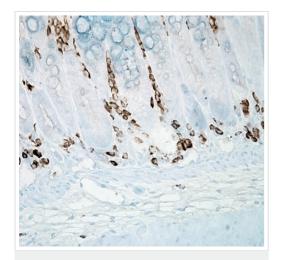
All lanes: Goat anti-Mouse HRP conjugated at 1/6000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 4 seconds

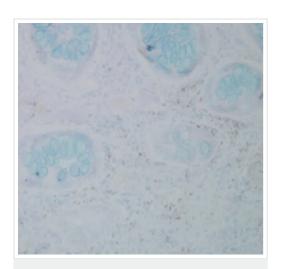
Blocked with 5% milk for 2 hours.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-3-Nitrotyrosine antibody [39B6] (ab61392)

Formalin-fixed, paraffin-embedded mouse inflammed colon tissue stained for Nitrotyrosine using ab61392 at 1/1000000 dilution in immunohistochemical analysis.

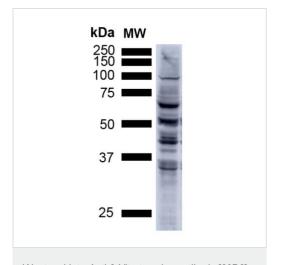
Secondary Antibody: Biotin Goat Anti-Mouse at 1/2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 µl for 2 minutes at RT.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-3-Nitrotyrosine antibody [39B6] (ab61392)

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.



Western blot - Anti-3-Nitrotyrosine antibody [39B6] (ab61392)

Anti-3-Nitrotyrosine antibody [39B6] (ab61392) at 1/1000 dilution (2.5 hours at RT with shaking) + A549 (Human lung carcinoma cell line) cell lysate at 15  $\mu$ g

## **Secondary**

Goat anti-mouse IgG HRP, 1 hour at RT with shaking at 1/1000 dilution

Block: 5% Skim milk powder in TBST.

Color Development: Chemiluminescent for HRP for 5 mins at RT.

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

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