

Mouse Nitrotyrosine Monoclonal Antibody

Nitrotyrosine Antibody: HRP

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103054	Mouse	Human, Mouse, Rat, Dog	Immunofluorescence, Immunoprecipitation, Immunohistochemistry, ELISA, Western Blot

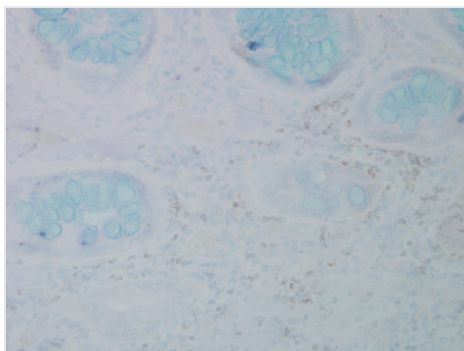
PRODUCT SYNONYMS

Nitrotyrosine; Monoclonal Antibody; Nitrotyrosine Antibody: HRP; anti-Nitrotyrosine antibody

PRODUCT SPECIFICATIONS

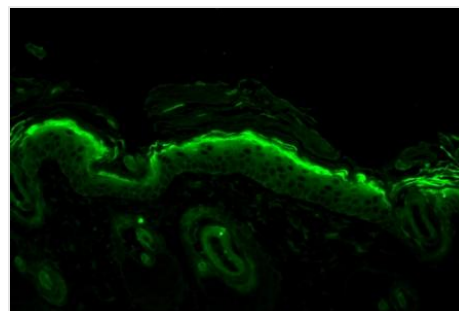
Host	Mouse
Reactivity	Human, Mouse, Rat, Dog
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	39B6
Specificity	Recognizes 3-nitrotyrosine moieties. No detectable cross-reactivity with non-nitrated tyrosine. Not species specific.
Purity/Purification	Protein G Purified
Form/Format	PBS, 50% glycerol, 0.09% sodium azide
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-Nitrotyrosine antibody	IF (Immunofluorescence), IP (Immunoprecipitation), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	3-(4-hydroxy-3-nitrophenylacetamido) propionic acid-bovine serum albumin
Certificate of Analysis	0.7 µg/ml was sufficient for detection of 5 µg SIN-1 treated BSA by Western Blot analysis using Goat anti-mouse IgG: HRP as the secondary antibody.
Preparation and Storage	Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

IMAGES



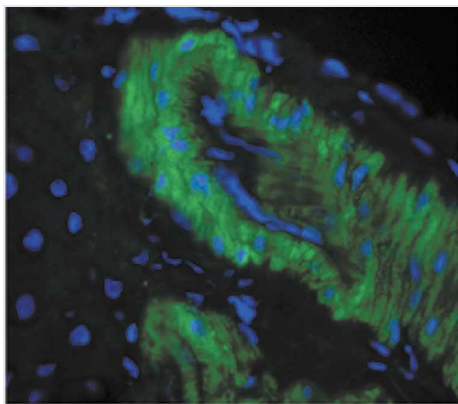
IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6. Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody at 1:25000 for 12 hours at 4 degree C. 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. Magnification: 40x.



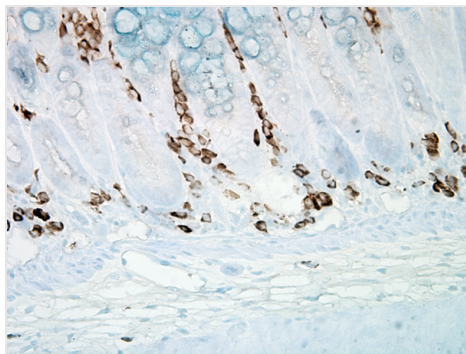
IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Backskin obtained from transgenic mice.



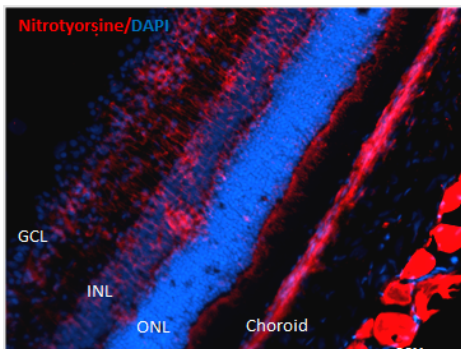
IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6. Tissue: liver tissue . Species: Rat. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody at 1:1000. Secondary Antibody: FITC Goat Anti-Mouse (green).



IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6. Tissue: inflamed colon. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody at 1:1000000 for 12 hours at 4 degree C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 ul for 2 minutes at RT. Magnification: 40x. With anti-microbial.



IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6. Tissue: Retinal Injury Model. Species: Mouse. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody at 1:1000. Secondary Antibody: Alexa Fluor 594 Goat Anti-Mouse (red). Courtesy of: Dr. Rajashekhar Gangaraju, University of Indiana, Department of Ophthalmology, Eugene and Marilyn Glick Eye Institute.

ADDITIONAL INFORMATION

Related Product Information for anti-Nitrotyrosine antibody	Protein tyrosine nitration results in a post-translational modification that is increasingly receiving attention as an important component of nitric oxide signaling (2). 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, eosino-philperoxidase (3), myoglobin, the cytochrome P-450s, superoxide dismutase and prostacyclin synthase. Nitrotyrosine may also serve as a biomarker for the effects of reactive nitrogen oxides, based on tyrosine residues becoming nitrated in proteins at sites of inflammation induced tissue injury (1). The presence of nitro tyrosine-containing proteins therefore has shown high correlation to disease states such as atherosclerosis, Alzheimer's disease, Parkinson's disease and amyotrophic lateral sclerosis (4).
Product Categories/Family for anti-Nitrotyrosine antibody	Cell Signaling; Oxidative Stress; Post-translational Modifications

References

1. Girault I. et al. (2001). Free Radical Biology and Medicine, 31 (11): 1375-1387.
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3. Takemoto K. et al (2007). Acta Med Okayama 61(1): 17-30.
4. Reynolds MR. et al. (2006) J Neurosci. 26(42): 10636-45.
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1. Kim. H. et al. (2010). SIRT3 Is a Mitochondria-Localized Tumor Suppressor Required for Maintenance of Mitochondrial Integrity and Metabolism during Stress. Cancer Cell. 17 (1), 41-52. doi:10.1016/j.ccr.2009.11.023
2. Grutzmacher, C. et al. (2012). Aberrant production of extracellular matrix proteins and dysfunction in kidney endothelial cells with a short duration of diabetes. AJP Renal Physiol. 304 (1), F19-F30. doi: 10.1152/ajprenal.00036.2012
3. Nakayama, T., et al. (2014). Improved survival rate by temperature control at compression sites in rat model of crush syndrome. Journal of Surgical Research. doi: 10.1016/j.jss.2013.12.012
4. Chao, T.H., Chang, M.Y., Su S.J., Su, S.H. (2014). Inducible nitric oxide synthase mediates MG132 lethality in leukemic cells through mitochondrial depolarization. Free Radic Biol Med. doi: 10.1016/j.freeradbiomed.2014.05.023

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/nitrotyrosine-antibody-clone-39b6-immunofluorescence-immunoprecipitation-immunohistochemistry-western-blot-elisa/103054>