

Nitrotyrosine Antibody
Nitrotyrosine Antibody, Clone 39B6
Catalog # ASM10078**Specification**

Nitrotyrosine Antibody - Product Information

Application	WB, IHC, ICC, IP, E, FC, AM
Host	Mouse
Isotype	IgG2a
Clonality	Monoclonal
Description	
Mouse Anti- Nitrotyrosine Monoclonal IgG2a	

Target/Specificity

Recognizes 3-nitrotyrosine moieties. No detectable cross-reactivity with non-nitrated tyrosine. Not species specific.

Other Names

Nitro tyrosine Antibody, 3-Nitrotyrosine Antibody

Trademark	MOLECULAR SIGNATURE®
Immunogen	
Hybridoma line 39B6	

Purification

Protein G Purified

Storage	-20°C
---------	--------------

Storage Buffer

PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	Blue Ice or 4°C
----------------------	------------------------

Certificate of Analysis

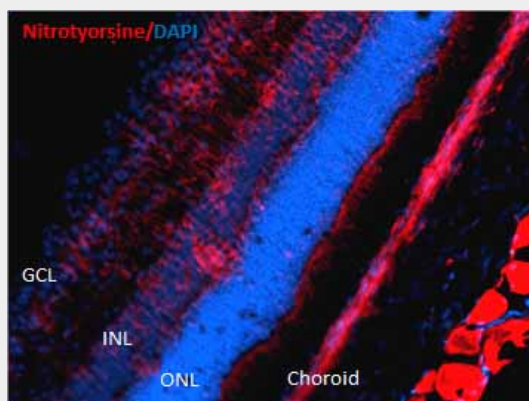
0.7 µg/ml of SMC-154 was sufficient for detection of 5 µg SIN-1 treated BSA by Western Blot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Nitrotyrosine Antibody - Protocols

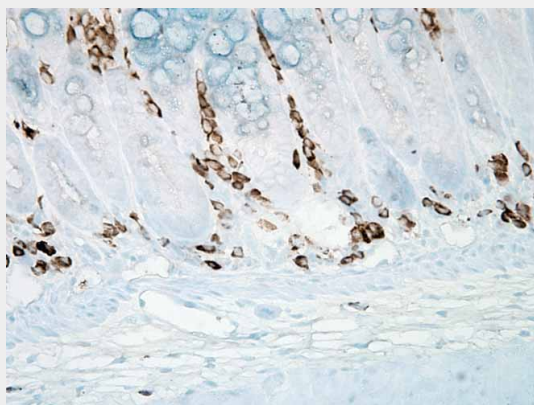
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

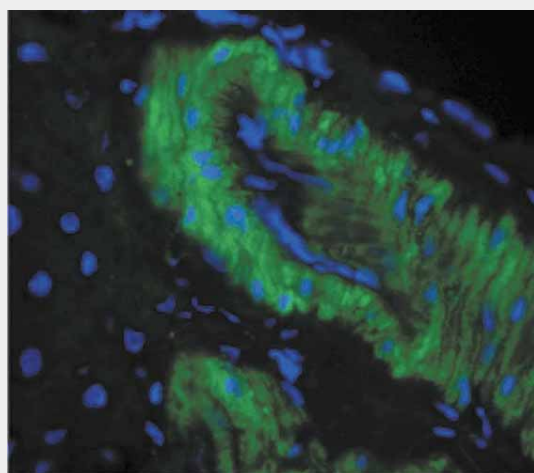
Nitrotyrosine Antibody - Images



Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6 (ASM10078). Tissue: Retinal Injury Model. Species: Mouse. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody (ASM10078) 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.

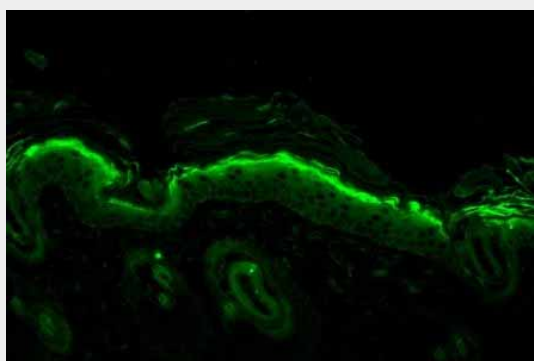


Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6 (ASM10078). Tissue: inflamed colon. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody (ASM10078) at 1:1000000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat 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.

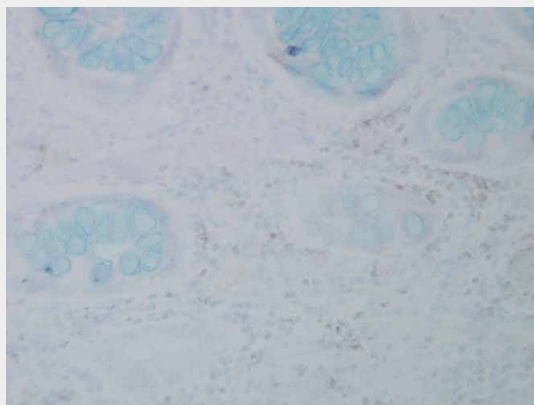


Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6 (ASM10078). Tissue: liver tissue . Species: Rat. Primary Antibody: Mouse Anti-Nitrotyrosine

Monoclonal Antibody (ASM10078) at 1:1000. Secondary Antibody: FITC Goat Anti-Mouse (green).



Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6 (ASM10078). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody (ASM10078) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Immunohistochemistry analysis using Mouse Anti-Nitrotyrosine Monoclonal Antibody, Clone 39B6 (ASM10078). Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-Nitrotyrosine Monoclonal Antibody (ASM10078) at 1:25000 for 12 hours at 4°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.

Nitrotyrosine Antibody - Background

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).

Nitrotyrosine Antibody - References

1. Girault I. et al. (2001). Free Radical Biology and Medicine, 31 (11): 1375-1387.
2. Gow AJ, Farkouh CR, Munson DA, Posencheq MA, and Ischiropoulos H. (2004). Am J Physiol Lung Cell Mol Physiol. 287(2): L262-8.

3. Takemoto K. et al (2007). Acta Med Okayama 61(1): 17-30.
4. Reynolds MR. et al. (2006) J Nerosci. 26(42): 10636-45.
5. Pfister H., et al. (2002) Vet Pathol. 39: 190-199.
6. Khan J. et al. (1998) Biochem J. 330(2): 795-801.