



Anti-Nitrotyrosine (MOUSE) Monoclonal Antibody - 200-301-A98

Code: 200-301-A98

Size: 100 µg

Product Description: Anti-Nitrotyrosine (MOUSE) Monoclonal Antibody - 200-301-A98

Concentration: 1.0 mg/mL

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Mouse
Gene Name	n/a
Species Reactivity	Human, Mouse, Rat, Dog
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	50% (v/v) Glycerol
Preservative	0.1% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Application Note	This Protein G purified antibody has been tested for use in ELISA, immunoprecipitation, immunohistochemistry and western blotting. Specific conditions for reactivity should be optimized by the end user. Approximately 0.7 µg of antibody is sufficient to detect 5 µg of SIN-1 treated BSA by Western blotting using HRP Gt-a-Mouse IgG (p/n 610-103-121) and chemiluminescent substrate (p/n PICOMAX-110).
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, eosinophilperoxidase (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 has shown high correlation to disease states such as atherosclerosis, Alzheimer's disease, Parkinson's disease and amyotrophic lateral sclerosis (4).
Purity And Specificity	This Protein G purified monoclonal antibody reacts with proteins containing 3-nitrotyrosine moieties and does not detect non-nitrated tyrosine residues. This antibody is known to react with nitrated tyrosine residues from human, mouse, rat and dog sources. Reactivity with nitrotyrosine from other sources is also expected.
Assay Dilutions	User Optimized
ELISA	1:10,000 - 1:50,000
Immunohistochemistry	1:200 - 1:1,000
WESTERN BLOT	1:500 - 1:2,000
IHC	1:200 - 1:1,000
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This Protein G purified monoclonal antibody was prepared using conventional hybridoma technology after repeated immunizations with 3-(4-Hydroxy-3-nitrophenyl acetamido) propionic acid - BSA conjugate.
General Reference	Girault I. et al. (2001). Free Radical Biology and Medicine, 31 (11): 1375-1387. Gow AJ, Farkouh CR, Munson DA, Posencheq MA, and Ischiropoulos H. (2004). Am J Physiol Lung Cell Mol Physiol. 287(2): L262-8. Takemoto K. et al (2007). Acta Med Okayama 61(1): 17-30. Reynolds MR. et al. (2006) J Neurosci. 26(42): 10636-45. Pfister H., et al. (2002) Vet Pathol. 39: 190-199. Khan J. et al. (1998) Biochem J. 330(2): 795-801.

Related Products

100-4151	Anti-CATALASE (RABBIT) Antibody - 100-4151
100-4191	Anti-SUPEROXIDE DISMUTASE (RABBIT) Antibody - 100-4191
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302
B501-0500	BLOTTO Immunoanalytical Grade (Non-Fat Dry Milk) - B501-0500

Related Links

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