

## Product datasheet for AM26352PU-N

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# Nitrotyrosine Mouse Monoclonal Antibody [Clone ID: HM.11]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: HM.11

Applications: ELISA, IHC, WB

Recommended Dilution: Immunohistochemistry on frozen sections (1,3): Also cytospins: acetone fixation 10 min -20 °C;

block endogenous peroxidase by 0.3 % H2O2 in PBS (or methanol for intracellular staining); blocking with 10% NGS or 5 % BSA for 30 min. The typical starting working dilution is 1:10. Immunohistochemistry on paraffin sections (4,5): 10% formalin fixation; 3% H2O2 to block endogenous peroxidases; Citrate buffer pH 6.0 for 1 min at 100 °C as antigen retrieval

treatment; (1:200/400) (Ref 1). Positive control: Human lung tissue. The typical starting working

dilution is 1:10.

Immunoassays (1).

Western blot (2-5): Reduced and no-reduced samples; block with 5% BSA or skimmed milk. Positive control: mouse kidney lysate, mouse optic nerve, retina, spinal cord and brain lysates,

rat aorta lysate. The typical starting working dilution is 1:10.

Host: Mouse

**Isotype:** IgG2b

Clonality: Monoclonal

Immunogen: Nitrated KLH

**Specificity:** The monoclonal antibody HM.11 recognizes modified amino acid nitrotyrosine in all different

species. It recognizes nitrotyrosine, both with the free amino acid as well as with proteins

containing nitrotyrosine.

Does not cross react with Phosphotyrosine or Chlorotyrosine.

Formulation: PBS

State: Purified

State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin





Concentration: lot specific

Purification: Protein G

Conjugation: Unconjugated

Storage: Store at 2 - 8 °C.

**Stability:** Shelf life: one year from despatch.

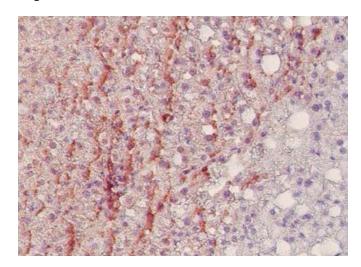
**Background:** Nitrotyrosine is formed in tissues in presence of the active metabolite NO and is a stable end

product of nitrosylation of tyrosine. Inflammation is characterized by increased nitric oxide (NO) production. NO reacts rapidly with superoxide to form peroxynitrite. At physiological pH and in the presence of transition metals, peroxynitrite undergoes heterolytic cleavage to form hydroxyl anion and nitronium ion, the latter of which nitrates protein tyrosine residues. The presence of nitrotyrosine has been detected in various inflammatory processes including atherosclerotic plaques, Amyotrophic Lateral Sclerosis (ALS) and Multiple Sclerosis (MS). Thus, the presence of nitrotyrosine on proteins can be used as a marker for peroxynitrite formation

in vivo and consequently as a marker of NO-mediated tissue damage.

**Synonyms:** NO-Tyrosine, Nitro-Tyrosine

### **Product images:**



Nitrotyrosine in human liver of severely obesed patients. Staining of paraffin tissue section with clone HM.11 (Cat. # AM26352PU-N). Anti-nitrotyrosine at 2g/ml (1h, RT).