

# **Product datasheet for AM05341PU-N**

### 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

OriGene Technologies, Inc.

#### EU: info-de@origene.com CN: techsupport@origene.cn

## **Nitrotyrosine Mouse Monoclonal Antibody [Clone ID: 2A12]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 2A12

**Applications:** IHC, WB

Recommended Dilution: Western Blot: 1/1000.

Immunohistochemistry on Frozen Sections.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** 3-Nitrotyrosine-KLH

**Specificity:** This antibody detects 3-Nitrotyrosine.

Formulation: 20 mM Sodium Phosphate, 150 mM Sodium Chloride, 50% Glycerol, 3mM Sodium Azide, pH

7.5

State: Purified

State: Liquid purified Ig fraction.

**Concentration:** lot specific

Conjugation: Unconjugated

**Storage:** The antibody can be shipped at 2-8°C.

Store (in aliquots) at -20°C only.

Avoid repeated freezing and thawing.

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

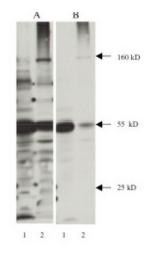


Background:

Protein tyrosine nitration results in a post-translational modification that is increasingly receiving attention as an important component of nitric oxidesignaling. 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.55 kD 160 kD.

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

### **Product images:**



Legend A. Western blot using 3-nitrotyrosine monoclonal antibody on 40 g mouse brain lysate (Lane 1) and 40 g rat brain lysate (Lane 2). Antibody used at a dilution of 1g/ml, detected with Supersignal West Pico Substrate -30 second exposure. Legend B. Same