**Product Overview:** Monoclonal Antibody to 3-Nitrotyrosine

**Immunogen:** 3-Nitrotyrosine-KLH

**Clone:** 3B13

**Isotype:** IgG1

**Host animal:** Mouse

**Format:** 20 mM sodium phosphate, 150 mM sodium chloride, 50% glycerol, 3mM sodium azide, pH 7.5

**Ship Conditions:** Ship at ambient temperature, freeze upon arrival

**Species Reactivity:** Ubiquitous

**Applications:** Antibody can be used for Western blotting (Suggested dilution - 1:1000) and immunohistochemistry. Optimal concentration should be evaluated by serial dilutions.

**Packaging**

**Concentration:** 1 mg/ml

**Storage:** Product should be stored at -20º C. Aliquot to avoid freeze/thaw cycles. And stable for one year from purchase when stored properly.

**Background**

**Introduction:** 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 mM CO2 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.

**Keywords:** Nitrotyrosine; 3-Nitrotyrosine; M-NITRO-L-TYROSINE; NITROTYROSINE; H-TYR(M-NO2)-OH; H-TYR(3-NO2)-OH

**References**


