



Anti-3-Nitrotyrosine monoclonal antibody, clone 3B13 (DMAB8425)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Monoclonal Antibody to 3-Nitrotyrosine
Immunogen	3-Nitrotyrosine-KLH
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	N/A
Clone	3B13
Conjugate	Unconjugated
Applications	WB
Format	20 mM sodium phosphate, 150 mM sodium chloride, 50% glycerol, 3mM sodium azide, pH 7.5
Concentration	1 mg/ml
Size	100 µg
Preservative	None
Storage	Product should be stored at -20°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 oxide signaling. 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, eosinophil peroxidase, myoglobin, the cytochrome P-450s, superoxide dismutase and prostacyclin synthase. Various studies have shown that protein tyrosine nitration 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. 55 kD 160 kD

Keywords

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