

Nitrotyrosine Antibody (HM11)

Mouse Monoclonal Antibody Catalog # ABV10964

Specification

Nitrotyrosine Antibody (HM11) - Product Information

Application Reactivity Host Clonality Isotype WB All Species Mouse Monoclonal Mouse IgG1

Nitrotyrosine Antibody (HM11) - Additional Information

Application & Usage

Western Blot (1 μ g/ml) using secondary antibody coupled to alkaline phosphatase and BCIP/NBT as substrate, ELISA (1:1000), Immunohistochemistry.

Target/Specificity Nitrotyrosine

Antibody Form Liquid

Appearance Colorless liquid

Formulation Sterile, no preservatives added.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions Nitrotyrosine Antibody (HM11) is for research use only and not for use in diagnostic or therapeutic procedures.

Nitrotyrosine Antibody (HM11) - Protein Information

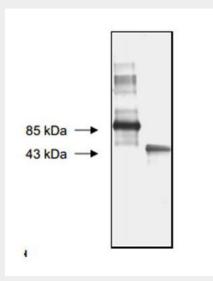
Nitrotyrosine Antibody (HM11) - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Nitrotyrosine Antibody (HM11) - Images



Western blot analysis of nitrated bovine serum albumin and nitrated egg ovalbumin. The blot was probed with primary antibody at a concentration of 1 :g/ml. The secondary antibody was coupled to alkaline phosphatase and the blot was developed with BCIP/NBT. Arrows indicate relative molecular weight.

Nitrotyrosine Antibody (HM11) - Background

Nitrotyrosine is a product of tyrosine nitration mediated by reactive nitrogen species such as peroxynitrite anion and nitrogen dioxide. It is a marker for inflammation and nitric oxide (NO) production. It is detected in large number of pathological conditions and is considered a marker of NO-dependent, reactive nitrogen species-induced nitrative stress. Tyrosine nitration can inactivate enzymes and receptors that depend on tyrosine residues for their activity. Nitration prevents phosphorylation of tyrosine residues important for signal transduction. Nitrotyrosine has been detected in inflammatory processes such as septic shock, rheumatoid arthritis, celiac disease, atherosclerotic plaques, chronic renal failure and keratoconus. Because nitrotyrosine is a stable product of multiple pathways, such as the formation of peroxynitrite, its plasma concentration may be a useful determinant of NO-dependent damage in vivo. Nitrotyrosine Antibody detects proteins and peptides containing nitro-tyrosine in a manner independent of the surrounding amino acid sequence. It is a valuable tool for identifying new nitrated proteins as well as for assaying protein nitration and measuring levels of nitrated proteins in tissues and samples.