

## **Nitrotyrosine Antibody (7A5)**

Mouse Monoclonal Antibody Catalog # ABV10963

# **Specification**

## Nitrotyrosine Antibody (7A5) - Product Information

Application WB

Reactivity Human, Mouse, Rat, Dog

Host Mouse
Clonality Monoclonal
Isotype Mouse IgG1

#### Nitrotyrosine Antibody (7A5) - Additional Information

Application & Usage Western Blot (0.5 μg/ml, ECL), ELISA (0.05

μg/ml)

**Target/Specificity** 

Nitrotyrosine

**Antibody Form** 

Liquid

**Appearance** 

Lyophilized powder

#### **Formulation**

Lyophilized from 1 ml of 2x PBS containing 0.09% sodium azide, PEG, and sucrose.

#### Handling

The antibody solution should be gently mixed before use.

# **Reconstitution & Storage**

-20 °C

## **Background Descriptions**

#### **Precautions**

Nitrotyrosine Antibody (7A5) is for research use only and not for use in diagnostic or therapeutic procedures.

#### Nitrotyrosine Antibody (7A5) - Protein Information

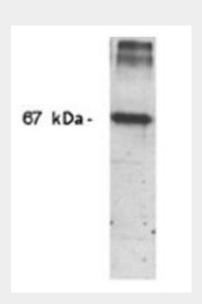
### Nitrotyrosine Antibody (7A5) - Protocols

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



- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Nitrotyrosine Antibody (7A5) - Images



Western blot analysis of Nitrotyrosine-modified BSA probed with Nitrotyrosine mAb (7A5) at  $1\mu g/ml$ .

# Nitrotyrosine Antibody (7A5) - 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.