

Nitrotyrosine Antibody (HM11)

CATALOG #:	5414-50
AMOUNT:	50 µg
HOST:	Mouse
ISOTYPE:	IgG1
IMMUNOGEN:	Nitrated keyhole limpet hemocyanin (KLH).
FORMULATION:	Sterile, no preservatives added.
SPECIES REACTIVITY:	All
STORAGE CONDITIONS:	Can be stored at 4°C for three months. For long term storage, store at aliquoted at -20°C or -80°C. Avoid freeze/thaw cycles.

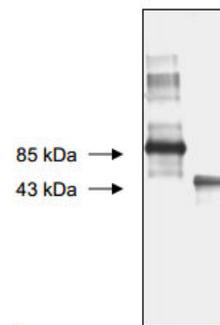
DESCRIPTION:

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.

SPECIFICITY: This antibody recognizes nitrotyrosine in nitrated proteins. It has been tested with nitrated bovine serum albumin, nitrated egg albumin and plasma proteins. Does not bind to unnitrated proteins.

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

Note: *This information is only intended as a guide. The optimal dilutions must be determined by the user*



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

RELATED PRODUCTS:

- Nitrotyrosine Antibody (39B6) (**Cat. No. 5412-100**)
- Nitrotyrosine Antibody (7A5) (**Cat. No. 5413-50**)
- Nitrotyrosine Antibody (NOY-7A5) (**Cat. No. 5415-50**)
- Nitrotyrosine Antibody (**Cat. No. 5416-50**)

FOR RESEARCH USE ONLY! Not to be used on humans.