

Nitrotyrosine Antibody (NOY-7A5)

CATALOG #:	5415-50
AMOUNT:	50 µg
HOST:	Mouse
ISOTYPE:	IgG1
IMMUNOGEN:	KLH (keyhole limpet hemocyanin) modified with nitrotyrosine.
FORM:	Liquid
FORMULATION:	In 0.5 ml 2x PBS, 0.09% sodium azide, PEG and sucrose.
SPECIES REACTIVITY:	All
STORAGE CONDITIONS:	Stable for 1 year when stored at -80°C in aliquots. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C for up to 3 months.

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:	Recognizes nitrotyrosine-modified proteins.
APPLICATION:	Western Blot (use 1 µg/ml for AP/BCIP/NBT (MTT) detection and 0.5 µg/ml for HRP/ECL detection). Recommended blocking buffer is CPPT: 10 mM TRIS-HCl, pH 7.4, 0.5% (w/v) casein, 1% (w/v) PEG 4000, 1% (w/v) polyvinylpyrrolidone, 0.1% (v/v) Tween 20, and 150 mM sodium chloride.

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

RELATED PRODUCTS:

- Nitrotyrosine Antibody (39B6) (**Cat. No. 5412-100**)
- Nitrotyrosine Antibody (7A5) (**Cat. No. 5413-50**)
- Nitrotyrosine Antibody (HM11) (**Cat. No. 5414-50**)
- Nitrotyrosine Antibody (**Cat. No. 5416-50**)

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