



Qty: 100 µg/200 µL

Mouse anti-Nitrotyrosine

Catalog No. 32-1900

Lot No. See product label

Mouse anti-Nitrotyrosine

FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide (NaN₃). The antibody is purified from tissue culture supernatant by Protein G chromatography.

CLONE: HM11

ISOTYPE: IgG₁

SPECIFICITY

This antibody is specific for nitrotyrosine as both free amino acid and as present in nitrated proteins.

REACTIVITY

Reactivity of this antibody with nitrated proteins is independent of the protein's species of origin. Reactivity has been confirmed with peroxynitrite-treated¹ A431 cell lysates by Western blotting and with paraffin-embedded human pancreas tissue by immunohistochemistry.*

Sample	Western Blotting	IHC (frozen and paraffin*)
Any Species	+	+
Immunogen		

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature, length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.5-5 µg/mL
Immunoprecipitation: ~5 µg/IP reaction
Western Blotting: 1-2 µg/mL
Immunohistochemistry*: 1-2 µg/mL

* For best results in immunohistochemistry with formalin-fixed, paraffin-embedded tissues, heat induced epitope retrieval (HIER) with citrate buffer, pH 6.0, is required prior to staining.

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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PI321900

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BACKGROUND²⁻⁶

The presence of nitrotyrosine has been detected in various inflammatory processes, including atherosclerotic plaques. Nitrotyrosine is formed in tissues in the presence of the active metabolite NO. Various pathways including the formation of peroxynitrite lead to nitrotyrosine production. It is still unknown whether nitration is merely a footprint of oxidative stress, an important pathway of nitric oxide metabolisms or a part of integral processes for maintaining cellular homeostasis.

GENERAL REFERENCES

1. Sampson JB, et al. Methods Enzymol 269:210-218, 1996.
2. Ter Steege JC, et al. Free Rad Biol Med 25(8):953-963, 1998.
3. Beckman JS, et al. Biol Chem 375:81-88, 1994.
4. Kooy NW, et al. Am J Resp Crit Care Med 151:1250-1254, 1995.
5. Beckman JS, et al. PNAS 84:1620-1624, 1990.
6. Nakaki T, Fujii T. Jpn J Pharmacol 79(2):125-129, 1999.

RELATED PRODUCTS**IHC Detection Kits for Mouse Primary Antibodies**

Kit (Enzyme/Chromogen)	# of slides	Cat. No.
Histostain®-Plus (HRP/AEC)	150	85-6543
Histostain-Plus (HRP/DAB)	150	85-9143
NBA™ [non-biotin amplification] (HRP/AEC)	150	85-3043
NBA [non-biotin amplification] (not included)	600	85-3243
HistoMouse™ for mouse tissue (HRP/AEC)	50	95-9541
HistoMouseE for mouse tissue (HRP/AEC)	250	95-9544

ZyMax™ Secondary Antibodies

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

Immunoprecipitation Reagents

Product	Conjugate	Cat. No.
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

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