

Nitrotyrosine (7A5): sc-81482

BACKGROUND

Nitrotyrosine is a marker for inflammation and nitric oxide (NO) production and is formed in the presence of the active metabolite NO. 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 has been detected in inflammatory processes such as septic shock, rheumatoid arthritis, celiac disease, atherosclerotic plaques and chronic renal failure.

REFERENCES

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5. Xu, J., et al. 2001. iNOS and Nitrotyrosine expression after spinal cord injury. *J. Neurotrauma* 18: 523-532.
6. Girault, I., et al. 2001. Immunodetection of 3-Nitrotyrosine in the liver of zymosan-treated rats with a new monoclonal antibody: comparison to analysis by HPLC. *Free Radic. Biol. Med.* 31: 1375-1387.
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8. Rhyu, D.Y., et al. 2002. Prevention of peroxynitrite-induced renal injury through modulation of peroxynitrite production by the Chinese prescription Wen-Pi-Tang. *Free Radic. Res.* 36: 1261-1269.
9. Lorch, S.A., et al. 2003. Plasma 3-Nitrotyrosine and outcome in neonates with severe bronchopulmonary dysplasia after inhaled nitric oxide. *Free Radic. Biol. Med.* 34: 1146-1152.

SOURCE

Nitrotyrosine (7A5) is a mouse monoclonal antibody raised against 3-Nitrotyrosine.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, PEG and sucrose.

STORAGE

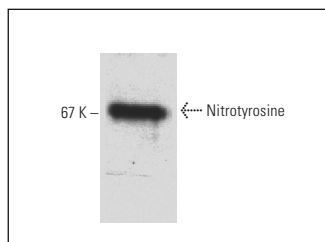
Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Nitrotyrosine (7A5) is recommended for detection of nitrosylated tyrosine containing proteins by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Positive Controls: Bovine Serum Albumin (BSA): sc-2322.

DATA



Nitrotyrosine (7A5): sc-81482. Western blot analysis of Nitrotyrosine expression in Nitrotyrosine-modified BSA.

SELECT PRODUCT CITATIONS

1. Kundu, S., Tyagi, N., Sen, U. and Tyagi, S.C. 2009. Matrix imbalance by inducing expression of metalloproteinase and oxidative stress in cochlea of hyperhomocysteinemic mice. *Mol. Cell. Biochem.* 332: 215-224.
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3. Simoes, I.C.M., Karkucinska-Wieckowska, A., Janikiewicz, J., Szymanska, S., Pronicki, M., Dobrzn, P., Dabrowski, M., Dobrzn, A., Oliveira, P.J., Zischka, H., Potes, Y. and Wieckowski, M.R. 2020. Western diet causes obesity-induced nonalcoholic fatty liver disease development by differentially compromising the autophagic response. *Antioxidants* 9: E995.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **Nitrotyrosine (39B6): sc-32757** for Nitrotyrosine antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.