

NOS3 (m): 293T Lysate: sc-122097

BACKGROUND

Nitric oxide (NO) has a broad range of biological activities and has been implicated in signaling pathways in phylogenetically diverse species. Nitric oxide synthases (NOSs), the enzymes responsible for synthesis of NO, contain an N-terminal oxygenase domain and a C-terminal reductase domain. NOS activity requires homodimerization as well as three cosubstrates (L-arginine, NADPH and O₂) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, tetrahydrobiopterin and heme). Several distinct NOS isoforms have been described and been shown to represent the products of three distinct genes. These include two constitutive Ca²⁺/CaM-dependent forms of NOS, including NOS1 (also designated ncNOS) whose activity was first identified in neurons, and NOS3 (also designated eNOS), first identified in endothelial cells. The inducible form of NOS, NOS2 (also designated iNOS), is Ca²⁺-independent and is expressed in a broad range of cell types.

REFERENCES

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- Bukrinsky, M.E., Nottet, H.S., Schmidtmerova, N., Dubrovsky, L., Flanagan, C.R., Mullins, M.E., Lipton, S.A. and Gendelman, H.E. 1995. Regulation of nitric oxide synthase activity in human immunodeficiency virus type 1 (HIV-1)-infected monocytes: implications for HIV-associated neurological disease. *J. Exp. Med.* 181: 735-745.

CHROMOSOMAL LOCATION

Genetic locus: Nos3 (mouse) mapping to 5 A3.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PRODUCT

NOS3 (m): 293T Lysate represents a lysate of mouse NOS3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

NOS3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NOS3 antibodies. Recommended use: 10-20 µl per lane.

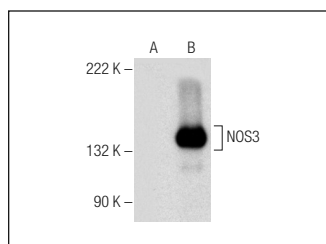
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NOS3 (C-6): sc-376542 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NOS3 expression in NOS3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

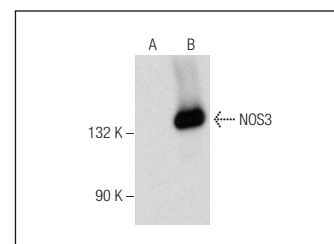
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



NOS3 (C-6): sc-376542. Western blot analysis of NOS3 expression in non-transfected: sc-117752 (A) and mouse NOS3 transfected: sc-122097 (B) 293T whole cell lysates.



NOS3 (A-9): sc-376751. Western blot analysis of NOS3 expression in non-transfected: sc-117752 (A) and mouse NOS3 transfected: sc-122097 (B) 293T whole cell lysates.

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.