Technical Data Sheet

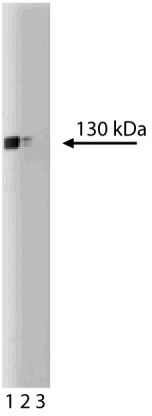
Purified Mouse Anti-Mouse iNOS

Product Information

Material Number:	**610599**
Alternate Name:	NOS Type II
Size:	50 µg
Concentration:	250 µg/ml
Clone:	2/iNOS
Immunogen:	Mouse iNOS aa. 772-787
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse
Target MW:	130 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Nitric oxide synthase (NOS), a cell-type specific enzyme, catalyzes the synthesis of nitric oxide (NO). NO is a short-lived radical that transmits cellular signals involved in vasorelaxation, neurotransmission, and cytotoxicity. In macrophages and other cell types, NOS (iNOS or macNOS) activity increases following exposure to cytokines (IFN-γ, TNF-α, and IL-1) and microbial products (lipopolysaccharide (LPS)). iNOS isactivated independently of Ca2+/calmodulin and its level of expression is tightly controlled by several transcription factors, including NFκB. Data indicates that TGF-ß affects translation of iNOS mRNA and decreases iNOS protein stability. Normally undetectable in brain tissue, iNOS mRNA has been observed in CNS tissues of animals under experimental pathologic conditions. iNOS and nNOS share 51% amino acid homology with the greatest degree of divergence in the calmodulin binding domain.



Western blot analysis of iNOS/NOS Type II on a cell lysate from mouse macrophages (RAW 264.7) stimulated with 10 ng/mL IFNγ and 1 µg/mL LPS for 12 hours. *Lane 1: 1:250, Lane 2: 1:500, Lane 3: 1:1000 dilution of the mouse anti- mouse iNOS/NOS Type II antibody.*

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Suggested Companion Products

Catalog Number	Name	Size	Clone
611473	Mouse Macrophage + IFNγ/LPS Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Koprowski H, Zheng YM, Heber-Katz E, et al. In vivo expression of inducible nitric oxide synthase in experimentally induced neurologic diseases. *Proc Natl Acad Sci U S A*. 1993; 90(7):3024-3027. (Biology)

Nathan C, Xie QW. Regulation of biosynthesis of nitric oxide. *J Biol Chem.* 1994; 269(19):13725-13728. (Biology)

Vodovotz Y, Bogdan C, Paik J, Xie QW, Nathan C. Mechanisms of suppression of macrophage nitric oxide release by transforming growth factor beta. *J Exp Med.* 1993; 178(2):605-613. (Biology)

Xie QW, Cho HJ, Calaycay J, et al. Cloning and characterization of inducible nitric oxide synthase from mouse macrophages. *Science.* 1992; 256(5054):225-228. (Biology)