

Technical Data Sheet

Purified Mouse Anti-eNOS/NOS Type III**Product Information**

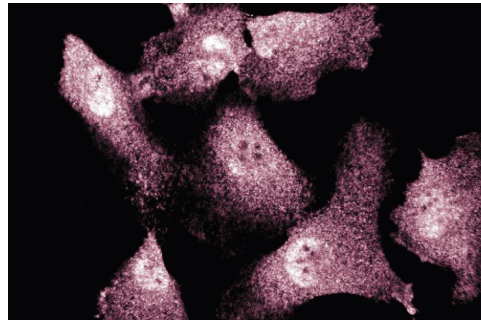
Material Number:	610297
Size:	150 µg
Concentration:	250 µg/ml
Clone:	3/eNOS/NOS Type III
Immunogen:	Human eNOS aa. 1025-1203
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	140 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% 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 signals involved in vasorelaxation, neurotransmission, and cytotoxicity. In neurons and endothelial cells, constitutive NOS (cNOS) is activated by agonists that increase intracellular Ca²⁺ levels and enhance calmodulin binding. Neuronal NOS (mNOS) and endothelial NOS (eNOS) have recognition sites for NADPH, FAD, FMN, and calmodulin and both are regulated in a similar manner. The human forms exhibit 52% amino acid identity. However, they are distinct gene products of about 155 kDa (mNOS) and 140 kDa (eNOS). The eNOS gene was cloned from human vascular endothelium as well as from bovine aortic endothelial cells (BAEC). eNOS protein has a unique N-myristylation consensus sequence that may explain its membrane localization.



Western blot analysis of eNOS/NOS Type III on human endothelial cell lysate. Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 dilution of anti-eNOS/NOS Type III.



Immunofluorescent staining of Endothelial Cells

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

BD Biosciences

www.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 www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Tested During Development

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
611450	Human Endothelial Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

- Cao S, Yao J, McCabe TJ, et al. Direct interaction between endothelial nitric-oxide synthase and dynamin-2. Implications for nitric-oxide synthase function. *J Biol Chem.* 2001; 276(17):14249-14256.(Clone-specific: Immunofluorescence, Immunoprecipitation, Western blot)
- Kincer JF, Uittenbogaard A, Dressman J, et al. Hypercholesterolemia promotes a CD36-dependent and endothelial nitric-oxide synthase-mediated vascular dysfunction. *J Biol Chem.* 2002; 277(26):23525-23533.(Clone-specific: Western blot)
- Laufs U, Endres M, Stagliano N, et al. Neuroprotection mediated by changes in the endothelial actin cytoskeleton. *J Clin Invest.* 2000; 106(1):15-24.
(Clone-specific: Immunofluorescence, Immunohistochemistry)
- Thomas SR, Chen K, Keaney JF Jr. Hydrogen peroxide activates endothelial nitric-oxide synthase through coordinated phosphorylation and dephosphorylation via a phosphoinositide 3-kinase-dependent signaling pathway. *J Biol Chem.* 2002; 277(8):6017-6024.(Clone-specific: Western blot)
- Zhao H, Dugas N, Mathiot C, et al. B-cell chronic lymphocytic leukemia cells express a functional inducible nitric oxide synthase displaying anti-apoptotic activity. *Blood.* 1998; 92(3):1031-1043.(Clone-specific: Flow cytometry)