10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

eNos Antibody (S1177)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11828a

Product Information

Application	WB, FC, IF, E
Primary Accession	P29474
Other Accession	Q62600, Q28969, P70313, P29473, NP_001153582.1, NP_000594.2, NP_001153581.1
Reactivity	Human
Predicted	Bovine, Mouse, Pig, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB29786
Calculated MW	133275
Antigen Region	1156-1183

Additional Information

Gene ID	4846
Other Names	Nitric oxide synthase, endothelial, Constitutive NOS, cNOS, EC-NOS, Endothelial NOS, eNOS, NOS type III, NOSIII, NOS3
Target/Specificity	This eNos antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1156-1183 amino acids from human eNos.
Dilution	WB~~1:1000 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	eNos Antibody (S1177) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NOS3 (HGNC:7876)

Function	Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway (PubMed:1378832). NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets.
Cellular Location	Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Note=Specifically associates with actin cytoskeleton in the G2 phase of the cell cycle; which is favored by interaction with NOSIP and results in a reduced enzymatic activity
Tissue Location	Platelets, placenta, liver and kidney.

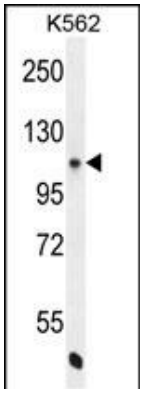
Background

Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide is synthesized from L-arginine by nitric oxide synthases. Variations in this gene are associated with susceptibility to coronary spasm. Multiple transcript variants encoding different isoforms have been found for this gene.

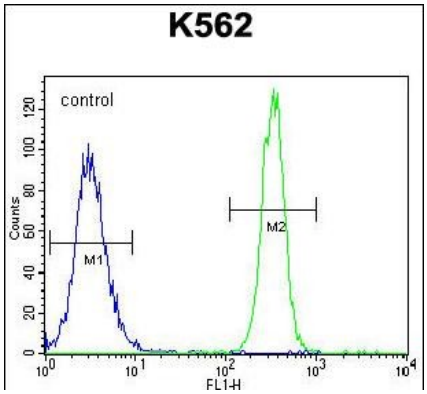
References

Yanamandra, K., et al. Ophthalmic Genet. 31(4):173-177(2010)
Bambha, K., et al. Mayo Clin. Proc. 85(9):814-820(2010)
Shin, S.J., et al. Eur. J. Obstet. Gynecol. Reprod. Biol. 152(1):64-67(2010)
Kim, S.M., et al. Kardiol Pol 68(8):920-926(2010)
Dafni, C., et al. BMC Med. Genet. 11, 133 (2010) :

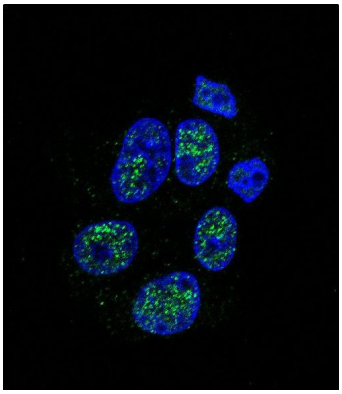
Images



eNos Antibody (S1177) (Cat. #AP11828a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the eNos antibody detected the eNos protein (arrow).



eNos Antibody (S1177) (Cat. #AP11828a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of eNos Antibody (S1177)(Cat#AP11828a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).

Citations

- KLF2 regulates eNOS uncoupling via Nrf2/HO-1 in endothelial cells under hypoxia and reoxygenation.
- The anti-inflammatory effect and potential mechanism of cardamonin in DSS-induced colitis.
- Activation of Krüppel-Like Factor 2 with Ginkgo Biloba Extract Induces eNOS Expression and Increases NO Production in Cultured Human Umbilical Endothelial Cells.
- Cilostazol Induces eNOS and TM Expression via Activation with Sirtuin 1/Krüppel-like Factor 2 Pathway in Endothelial Cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.