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

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|---|---|
| **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

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| **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

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| **Name** | NOS3 ( HGNC:7876) |

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| **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. |

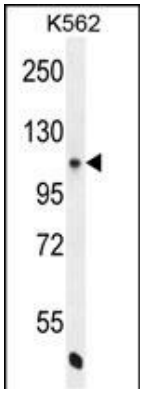
## Background

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.

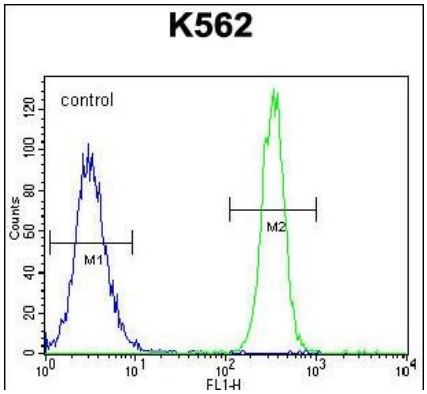
## References


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) :

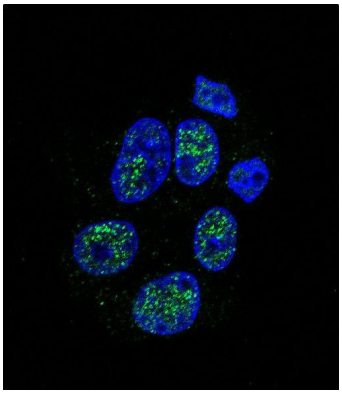

## Images




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'.