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

# Phospho-eNos(S1177) Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3665a

## Product Information

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|---|---|
| **Application** | DB, IF, E |
| **Primary Accession** | P29474 |
| **Other Accession** | Q62600, Q28969, P70313, P29473 |
| **Reactivity** | Human |
| **Predicted** | Bovine, Mouse, Pig, Rat, Canine, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB21907 |
| **Calculated MW** | 133275 |

## 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 phosphopeptide corresponding to amino acid residues surrounding S1177 of human eNos. |
| **Dilution** | DB~~1:500 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** | Phospho-eNos(S1177) Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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 |

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| | (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. |

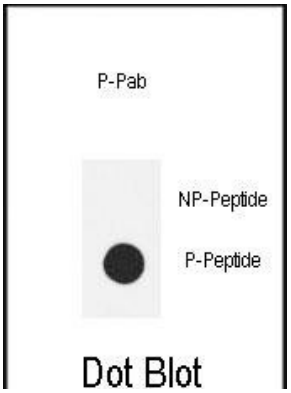
## Background

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.

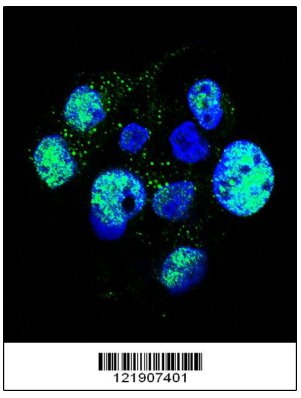
## References

Greif,D.M., et.al., Biochemistry 41 (52), 15845-15853 (2002)

## Images




Dot blot analysis of anti-Phospho-eNos-S1177 Phospho-specific Pab (Cat. #AP3665a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.




Confocal immunofluorescent analysis of Phospho-eNos-S1177 Antibody (Cat#AP3665a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).

## Citations

- TRPV4 Activation Contributes Functional Recovery from Ischemic Stroke via Angiogenesis and Neurogenesis.

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