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

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

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

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.

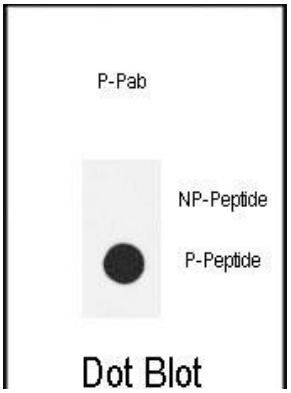
Background

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.

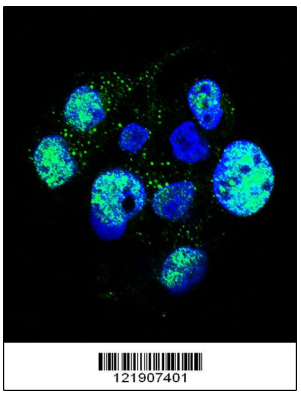
References

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'.