SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-Phospho-eNOS (Ser1177) antibody

SL3447R

Product Name:	Phospho-eNOS (Ser1177)
Chinese Name:	磷酸化一氧化氮合成酶3(内皮型)抗体
Alias:	eNOS (phospho S1177); eNOS(phospho S1177); p-eNOS (phospho S1177); eNOS (Phospho-Ser1177); cNOS; Constitutive NOS; EC NOS; ecNOS; Endothelial nitric oxidase synthase; Endothelial nitric oxide synthase; Endothelial nitric oxide synthase 3; Endothelial NOS; Nitric oxide synthase 3 (endothelial cell); Nitric oxide synthase 3; Nitric oxide synthase 3 endothelial cell; Nitric oxide synthase endothelial; nitric oxide synthase, endothelial; NOS 3; NOS III; NOS type III; NOS3; NOSIII; NOS3_HUMAN.
文献引用 PubMed :	**Specific References(3)**|SL3447R has been referenced in 3 publications. **[IF=3.82]**Ikemura, S., et al. "Preventive effects of the anti-vasospasm agent via the regulation of the Rho-kinase pathway on the development of steroid-induced osteonecrosis in rabbits." Bone (2013).**WB;Rabbit**. PubMed:23313282 **[IF=2.85]**Chen, I., et al. "Statins ameliorate pulmonary hypertension secondary to left ventricular dysfunction through the Rho-kinase pathway and NADPH oxidase." Pediatric Pulmonology (2016).**IHC-P;Rat**. PubMed:28029743 **[IF=1.28]**Yin, Yaling, et al. "Protective effect of Xin Mai Jia ultrafiltration extract on human umbilical vein endothelial cell injury induced by hydrogen peroxide and the effect on the NO?cGMP signaling pathway." Experimental and therapeutic medicine 8.1 (2014): 38-48.**IF(ICC);Human**. PubMed:24944594
Organism Species:	Rabbit

Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=2μg /TestIF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	133kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human eNOS around the phosphorylation site of Ser1177:TQ(p-S)FS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	eNOS is a calcium/calmodulin dependent enzyme which undergoes several post translational modifications, including acylation with myristate and palmitate, and phosphorylation on numerous residues. As with the other members of the NOS family, eNOS derives the diffusible multifunctional second messenger NO from L arginine through a series of reactions in which L citrulline is an intermediate. eNOS plays an important role in controlling vascular tone, platelet aggregation, and cardiac myocyte function. **Function:** Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway. NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets. Isoform eNOS13C: Lacks eNOS activity, dominant-negative form that may down-regulate eNOS activity by forming heterodimers with isoform 1. **Subunit:** Homodimer. Interacts with NOSIP and NOSTRIN. **Subcellular 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 Specificity:** Platelets, placenta, liver and kidney.

Post-translational modifications:
Phosphorylation by AMPK at Ser-1177 in the presence of Ca(2+)-calmodulin (CaM) activates activity. In absence of Ca(2+)-calmodulin, AMPK also phosphorylates Thr-495, resulting in inhibition of activity. Phosphorylation of Ser-114 by CDK5 reduces activity.

Similarity:
Belongs to the NOS family.
Contains 1 FAD-binding FR-type domain.
Contains 1 flavodoxin-like domain.

SWISS:
P29474

Gene ID:
4846

Database links:

Entrez Gene: 287024Cow

Entrez Gene: 403784Dog

Entrez Gene: 4846Human

Entrez Gene: 18127Mouse

Entrez Gene: 397557Pig

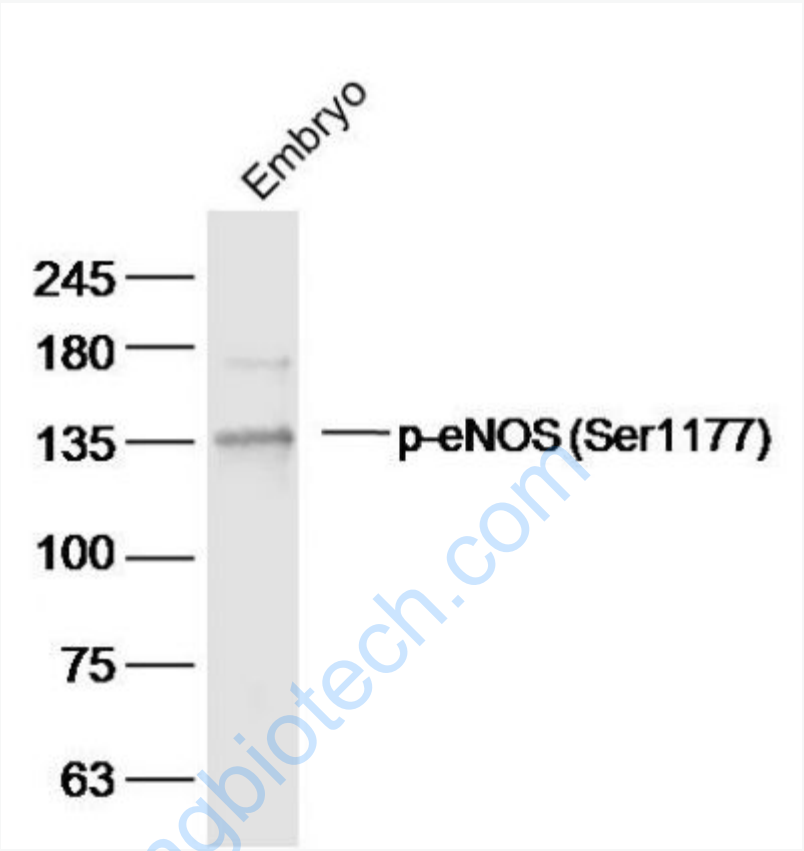
Entrez Gene: 24600Rat

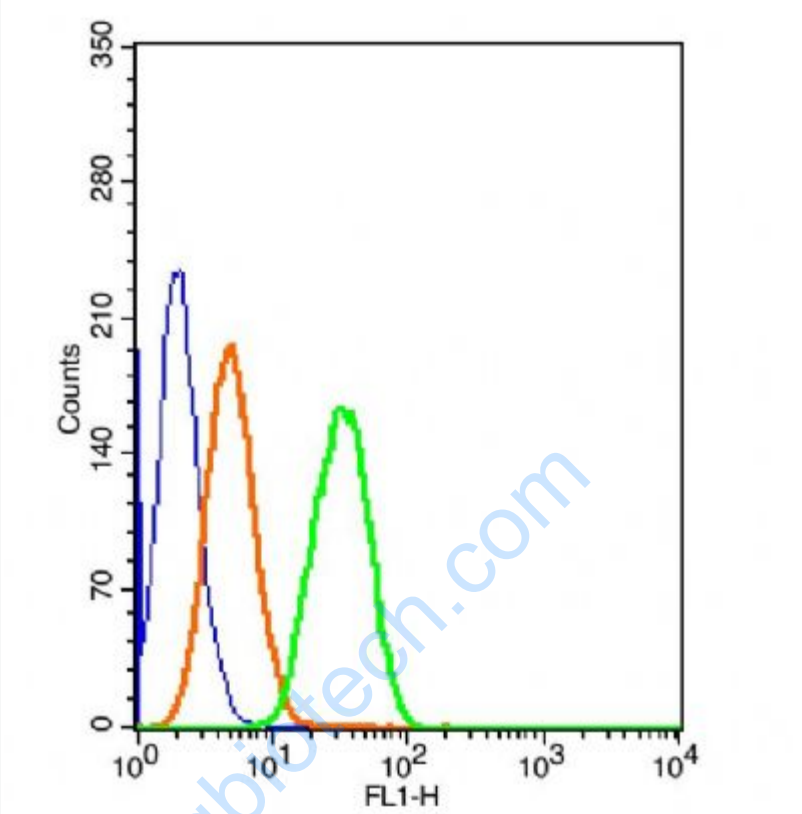
Omim: 163729Human

SwissProt: P29473Cow

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Synthesis and Degradation(Synthesis and Degradation)
催化生物体内一氧化氮(NO)生成的酶。分神经型一氧化氮合成的酶(nNOS or NOS-1)、诱导型一氧化氮合成的酶(iNOS or NOS-2)、内皮型一氧化氮合成的酶(eNOS or NOS-3)。此抗体识别分子量为135kDa的内皮型一氧化氮合成的酶。

Picture:	 Sample: Embryo (Mouse) Lysate at 40 ug Primary: Anti- p-eNOS (Ser1177) (SL3447R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 133 kD Observed band size: 133 kD



The blue histogram is unstained cells(HepG 2 cells). The Orange histogram is cells stained with Rabbit IgG/FITC (SL3447R) The green histogram is cells stained with Rabbit Anti-Phospho-eNOS (Ser1177)/FITC Conjugated antibody (SL3447R). Isotype control: Cell lines treated with Rabbit IgG/FITC (SL3447R) instead of the primary antibody to confirm that primary antibody binding is specific. 2μg in 100 μl 1 X PBS containing 0.5% BSA.