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Rabbit Anti-eNOS antibody

SL0163R

Product Name:	eNOS
Chinese Name:	一氧化氮合成酶-3(内皮型)抗体
Alias:	NOS-3; 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(7)**|SL0163R has been referenced in 7 publications. **[IF=5.51]**Nour, Sayed, et al. "Intrapulmonary shear stress enhancement: A new therapeutic approach in acute myocardial ischemia." International Journal of Cardiology (2013).**Pig**. PubMed:23932859 **[IF=3.14]**Li, Hongyan, et al. "Oxidative stress, endothelial dysfunction and inflammatory response in rat heart to NO< sub> 2 inhalation exposure." Chemosphere 82.11 (2011): 1589-1596.**WB;Rat**. PubMed:21168897 **[IF=3.05]**Ji, Chenyang, et al. "Construction of tissue-engineered corpus cavernosum with muscle-derived stem cells and transplantation in vivo." BJU international 107.10 (2011): 1638-1646.**Rabbit**. PubMed:20868390 **[IF=2.59]**Sun, Tao, et al. "Antihypertensive effect of formononetin through regulating the expressions of eNOS, 5-HT< sub> 2A/1B receptors and α< sub> 1-adrenoceptors in spontaneously hypertensive rat arteries." European Journal of Pharmacology (2013).**Rat**.

	PubMed:23123056 **[IF=1.38]**Hu, Zhibin, et al. "Comparative analysis of preservation method and intermittent perfusion volume on the expression of endothelial and inflammatory markers by coronal artery and myocardium in porcine donor hearts." ASAIO journal (American Society for Artificial Internal Organs: 1992) (2014).**IHC-P;Pig**. PubMed:25232770 **[IF=1.48]**Wen, Chen-Ting, Tao He, and Yi-Qiao Xing. "Erythropoietin promotes retinal angiogenesis in a mouse model." Molecular medicine reports 10.6 (2014): 2979-2984.**WB;Mouse**. PubMed:25269825 **[IF=2.59]**Wu, Chun Shan, et al. "Bubble CPAP Support after Discontinuation of Mechanical Ventilation Protects Rat Lungs with Ventilator-Induced Lung Injury." Respiration (2016).**other;** PubMed:26800273
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Sheep,Guinea Pig,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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 synthetic peptide derived from human NOS-3:1105-1202/1203
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:	Nitric oxide synthase NOS oxidizes a guanidine nitrogen of arginine releasing nitric oxide in the form of a free radical and citrulline. Nitric oxide thus generated acts as a messenger in diverse functions including vasodilation neurotransmission, anti tumor and anti pathogenic activities. NOS is classified under three types: neuronal NOS (nNOS) or brain NOS (bNOS); inducible NOS (iNOS) or macrophage NOS (mNOS); and

endothelial NOS (eNOS).

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: 4846Human

Entrez Gene: 18127Mouse

Entrez Gene: 24600Rat

Omim: 163729Human

SwissProt: P29473Cow

SwissProt: P29474Human

SwissProt: P70313Mouse

SwissProt: Q62600Rat

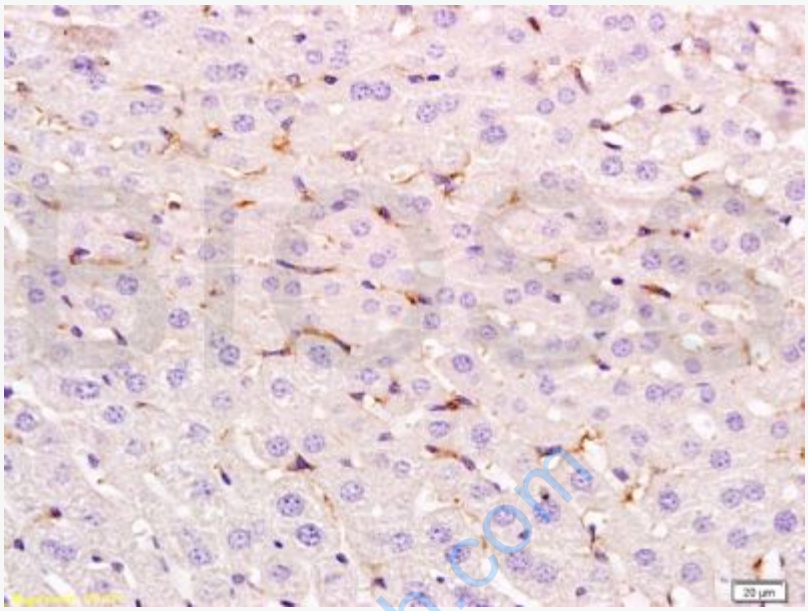
Unigene: 647092Human

Unigene: 258415Mouse

Unigene: 44265Rat

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:	 Tissue/cell: rat liver tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-NOS-3/eNOS Polyclonal Antibody, Unconjugated(SL0163R) 1:100, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining