

# Rabbit Anti-Phospho-eNOS (Ser1176) antibody

# SL13071R

Phospho-eNOS (Ser1176)
磷酸化一氧化氮合成酶3(内皮型)抗体
eNOS (phospho S1176); p-eNOS (phospho S1176); eNOS (Phospho-Ser1176); cNOS; eNOS; Constitutive NOS; EC NOS; ecNOS; Endothelial nitric oxidase 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.
Rabbit
Polyclonal  Hymne Moure Pet
Human,Mouse,Rat, WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
133kDa
cytoplasmicThe cell membrane
Lyophilized or Liquid
lmg/ml
KLH conjugated Synthesised phosphopeptide derived from mouse eNOS around the phosphorylation site of Ser632:TQ(p-S)FS
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
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.
<u>PubMed</u>

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:**

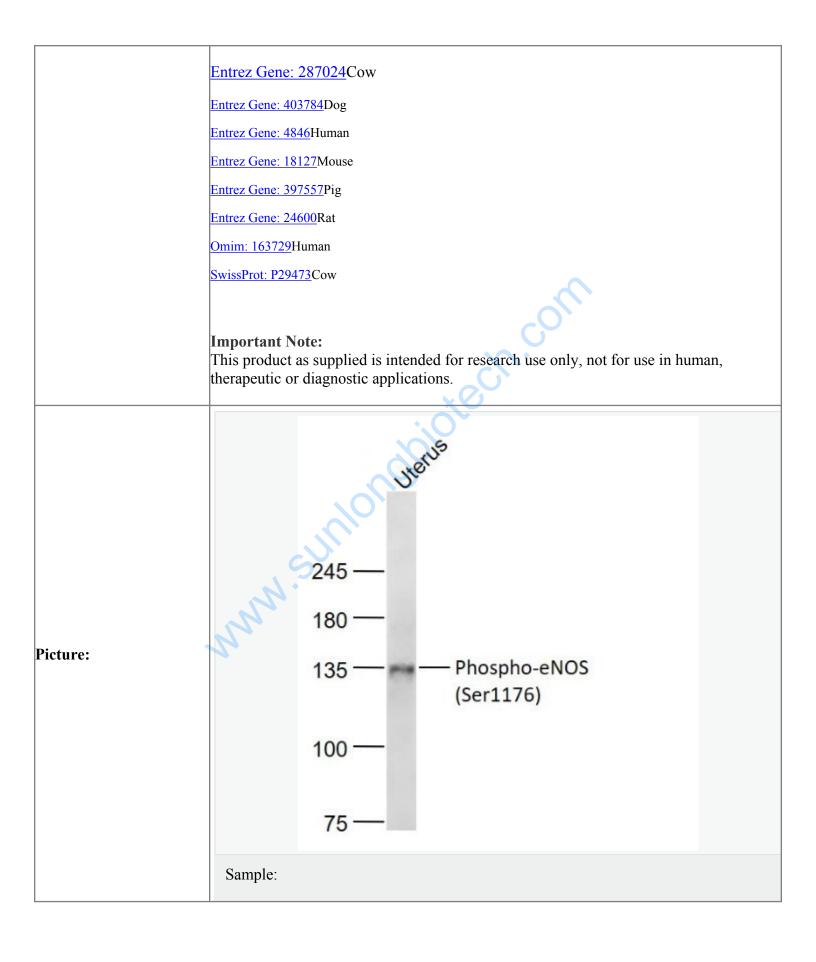
P29474

#### Gene ID:

4846

# Database links:

Product Detail:



Uterus (Mouse) Lysate at 40 ug

Primary: Anti-Phospho-eNOS (Ser1176) (SL13071R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 133 kD

Observed band size: 133 kD

