



eNOS (phospho Ser1177) Polyclonal Antibody

Catalog No	YP-Ab-17166
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;ELISA
Gene Name	NOS3
Immunogen	The antiserum was produced against synthesized peptide derived from human eNOS around the phosphorylation site of Ser1176. AA range:1144-1193
Specificity	Phospho-NOS3 (S1177) Polyclonal Antibody detects endogenous levels of NOS3 protein only when phosphorylated at S1177.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	cNOS;Constitutive NOS;EC NOS;EC-NOS;ecNOS;Endothelial nitric oxidase synthase;Endothelial nitric oxide synthase;Endothelial nitric oxide synthase 3; Endothelial NOS;eNOS;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; NOS3_HUMAN;NOSIII
Observed Band	130-140kD
Calculated Molecular Weight	130-140kD
Cell Pathway	Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. 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.
Function	catalytic activity:L-arginine + n NADPH + n H(+) + m O(2) = citrulline + nitric oxide + n NADP(+).,cofactor: Binds 1 FAD.,cofactor: Binds 1 FMN.,cofactor: Heme group.,cofactor: Tetrahydrobiopterin (BH4). May stabilize the dimeric form of the



enzyme.,enzyme regulation:Stimulated by calcium/calmodulin. Inhibited by NOSIP and NOSTRIN.,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.,online information:Nitric oxide synthase entry, polymorphism:Variation in NOS3 seem to be associated with susceptibility to coronary spasm.,similarity:Belongs to the NOS family.,similarity:Contains 1 FAD-binding FR-type domain.,similarity:Contains 1 flavodoxin-like

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. Variations in this gene are associated with susceptibility to coronary spasm. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009],

matters needing attention

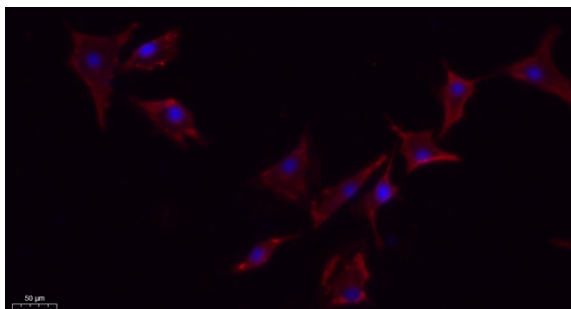
Avoid repeated freezing and thawing!

Usage suggestions

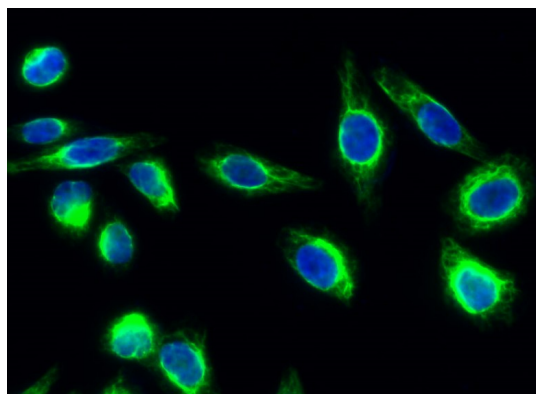
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



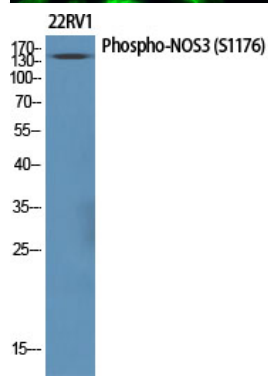
Products Images



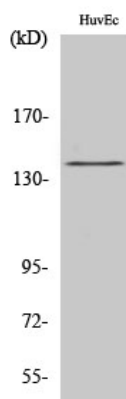
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



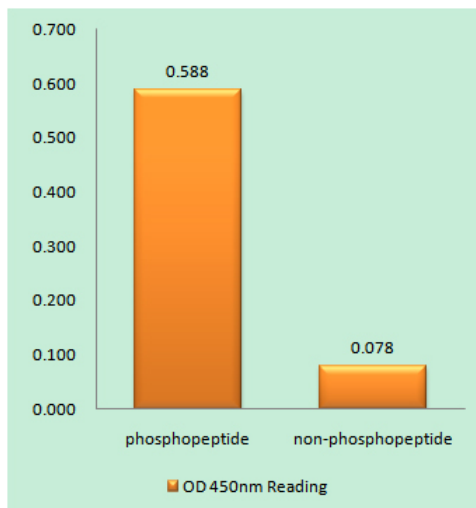
Immunofluorescence analysis of Hela cell. 1, NOS3 (phospho Ser1177) Polyclonal Antibody (green) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



Western Blot analysis of various cells using Phospho-NOS3 (S1177) Polyclonal Antibody diluted at 1:1000



Western Blot analysis of HuvEc cells using Phospho-NOS3 (S1177) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay
(Phospho-ELISA) for Immunogen Phosphopeptide
(Phospho-left) and Non-Phosphopeptide
(Phospho-right), using eNOS (Phospho-Ser1176)
Antibody