G-Biosciences Image not found or type unknown

Immunotag™ NOS3 (phospho Thr494) Polyclonal Antibody

Antibody Specification

Catalog No.	ITP0196
Product Description	Immunotag™ NOS3 (phospho Thr494) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	NOS3 (Thr494)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human NOS3 (phospho Thr494)
Specificity	Phospho-NOS3 (T494) Polyclonal Antibody detects endogenous levels of NOS3 protein only when phosphorylated at T494.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	NOS3
Accession No.	P29474 P70313 Q62600
Alternate Names	NOS3; Nitric oxide synthase; endothelial; Constitutive NOS; cNOS; EC-NOS; Endothelial NOS; eNOS; NOS type III; NOSIII

Antibody Specification

Description	nitric oxide synthase 3(NOS3) Homo sapiens 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],
Cell Pathway/ Category	Regulates Angiogenesis, AMPK, PI3K/Akt, Protein_Acetylation
Protein Expression	Artery,Placenta,Platelet,Umbilical vein,
Subcellular Localization	Golgi membrane,nucleus,cytoplasm,cytosol,cytoskeleton,plasma membrane,caveola,endocytic vesicle membrane,
Protein 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 domain.,subcellular location: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.,subunit:Homodimer. Interacts with NOSIP and NOSTRIN.,tissue specificity:Platelets, placenta, liver and kidney.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.