Enos/NOS3 (NOS3) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	eNOS/NOS3, Polyclonal Antibody
Full Product Name	Anti-eNOS/NOS3 Antibody Picoband
Product Gene Name	anti-NOS3 antibody
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Assay Type	Sandwich
Samples	Cell culture supernatants, serum, plasma (heparin, EDTA), saliva and urine
Detection Range	312 pg/ml - 20,000 pg/ml
Sensitivity	<10 pg/ml
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (lot specific)
Specificity	Natural and recombinant Human DPP4
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Molecular Weight	133,289 Da
Chromosome Location	Chromosome: 7; NC_000007.13 (150688144..150711687). Location: 7q36
OMIM	163729
3D Structure	ModBase 3D Structure for P29474
Product Categories/Family for anti-NOS3 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-NOS3 antibody	Western Blot (WB), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS), ELISA (EIA)

Application Notes for anti-NOS3 antibody	WB: 0.25-0.5 ug/ml, Human ICC/IF: 5 ug/ml, Human FC/FACS: 1-3 ug/1x10^6 cells, Human Direct ELISA: 0.1-0.5 ug/ml, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Rabbit IgG (#MBS176460) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (#MBS176453) for ICC.
Related Product Information for anti-NOS3 antibody	Background: Dipeptidyl peptidase-4(DPP4), also known as adenosine deaminase complexing protein 2 or CD26(cluster of differentiation 26) is a protein that, in humans, is encoded by the DPP4 gene. By fluorescence in situ hybridization, the CD26 gene was mapped to 2q24.3. DPP4 plays a major role in glucose metabolism. It is responsible for the degradation of incretins such as GLP-1. Furthermore, it appears to work as a suppressor in the development of cancer and tumours. CD26/ DPP4 plays an important role in tumor biology, and is useful as a marker for various cancers, with its levels either on the cell surface or in the serum increased in some neoplasms and decreased in others. Principle of the Assay: The Quick Picokine™ Human DPP4 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human DPP4 in cell culture supernatants, serum, plasma (heparin, EDTA), saliva and urine. It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human DPP4 with immunogen: Expression system for standard: NS0; Immunogen sequence: D34-P766. To measure Human DPP4, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product is linearly proportional to Human DPP4 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human DPP4 in the sample.
Other Notes	Small volumes of anti-NOS3 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for NOS3 purchase	MBS1754947 is an antibody targeting NOS3. Also known as Anti-eNOS/NOS3 Antibody Picoband. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for NOS3. It may not necessarily be applicable to this product.

NCBI GI #	40254422
NCBI GeneID	4846
NCBI Accession #	NP_000594.2
UniProt Primary Accession #	P29474
UniProt Secondary Accession #	Q13662; Q14251; Q14434; Q548C1; Q6GSL5; Q9UDC6; A0S0A7; A0S0A8; A8KA63; B2RCQ1; E9PFR2
UniProt Related Accession #	P29474
GenBank Nucleotide #	NM_000603.4
NCBI Official Full Name	nitric oxide synthase, endothelial isoform 1
NCBI Official Synonym Full Names	nitric oxide synthase 3 (endothelial cell)
NCBI Official Symbol	NOS3
NCBI Official Synonym Symbols	eNOS; ECNOS
UniProt Protein Name	Nitric oxide synthase, endothelial
UniProt Synonym Protein Names	Constitutive NOS; cNOS; EC-NOS; Endothelial NOS; eNOS; NOS type III

Protein Family	Nitric oxide synthase
UniProt Gene Name	NOS3
UniProt Synonym Gene Names	cNOS; eNOS; NOSIII
UniProt Entry Name	NOS3_HUMAN
NCBI Protein Information	nitric oxide synthase, endothelial; cNOS; EC-NOS; NOSIII; NOS type III; endothelial NOS; constitutive NOS
NCBI Summary for NOS3	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]
UniProt Comments for NOS3	eNOS: endothelial constitutive nitric oxide synthase. Synthesizes nitric oxide (NO) from arginine and oxygen, 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. Induced in humans by caloric restriction. Stimulated by calcium/calmodulin. Inhibited by NOSIP and NOSTRIN. Protein type: EC 1.14.13.39; Oxidoreductase; Amino Acid Metabolism - arginine and proline Chromosomal Location of Human Ortholog: 7q36 Cellular Component: Golgi membrane; cytoskeleton; cytoplasm; plasma membrane; caveola; nucleus; cytosol Molecular Function: calmodulin binding; actin monomer binding; protein binding; FAD binding; FMN binding; NADPH-hemoprotein reductase activity; nitric-oxide synthase activity; iron ion binding; heme binding; NADP binding; cadmium ion binding Biological Process: regulation of systemic arterial blood pressure by endothelin; negative regulation of potassium ion transport; negative regulation of muscle hyperplasia; positive regulation of vasodilation; nitric oxide metabolic process; negative regulation of cell proliferation; negative regulation of hydrolase activity; regulation of blood pressure; regulation of the force of heart contraction by chemical signal; lipopolysaccharide-mediated signaling pathway; angiogenesis; negative regulation of blood pressure; regulation of blood vessel size; nitric oxide biosynthetic process; mitochondrion organization and biogenesis; interaction with host; negative regulation of calcium ion transport; in utero embryonic development; positive regulation of guanylate cyclase activity; regulation of sodium ion transport; ovulation from ovarian follicle; positive regulation of angiogenesis; response to heat; endothelial cell migration; arginine catabolic process; blood vessel remodeling; regulation of nitric-oxide synthase activity; vascular endothelial growth factor receptor signaling pathway; blood coagulation; nitric oxide mediated signal transduction; lung development; smooth muscle hyperplasia Disease: Preeclampsia/eclampsia 1; Alzheimer Disease; Hypertension, Essential; Stroke, Ischemic
Research Articles on NOS3	**1.** Genistein could promote the activity of eNOS in HUVECs by increasing phosphorylation of eNOS through the PI3K/AKT pathway.
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