Rat Neuronal Nitric Oxide Synthase (nNOS/NOS1) ELISA Kit

Catalog No: #EK11198

Package Size: #EK11198-1 48T #EK11198-2 96T

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Description

Product Name	Rat Neuronal Nitric Oxide Synthase (nNOS/NOS1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	IHPS1; NOS; nNOS; nitric oxide synthase 1; neuronal
Accession No.	O19132
Uniprot	O19132
GeneID	100009243;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.055 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate NOS1 in samples. An antibody specific for NOS1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyNOS1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for NOS1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of NOS1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Nitric oxide (NO) is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter; it is implicated in neurotoxicity associated with stroke and neurodegenerative diseases, neural regulation of smooth muscle, including peristalsis, and penile erection. NO is also responsible for endothelium-derived relaxing factor activity regulating blood pressure. NO mediates tumoricidal and bactericidal actions, as indicated by the fact that inhibitors of NO synthase (NOS) block these effects. Neuronal NOS and macrophage NOS are distinct isoforms.Both the neuronal and the macrophage forms are unusual among oxidative enzymes in requiring several electron donors: FAD, flavin mononucleotide (FMN), NADPH, and tetrahydrobiopterin.

Note: This product is for in vitro research use only