Mouse Endothelial nitric oxide synthase,eNOS ELISA Kit

Product Code	CSB-E08324m
Abbreviation	NOS3
Target Name	nitric oxide synthase 3 (endothelial cell)
Uniprot No.	P70313
Alias	ECNOS, eNOS, nitric oxide synthase 3
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 IU/mL-20 IU/mL
Sensitivity	0.078 IU/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Neuroscience
Gene Names	Nos3
Tag Info	quantitative
Protein Description	Sandwich

Description

This mouse eNOS ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of mouse eNOS in multiple samples, including serum, plasma, and tissue homogenates. It also uses the enzyme-substrate chromogenic reaction to visualize and analyze the analyte levels through the color intensity. The intensity of the colored product is in direct proportion to the eNOS levels in the sample and is measured at 450 nm through a microplate reader.

eNOS, also called NOS3, is usually constitutively expressed in cells in an inactive state and is activated by binding to the CaM protein after the elevation of Ca^{2+} concentration. NOS3 is highly enriched in endothelial cells (ECs) and contributes to the generation of nitric oxide (NO) to exert vasodilation and regulate the flow of blood throughout the body. It is linked to cardiovascular diseases such as hypertension, atherosclerosis, and diabetes mellitus. Recent studies have shown that NOS3 plays an important role in cancers, such as inhibiting apoptosis and promoting angiogenesis, proliferation, invasiveness,

and immunosuppression.

Target Details

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.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse eNOS in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	86
	Range %	82-95
1:2	Average %	97
	Range %	91-103
1:4	Average %	105
	Range %	98-112
1:8	Average %	98
	Range %	94-102

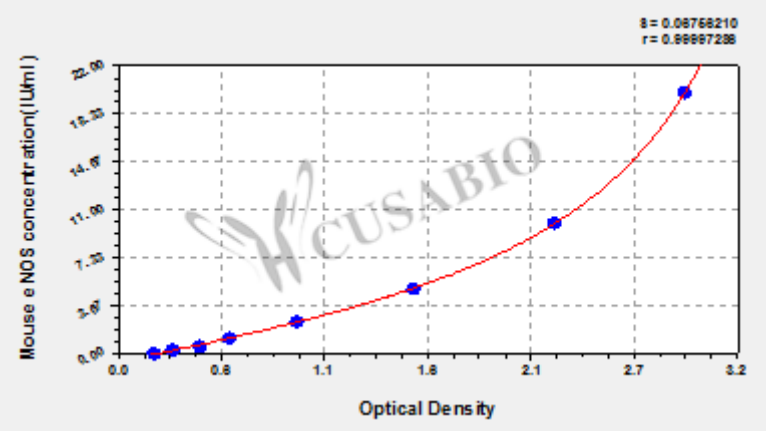
Recovery

The recovery of mouse eNOS spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	98	92-104
EDTA plasma (n=4)	102	94-106

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



IU/ml	OD1	OD2	Average	Corrected
20	2.995	2.865	2.930	2.728
10	2.280	2.244	2.262	2.060
5	1.528	1.546	1.537	1.335
2.5	0.926	0.940	0.933	0.731
1.25	0.598	0.578	0.588	0.386
0.625	0.445	0.431	0.438	0.236
0.312	0.298	0.305	0.302	0.100
0	0.199	0.204	0.202	?

Msds

{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E08324m.pdf","filename":"MSDS"}}