

Active Recombinant Full Length Rat Nos1 Protein, His tagged

Cat. No. Nos1-01RFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Nos1 Protein with His tag was expressed in E. coli.
Species	Rat
Source	E.coli
ProteinLength	1-1434 aa
Description	Nitric oxide synthases are a family of enzymes catalyzing the production of nitric oxide (NO) from L-arginine. NO is an important cellular signaling molecule. It helps modulate vascular tone, insulin secretion, airway tone, and peristalsis, and is involved in angiogenesis and neural development. It may function as a retrograde neurotransmitter. Nitric oxide is mediated in mammals by the calcium-calmodulin controlled isoenzymes eNOS (endothelial NOS) and nNOS (neuronal NOS). The inducible isoform, iNOS, is involved in immune response, binds calmodulin at physiologically relevant concentrations, and produces NO as an immune defense mechanism, as NO is a free radical with an unpaired electron. It is the proximate cause of septic shock and may function in autoimmune disease.
Form	Liquid
Molecular Weight	~160 kDa/subunit; homodimer.
Bio-Activity	≥500 U/mg. 1 U is defined as the amount of enzyme required to produce 1 nmol of NO (nitric oxide) per minute at 37 centigrade. NO synthesis is measured by the conversion

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

of oxyhemoglobin to methemoglobin.

Purity ≥ 90% by SDS-PAGE

Notes Avoid freeze/thaw cycles. After opening, prepare aliquots and store at -80 centigrade.

Stability Stable for at least 1 year after receipt when stored at -80 centigrade. Keep stock vial on ice during experiments.

Storage Long Term Storage: -80 centigrade

Storage Buffer In 50 mM TRIS, pH 7.4, containing 0.1 mM EDTA, 10% glycerol, 100 mM NaCl, 0.1 mM DTT, 10 µM tetrahydrobiopterin.

Shipping Dry Ice

GENE INFORMATION

Gene Name NOS1 nitric oxide synthase 1 [Homo sapiens (human)]

Official Symbol NOS1

Synonyms NOS1; nitric oxide synthase 1 (neuronal); NOS; nitric oxide synthase, brain; nNOS; NOS type I; neuronal NOS; constitutive NOS; peptidyl-cysteine S-nitrosylase NOS1; bNOS; IHPS1; N-NOS; NC-NOS

Gene ID 4842

mRNA Refseq NM_000620

Protein Refseq NP_000611

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

MIM	163731
-----	--------

UniProt ID	P29475
------------	--------

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA