

Datasheet for ABIN3094120

NOS1 Protein (AA 1-1434) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	NOS1
Protein Characteristics:	AA 1-1434
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NOS1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MEDHMFQVQQ IQPNVISVRL FKRKVGGLGF LVKERVSKPP VIISDLIRGG AAEQSGLIQA</p> <p>GDIILAVNGR PLVDLSYDSA LEVLRGIASE THVVLILRGP EGFTTHLETT FTGDGTPKTI</p> <p>RVTQPLGPPT KAVDLSHQPP AGKEQPLAVD GASGPGNGPQ HAYDDGQEAG SLPHANGLAP</p> <p>RPPGQDPAKK ATRVSLQGRG ENNELLKEIE PVLSLLTSGS RGVKGGAPAK AEMKDMGIQV</p> <p>DRDLDGKSHK PLPLGVENDR VFNDLWGKGN VPVVLNNPYS EKEQPPTSGK QSPTKNGSPS</p> <p>KCPRFLKVKN WETEVVLTDT LHLKSTLETG CTEYICMSI MHPSQHARRP EDVRTKGQLF</p> <p>PLAKEFIDQY YSSIKRFGSK AHMERLEEVN KEIDTTSTYQ LKDTIELYGA KHAWRNASRC</p> <p>VGRIQWSKLQ VFDARDCTTA HGMFNYICNH VKYATNKGNL RSAITIFPQR TDGKHDFRVW</p> <p>NSQLIRYAGY KQPDGSTLGD PANVQFTEIC IQQGWKPPRG RFDVLPPLLQ ANGNDPPELFQ</p> <p>IPPELVLEVP IRHPKFEWFK DLGLKWYGLP AVSNMLLEIG GLEFSACPFS GWYMGTEIGV</p> <p>RDYCDNSRYN ILEEVAKKMN LDMRKTSSLW KDQALVEINI AVLYSFQSDK VTIVDHHSAT</p>

ESFIKHMENE YRCRGGCPAD WWWIVPPMSG SITPVFHQEM LNYRLTPSFE YQDPWNTHV
WKGTTNGTPTK RRAIGFKKLA EAVKFSAKLM GQAMAKRVKA TILYATETGK SQAYAKTLCE
IFKHAFDAKV MSMEEDIVH LEHETLVLVV TSTFGNGDPP ENGEKFGCAL MEMRHPNSVQ
EERKSYKVRF NSVSSYSDSQ KSSGDGPDLR DNFESAGPLA NVRFSVFGLG SRAYPHFCAF
GHAVDTLLEE LGGERILKMR EGDELGCQEE AFRTWAKKVF KAACDVFCVG DDVNIKANN
SLISNDRSWK RNKFRLTFVA EAPELTQGLS NVHKKRVSA RLLSRQNLQS PKSSRSTIFV
RLHTNGSQEL QYQPGDHLGV FPGNHEDLVN ALIERLEDAP PVNQMVKVEL LEERNALGV
ISNWTDELRL PPCTIFQAFK YYLDITPPT PLQLQQFASL ATSEKEKQRL LVLSKGLQEY
EEWKWGKNPT IVEVLEEFPS IQMPATLLLT QLSLLQPRYY SISSSPDMYP DEVHLTVAIV
SYRTRDGEGP IHHGVCSSWL NRIQADELVP CFVRGAPSFH LPRNPQVPCI LVGPGTGIAF
FRSFWQQRQF DIQHKGMNPC PMVLVFGCRQ SKIDHIYREE TLQAKNKGVF RELYTAYSRE
PDKPKKYVD ILQEQLAESV YRALKEQGGH IYVCGDVTMA ADVLKAIQRI MTQQGKLSAE
DAGVFISMR DDNRYHEDIF GVTLRTYEVT NRLRSEIAF IEESKKDTDE VFSS

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the

Product Details

mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	NOS1
Alternative Name:	NOS1 (NOS1 Products)
Background:	Nitric oxide synthase 1 (EC 1.14.13.39) (Constitutive NOS) (NC-NOS) (NOS type I) (Neuronal NOS) (N-NOS) (nNOS) (Nitric oxide synthase, brain) (bNOS) (Peptidyl-cysteine S-nitrosylase NOS1),FUNCTION: Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter. Probably has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such SRR. {ECO:0000269 PubMed:35772285}.
Molecular Weight:	161.0 kDa
UniProt:	P29475
Pathways:	Negative Regulation of Hormone Secretion, Myometrial Relaxation and Contraction

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
--------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
----------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Restrictions:	For Research Use only
---------------	-----------------------

Handling

Format:	Liquid
Buffer:	<p>The buffer composition is at the discretion of the manufacturer.</p> <p>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.</p>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months