

Datasheet for ABIN3094216  
**ENOS Protein (AA 2-1203) (His tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	ENOS (NOS3)
Protein Characteristics:	AA 2-1203
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ENOS protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

## Product Details

Sequence:	<p>GNLKSVAQEP GPPCGLGLGL GLGLCGKQGP ATPAPEPSRA PASLLPPAPE HSPSSPLTQ PPEGPKFPRV KNWEVGSITY DTLSAQAAQD GPCTPRRCLG SLVFPRKLQG RPSPGPPAPE QLLSQARDFI NQYYSSIKRS GSQAHEQRLQ EVEAEVAATG TYQLRESELV FGAKQAWRNA PRCVGRIQWG KLQVFDARDC RSAQEMFTYI CNHIKYATNR GNLRSITVF PQRCPGRGDF RIWNSQLVRY AGYRQQDGSV RGD PANVEIT ELCIQHWTP GNGRFDVLPL LLQAPDEPPE LFLPPPELV EVPLEHPTLE WFAALGLRWY ALPAVSNMLL EIGGLEFPAA PFSGWYMSTE IGTRNLCDPH RYNILEDVAV CMDLDTRTTS SLWKDKAAVE INVAVLHSYQ LAKVTIVDHH AATASFMKHL ENEQKARGGC PADWAWIVPP ISGSLTPVFH QEMVNYFLSP AFRYQPD PWK GSAAKGTGIT RKKTFKEVAN AVKISASLMG TVMAKRVKAT ILYGSETGRA QSYAQQLGRL FRKAFDPRVL CMDEYDVVSL EHETLVLVVT STFGNGDPPE NGESFAAALM EMSGPYNSSP RPEQHKSYKI RFNSISCS DP LVSSWRRKRK ESSNTDSAGA LGTLRFCVFG LGSRAYPHFC AFARAVDTRL EELGGERLLQ LGQGDEL CGQ EEA FRGWAQA AFQAACETFC VGEDAKAAAR</p>
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DIFSPKRSWK RQRYRLSAQA EGLQLLPGLI HVHRRKMFQA TIRSVENLQS SKSTRATILV  
RLDTGGQEGL QYQPGDHIGV CPPNRPGIVE ALLSRVEDPP APTEPVAVEQ LEKGSPGGPP  
PGWVRDPRLP PCTLRQALTF FLDITSPSP QLLRLLSTLA EEPREQQELE ALSQDPRRYE  
EWKWFRCPRL LEVLEQFSPV ALPAPLLLTQ LPLLQPRYYS VSSAPSTHPG EIHLTVAVLA  
YRTQDGLGPL HYGVCSTWLS QLKPGDPVPC FIRGAPSFRL PPDPSLPCIL VGPGTGIAPF  
RGFWQERLHD IESKGLQPTP MTLVFGCRCS QLDHLYRDEV QNAQQRGVFG RVLTAFSREP  
DNPITYVQDI LRTELAAEVH RVLCLERGHM FVCGDVTMAT NVLQTVQRIL ATEGDMELDE  
AGDVIGVLRD QQRYHEDIFG LTLRTQEVTS RIRTQSFSLQ ERQLRGAVPW AFDPPGSDTN SP

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human NOS3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.

## Product Details

2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target: ENOS (NOS3)

Alternative Name: NOS3 ([NOS3 Products](#))

Background: Produces nitric oxide (NO) 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., Isoform eNOS13C: Lacks eNOS activity, dominant-negative form that may down-regulate eNOS activity by forming heterodimers with isoform 1.

Molecular Weight: 134.1 kDa Including tag.

UniProt: [P29474](#)

Pathways: [ACE Inhibitor Pathway](#), [Regulation of Systemic Arterial Blood Pressure by Hormones](#), [Cellular Response to Molecule of Bacterial Origin](#), [Myometrial Relaxation and Contraction](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Thromboxane A2 Receptor Signaling](#), [VEGFR1 Specific Signals](#), [VEGF Signaling](#)

## 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.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

## Application Details

Restrictions: For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process