

## Product datasheet

# Recombinant Human eNOS protein (Tagged) ab198066

[1 Image](#)

### Description

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**Product name** Recombinant Human eNOS protein (Tagged)

**Purity** >= 71 % SDS-PAGE.  
Affinity purified.

**Expression system** Baculovirus infected Sf9 cells

**Accession** [P29474](#)

**Protein length** Full length protein

**Animal free** No

**Nature** Recombinant

**Species** Human

**Sequence**

```
MHHHHHHDYKDDDDKGNLKSVAQEPGPPCGLGLGLGLG
LCGKQGPATPAP
EPSRAPASLLPPAPEHSPSSPLTQPPEGPKFPRVKNW
EVGSITYDTLSA
QAQQDGPCTPRRCLGSLVFPRKLQGRPSGPPAPEQLL
SQARDFINQYYS
SIKRSGSQAHEQRLQEVEAEVAATGTQYQLRESELVFGAK
QAWRNAPRCVG
RIQWGKLVFDARDCRSAQEMFTYICNHIKYATNRGNLRS
AITVFPQRCP
GRGDFRIWNSQLVRYAGYRQQDGSVRGDPANVEITELCIQ
HGWTPNGRF
DVLPLLLQAPDDPPELFLPPPELVLEVPLEHPTLEWFAAL
GLRWYALPAV
SNMLLEIGGLEFPAAPFSGWYMSTEIGTRNLCDPHRYNILE
DVAVCMDLD
TRTTSSLWKDKAAVEINVAVLHSYQLAKVTVDHHAATASF
MKHLENEQK
ARGGCPADWAWVPPISGSLTPVFHQEMVNYFLSPAFLRY
QPDPWKGSAAK
GTGITRKKTFKEVANAVKISASLMGMTMAKRVKATILYGSE
TGRAQSYAQ
QLGRLFRKAFDPRVLCMDEYDVVSLEHETLVLVVTSTFG
NGDPPENGESF
AAALMEMSGPYNSSPRPEQHKSYPKIRFNSISCSDDLVS
```

WRRKRKESNT  
DSAGALGTLRFVFLGSRAYPHFCAFARAVDTRLEELG  
GERLLQLGQGD  
ELCGQEEAFRGWAQAAFQAACETFCVGEDAKAAARDIF  
SPKRSWKRQRYR  
LSAQAEGLQLLPGLIHVHRRKMFQATIRSVENLQSSKSTR  
ATILVRLDTG  
GQEGLQYQPGDHIGVCPNRPGLVEALLSRVEDPPAPTE  
PVAVEQLEKGS  
PGGPPPGWVRDPRLPPCTLRQALFFLDITSPSPQLRL  
LSTLAEPRE  
QQELEALSQDPRRYEEWKWFRCPTLLEVLEQFPSVALPA  
PLLLTQLPLLQ  
PRYSVSSAPSTHPGEIHLTVAVLAYRTQDGLGPLHYGVC  
STWLSQLKPG  
DPVPCFIRGAPSFRLPPDPSLPCILVGPGTGIAPFRGFWQ  
ERLHDIESKG  
LQPTPMTLVFGCRCSQLDHLRDEVQNAQQRGVFGRVLT  
AFSREPDNPKT  
YQDILRTELAAEVHRVLCCLERGHMFVCGDVTMATNVLQT  
VQRILATEGD  
MELDEAGDVIGVLRDQQRYPHEDIFGLTLRTQEVTSRIRTQS  
FSLQERQLR GAVPWAFDPPGSDTNSP

<b>Predicted molecular weight</b>	135 kDa including tags
<b>Amino acids</b>	2 to 1203
<b>Tags</b>	His-DDDDK tag N-Terminus
<b>Additional sequence information</b>	This product is for the mature full length protein from aa 2 to 1203. The initial Met is not included. GenBank Accession No. NM_000603.

## Specifications

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Our **Abpromise guarantee** covers the use of **ab198066** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**Form** Liquid

## Preparation and Storage

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**Stability and Storage** Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.  
pH: 8.00  
Preservative: 1.77% Imidazole  
Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine)

## General Info

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**Function** 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.

**Tissue specificity**

Platelets, placenta, liver and kidney.

**Involvement in disease**

Variation in NOS3 seem to be associated with susceptibility to coronary spasm.

**Sequence similarities**

Belongs to the NOS family.  
Contains 1 FAD-binding FR-type domain.  
Contains 1 flavodoxin-like domain.

**Post-translational modifications**

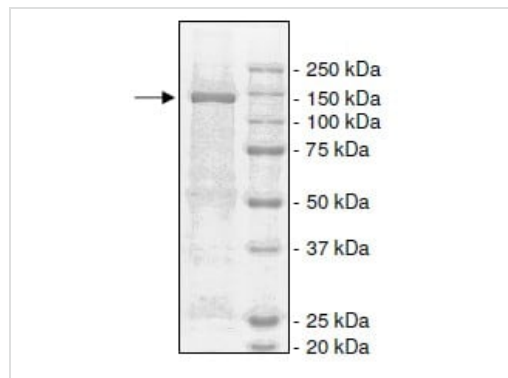
Phosphorylation by AMPK at Ser-1177 in the presence of Ca(2+)-calmodulin (CaM) activates activity. In absence of Ca(2+)-calmodulin, AMPK also phosphorylates Thr-495, resulting in inhibition of activity (By similarity). Phosphorylation of Ser-114 by CDK5 reduces activity.

**Cellular localization**

Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Specifically associates with actin cytoskeleton in the G2 phase of the cell cycle and which is favored by interaction with NOSIP and results in a reduced enzymatic activity.

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**Images**



4-20% SDS-PAGE analysis of 1.6 µg ab198066 with Coomassie staining.

SDS-PAGE - Recombinant Human eNOS protein (Tagged) (ab198066)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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