

Product datasheet

Recombinant Human eNOS protein (Tagged) ab198066

1 Image

Description

Product name	Recombinant Human eNOS protein (Tagged)
Purity	>= 71 % SDS-PAGE.
Expression system	Baculovirus infected Sf9 cells
Accession	P29474
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<p>MHHHHHHDYKDDDDKGNLKSVAQEPGPPCGLGLGL GLGLCGKQGPATPAP EPSRAPASLLPPAPEHSPPSSPLTQPPEGPKFPRVKN WEVGSITYDTLSA QAQQDGPCTPRRCLGSLVFPRKLQGRPSGPPAPEQ LLSQARDFINQYYS SIKRSGSQAHEQRLQEVEAEVAATGTYQLRESELVFG AKQAWRNAPRCVG RIQWGKLQVFDARDCRSAQEMFTYICNHIKYATNRGNL RSAITVFPQRCP GRGDFRMNSQLVRYAGYRQQDGSVRGDPANVEITEL CIQHGWTGNGRF DVLPLLLQAPDDPPELFLLPPELVLEVPLEHPTLEWFA ALGLRWYALPAV SNMLLEIGGLEFPAAPFSGWYMSTEIGTRNLCDPHRYN ILEDVAVCMDLD TRTTSSLWKDKAAVEINAVLHSYQLAKVTVDHHAAT ASFMKHLNEQK ARGGCPADWAWIVPPISGSLTPVFHQEMVNYFLSPAF RYQPDPWKGSAAK GTGITRKKTFKEVANAVKISASLMGTVMAKRVKATILYG SETGRAQSYAQ QLGRLEFRKAFDPRVLCMDEYDVVSLEHETLVLVVTST FGNGDPPENGESF AAALMEMSGPYNSSPRPEQHKSYPKIRFNSISCSGPLV</p>

SSWRRKRKESST
 DSAGALGTLRFVFLGSRAYPHFCAFARAVDTRLEE
 LGGERLLQLGQGD
 ELCGQEEAFRGWAQAAFQAACETFCVGEDAKAAAR
 DIFSPKRQSWKRQRYR
 LSAQAEGQLLLPGLIHVHRRKMFQATIRSVENLQSSKS
 TRATILVRLDTG
 GQEGLQYQPGDHIGVCPNRPGLVEALLSRVEDPPAP
 TEPVAVEQLEKGS
 PGGPPPGWVRDPRLPCTLRQALTFFLDITSPSPQL
 LRLSTLAEEP
 QQELEALSQDPRRYEEWKWFRCPPTLLEVLEQFPSVA
 LPAPLLLTLPLLQ
 PRYYSVSSAPSTHPGEIHLTVAVLAYRTQDGLGPLHYG
 VCSTWLSQLKPG
 DPVPCFIRGAPSFRLPPDPSLPCILVGPGTGIAPFRGF
 WQERLHDIESKG
 LQPTPMTLVFGCRCSQLDHLRDEVQNAQQRGVFGR
 VLTAFSREPDNPKT
 YVDILRTELAAEVHRVLCCLERGHMFVCGDVTMATNV
 LQTVQRILATEGD
 MELDEAGDVIGVLRDQQRVYHEDIFGLTLRTQEVTSRIRT
 QSFSLQERQLR GAVPWAFDPPGSDTNSP

Predicted molecular weight	135 kDa including tags
Amino acids	2 to 1203
Tags	His-DDDDK tag N-Terminus
Additional sequence information	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

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

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8 Preservative: 1.77% Imidazole Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol
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General Info

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
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(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.

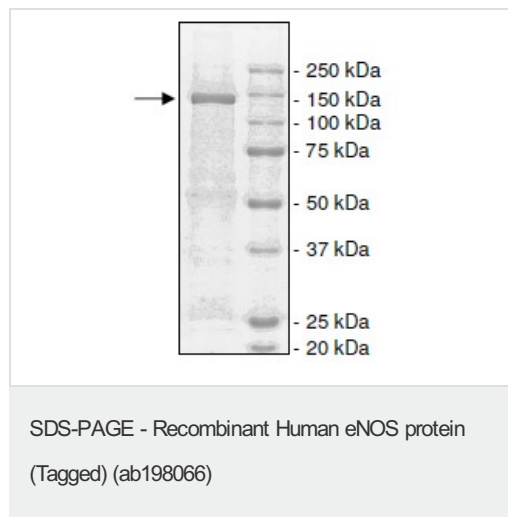
Post-translational modifications

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.

Images



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

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