

Product datasheet

Recombinant Human NADPH oxidase 4 protein ab289740

[1 Image](#)

Description

Product name	Recombinant Human NADPH oxidase 4 protein
Purity	>= 85 % SDS-PAGE.
Expression system	Cell free
Accession	<u>Q9NPH5</u>
Protein length	Full length protein
Animal free	Yes
Nature	Recombinant
Species	Human
Sequence	<pre> MAVSWRSWLA NEGVKHLCLF IWLSMNVLLF WKTFLLYNQG PEYHYLHQLM GLGLCLSRAS ASVLNLNCSL ILLPMCRTLL AYLRGSQKVP SRRTRRLLDK SRTFHITCGV TICIFSGVHV AAHLVNALNF SVNYSEDFVE LNAARYRDED PRKLLFTTVP GLTGVCMMVV LFLMITASTY AIRVSNYDIF WYTHNLFFVF YMLLTLHVSG GLLKYQTNLD THPPGCISLN RTSSQNISLP EYFSEHFHEP FPEGFSKPAE FTQHKFVKIC MEEPRFQANF PQTLWLWISGP LCLYCAERLY RYRSNKPVT IISVMSHPSD VMEIRMVKEN FKARPGQYIT LHCPVSVALE NHPFTLTMCP TETKATFGVH LKIVGDWTER FRDLLLLPSS QDSEILPFIQ SRNYPKLYID GPFSGPFEEES LNYEVSCLVA GGIGVTPFAS ILNTLLDDWK PYKLRRLYFI WVCRDIQSFR WFADLLCMLH NKFWQENRPD YVNIQLYLSQ TDGIQKIIGE KYHALNSRLF IGRPRWKLLF DEIAKYNRGK TVGVFCCGPN SLSKTLHKLS NQNNSYGTRF EYNKESFS </pre>
Predicted molecular weight	70 kDa including tags
Amino acids	1 to 578
Tags	His tag N-Terminus
Additional sequence information	10xHis

Specifications

Our **Abpromise guarantee** covers the use of **ab289740** 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	Lyophilized

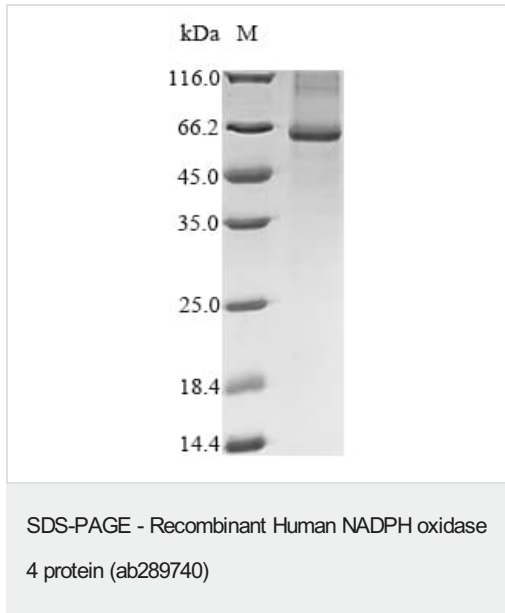
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.40 Constituents: 0.24% Tris, 0.87% Sodium chloride, 0.05% dodecyl 2-(trimethylazaniumyl)ethyl phosphate, 6% Trehalose
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General Info

Function	Constitutive NADPH oxidase which generates superoxide intracellularly upon formation of a complex with CYBA/p22phox. Regulates signaling cascades probably through phosphatases inhibition. May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity. May regulate insulin signaling cascade. May play a role in apoptosis, bone resorption and lipopolysaccharide-mediated activation of NFκB. May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation. Isoform 3 is not functional. Isoform 4 displays an increased activity. Isoform 5 and isoform 6 display reduced activity.
Tissue specificity	Expressed by distal tubular cells in kidney cortex and in endothelial cells (at protein level). Widely expressed. Strongly expressed in kidney and to a lower extent in heart, adipocytes, hepatoma, endothelial cells, skeletal muscle, brain, several brain tumor cell lines and airway epithelial cells.
Sequence similarities	Contains 1 FAD-binding FR-type domain. Contains 1 ferric oxidoreductase domain.
Developmental stage	Expressed in fetal kidney and fetal liver.
Post-translational modifications	Isoform 3 and isoform 4 are N-glycosylated. Isoform 4 glycosylation is required for its proper function.
Cellular localization	Endoplasmic reticulum membrane. Cell membrane. Cell junction > focal adhesion. Nucleus. May localize to plasma membrane and focal adhesions. According to PubMed:15927447, may also localize to the nucleus.

Images



SDS-PAGE analysis of ab289740

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

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