abcam

Product datasheet

Recombinant Human NADPH oxidase 4 protein ab112414

1 Image

Description

Product name	Recombinant Human NADPH oxidase 4 protein
Biological activity	Checker: see comments on **ab112406**.
Expression system	Wheat germ
Accession	**Q9NPH5**
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	LHNKFWQENRPDYVNIQLYLSQTDGIQKIIGEKYHALNSRLFI GRPRWKL LFDEIAKYNRGKTVGVFCCGPNSLSKTLHKLSNQNNSYGT RFEYNKESFS
Predicted molecular weight	37 kDa including tags
Amino acids	479 to 578

Specifications

Our **Abpromise guarantee** covers the use of **ab112414** in the following tested applications.

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

Applications	ELISA Peptide Array SDS-PAGE Western blot
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00

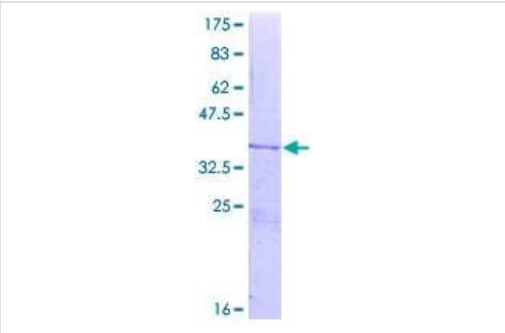
Constituents: 0.31% Glutathione, 0.79% Tris HCl

Glutathione is reduced.

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 lipolysaccharide-mediated activation of NFKB. 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 - Recombinant Human NADPH oxidase 4 protein (ab112414)

12% SDS-PAGE image showing ab112414 at approx 36.63kDa

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

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