

Product datasheet

Recombinant Human Neuroglobin protein ab63278

2 Images

Overview

Product name Recombinant Human Neuroglobin protein
Protein length Full length protein

Description

Nature Recombinant
Source Escherichia coli

Amino Acid Sequence

Species Human
Sequence M-ERPEPELIR QSWRAVSRSP LEHGTVLFAR
 LFALEPDLLP LFQYNCRQFS SPEDCLSSPE
 FLDHIRKVML VIDAAVTNVE DLSSLEEYLA
 SLGRKHRAVG VKLSSFSTVG ELLYMLEKC
 LGPAFTPATR AAWSQLYGAV VQAMSRGWDG E

Specifications

Our [Abpromise guarantee](#) covers the use of **ab63278** in the following tested applications.

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

Applications Western blot
 ELISA
 SDS-PAGE
Purity > 95 % SDS-PAGE.
 Please filter the product by an appropriate sterile filter before using it in the cell culture.
Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
 Preservative: None
 Constituents: 0.1M Sodium chloride, 0.05M PBS, pH 7.2

General Info

Function

Involved in oxygen transport in the brain. Hexacoordinate globin, displaying competitive binding of oxygen or the distal His residue to the iron atom. Not capable of penetrating cell membranes. The deoxygenated form exhibits nitrite reductase activity inhibiting cellular respiration via NO-binding to cytochrome c oxidase. Involved in neuroprotection during oxidative stress. May exert its anti-apoptotic activity by acting to reset the trigger level of mitochondrial cytochrome c release necessary to commit the cells to apoptosis.

Tissue specificity

Predominantly expressed in brain, the strongest expression is seen in the frontal lobe, the subthalamic nucleus and the thalamus.

Sequence similarities

Belongs to the globin family.

Post-translational modifications

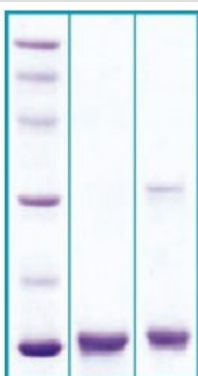
A redox disulfide bond regulates the heme pocket coordination and the rate of nitrite reduction to NO.

Phosphorylated in vitro by ERK1, ERK2 and PKA, and in vivo during hypoxia. Phosphorylation increases nitrite reductase activity.

Cellular localization

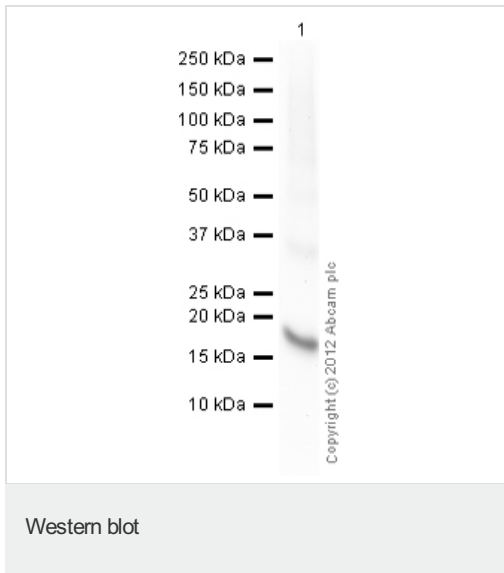
Perikaryon. Cytoplasm. Mitochondrion.

Images



LANE 1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa. LANE 2. reduced and heated sample, 5µg/lane. LANE 3. non-reduced and non-heated sample, 5µg/lane.

SDS-PAGE - Neuroglobin protein (ab63278)



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