

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 LGPFTPATR 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
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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

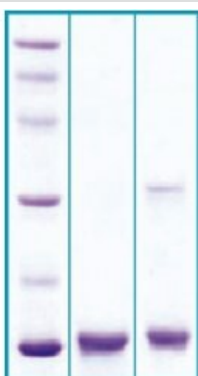
A redox disulfide bond regulates the heme pocket coordination and the rate of nitrite reduction to NO.

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

Cellular localization

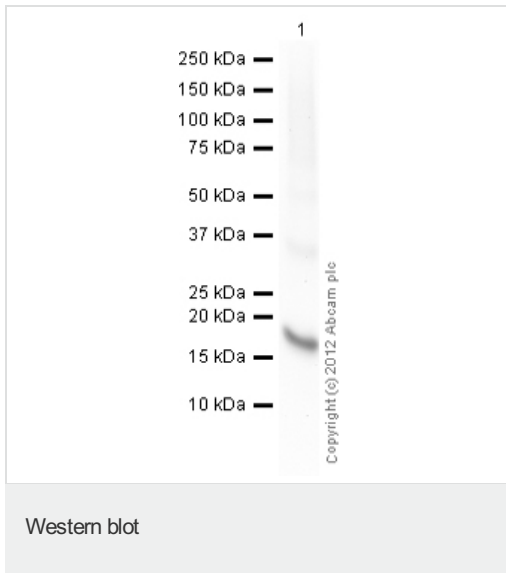
Perikaryon. Cytoplasm. Mitochondrion.

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)



Anti-Neuroglobin antibody [13C8] ([ab37258](#))
at 1 µg/ml + Recombinant Human Neuroglobin
protein ([ab63278](#)) at 0.1 µg

Secondary

Goat Anti-Mouse IgG H&L (HRP)
preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 17 kDa

Exposure time: 4 minutes

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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