

Neuroglobin Human, Chicken Polyclonal Antibody

Product Data Sheet

Source of Antigen: *E.coli*

Host: Hen

Cat. No.:

RD181043050

(0.05 mg)

Other names: NGB

Research topic

Neural tissue markers

Preparation

The antibody was raised in chicken by immunization with the recombinant Human Neuroglobin.

Amino Acid Sequence

The immunization antigen (17 kDa) is a protein containing 150 AA of recombinant Human Neuroglobin and one extra AA, N-terminal methionin (highlighted).

MERPEPELIR QSWRAVSRSP LEHGTVLFAR LFALEPDLLP LFQYNCRQFS SPEDCLSSPE FLDHIRKVML VIDAAVTNVE
DLSLEEYLA SLGRKHRAVG VKLSSFSTVG ESLLYMLEKC LGPAFTPATR AAWSQLYGAV VQAMSRGWDG E

Species Reactivity

Human, Dog, Rat

Not yet tested in other species.

Purification Method

Immunoaffinity chromatography on a column with immobilized recombinant Human Neuroglobin.

Antibody Content

0.05 mg (determined by BCA method, BSA was used as a standard)

Formulation

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. **AZIDE FREE.**

Reconstitution

Add 0.05 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

Expiration

See vial label.

Lot Number

See vial label.

Quality Control Test

Indirect ELISA - to determine titer of the antibody

SDS PAGE - to determine purity of the antibody

Applications

Western blotting

Introduction to the Molecule

Neuroglobin, 151 amino acid residue protein, mainly expressed in vertebrate brain and retina, is a recently identified member of the globin superfamily. Augmenting O₂ supply, neuroglobin promotes survival of neurons upon hypoxic injury, potentially limiting brain damage. Moreover, neuroglobin may be a novel oxidative stress-responsive sensor for signal transduction in the brain. Neuroglobin expression is increased by neuronal hypoxia in vitro and focal cerebral ischemia in vivo, and neuronal survival after hypoxia is reduced by inhibiting neuroglobin expression with an antisense oligodeoxynucleotide and enhanced by neuroglobin overexpression

References to this Product

- Li RC, Lee SK, Pournfar F, Brittan KR, Clair HB, Row BW, Wang Y, Gozal D . *Hypoxia differentially regulates the expression of neuroglobin and cytoglobin in rat brain*. [Brain Res](#) . Jun 22;1096(1):173-9 (2006)
- Ostojic J, Sakaguchi DS, de Lathouder Y, Hargrove MS, Trent JT 3, Kwon YH, Kardon RH, Kuehn MH, Betts DM, Grozdanic S . *Neuroglobin and cytoglobin: oxygen-binding proteins in retinal neurons*. [Invest Ophthalmol Vis Sci](#) . Mar;47(3):1016-23 (2006)
- Rajendram R, Rao NA . *Neuroglobin in normal retina and retina from eyes with advanced glaucoma*. [Br J Ophthalmol](#) . May;91(5):663-6 (2007)

Note

This product is for research use only.

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: info@biovendor.com sales@biovendor.com www.biovendor.com Web:
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail: infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail: infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail: infoUSA@biovendor.com