

NGB

Recombinant Human Neuroglobin

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|--------------------|---------|------------------|--------|
| Catalog No. | CRN007A | Quantity: | 2 µg |
| | CRN007B | | 10 µg |
| | CRN007C | | 1.0 mg |

Description: Neuroglobin is a recently identified member of the globin superfamily expressed primarily in the vertebrate brain and retina. Neuroglobin promotes survival of neurons upon hypoxic injury by augmenting O₂ supply, thereby 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*. Neuronal survival after hypoxia is reduced by inhibiting neuroglobin expression with an antisense oligodeoxynucleotide and enhanced by neuroglobin overexpression.
Recombinant Human Neuroglobin contains 151 aa residues.

GenelD: 58157

Source: *E. coli*

Molecular Weight: 17 kDa

Formulation: Sterile filtered and lyophilized from a 0.5 mg/ml solution containing 0.05 M phosphate buffer + 0.1 M NaCl, pH 7.2.

Purity: > 95% as determined by SDS-PAGE.

Purification Method: Two-step procedure using size exclusion chromatography before and after refolding.

Specificity: The amino acid sequence of the Recombinant Human Neuroglobin is 100% homologous to the amino acid sequence of native human Neuroglobin.

Amino Acid Sequence: MERPEPELIR QSWRAVSRSP LEHGTVLFAR LFALEPDLLP LFQYNCRQFS
SPEDCLSSPE FLDHIRKVML VIDAAVTNVE DLSSLEEYLA SLGRKHRAVG
VKLSSFSTVG ELLYMLEKC LGPAFTPATR AAWSQLYGAV VQAMSRGWDG E.

Reconstitution: **Centrifuge vial prior to opening.** Add 0.2 ml of distilled water and let the lyophilized pellet dissolve completely.

Applications: Western blotting.

Storage & Stability: Store lyophilized protein at -20°C. The lyophilized protein remains stable until the expiration date when stored at -20°C. Aliquot the product after reconstitution and store at -20 to -80°C. **Avoid repeated freeze-thaw cycles.**

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