

Recombinant Human NGB

Cat. No. NGB-229H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Total 151 AA. MW: 17 kDa (calculated). 150 AA of recombinant human Neuroglobin and one extra AA, N-terminal methionin (highlighted).
Species	Human
Source	E.coli
Description	NGB is a member of the vertebrate globin family involved in cellular oxygen homeostasis. It is an intracellular hemoprotein expressed in the central and peripheral nervous system, cerebrospinal fluid, retina and endocrine tissues. Neuroglobin is a monomer that reversibly binds oxygen with an affinity higher than that of hemoglobin. It also increases oxygen availability to brain tissue and provides protection under hypoxic or ischemic conditions, potentially limiting brain damage. It is of ancient evolutionary origin, and is homologous to nerve globins of invertebrates.
Form	Filtered (0, 4 µm) and lyophilized in 0.5 mg/mL in 0.05 M phosphate buffer, 0.1 M NaCl, Ph 7.2
Research topic	Energy metabolism and body weight regulation
Purity	>95%
Reconstitution	Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

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Applications	ELISA; Western blotting
Quality Control Test	BCA to determine quantity of the protein; SDS PAGE to determine purity of the protein
Sequences of amino acids	MERPEPELIR QSWRAVSRSP LEHGTVLFR LFALEPDLLP LFQYNCRQFS SPEDCLSSPE FLDHIRKVML VIDAAVTNVE DLSSLEEYLA SLGRKHRAVG VKLSSFSTVG ELLYMLEKC LGPAFTPATR AAWSQLYGAV VQAMSRGWDG E
Storage	Store lyophilized protein at -20°C. Lyophilized protein remains stable until the expiry date when stored at -20°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after one week at 4°C.

GENE INFORMATION

Gene Name	NGB neuroglobin [Homo sapiens]
Official Symbol	NGB
Synonyms	NGB; neuroglobin
Gene ID	58157
mRNA Refseq	NM_021257
Protein Refseq	NP_067080
MIM	605304

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UniProt ID	Q9NPG2
Chromosome Location	14q24
Function	heme binding; metal ion binding; oxygen binding; oxygen transporter activity
Neuroglobin	