

Recombinant Human Neuroglobin(NGB)

Catalog No: #AP70584

Package Size: #AP70584-1 20ug #AP70584-2 100ug #AP70584-3 1mg

Description

Product Name	Recombinant Human Neuroglobin(NGB)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-151aaSequence Info:Full Length
Accession No.	Q9NPG2
Calculated MW	32.9 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	MERPEPELIRQSWRAVSRSPLEHGTVLFARLFALPDLLPLFQYNCRQFSSPEDCLSSPEFLDHIRKVMLVIDA AVTNVEDLSSLEEYLASLGRKHRAVGVKLSSFSTVGESLLYMLEKCLGPAFTPATRAAWSQLYGAVVQAMSR GWDGE
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

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 mbranes. 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.

References

14-3-3 binding and phosphorylation of neuroglobin during hypoxia modulate six-to-five heme pocket coordination and rate of nitrite reduction to nitric oxide.Jayaraman T., Tejero J., Chen B.B., Blood A.B., Frizzell S., Shapiro C., Tiso M., Hood B.L., Wang X., Zhao X., Conrads T.P., Mallampalli R.K., Gladwin M.T.J. Biol. Chem. 286:42679-42689(2011) Research Topic:Transport

Note: This product is for in vitro research use only and is not intended for use in humans or animals.