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Anti-Neuroglobin Antibody

Catalog # AP95977

Product Information

Application	WB, FC
Primary Accession	Q9NPG2
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	16933

Additional Information

Gene ID	58157
Other Names	Neuroglobin
Target/Specificity	Recombinant fusion protein of human Neuroglobin expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

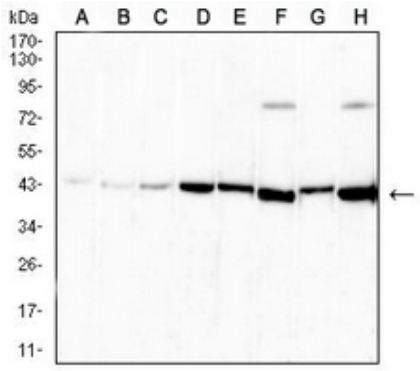
Protein Information

Name	NGB (HGNC:14077)
Function	Monomeric globin with a bis-histidyl six-coordinate heme-iron atom through which it can bind dioxygen, carbon monoxide and nitric oxide (PubMed:11473128, PubMed:12962627, PubMed:24699645). Could help transport oxygen and increase its availability to the metabolically active neuronal tissues, though its low quantity in tissues as well as its high affinity for dioxygen, which may limit its oxygen-releasing ability, argue against it (PubMed:11473128, PubMed:12860983, PubMed:12962627, PubMed:24699645). The ferrous/deoxygenated form exhibits a nitrite reductase activity and it could produce nitric oxide which in turn inhibits cellular respiration in response to hypoxia (PubMed:21296891). In its ferrous/deoxygenated state, it may also exhibit GDI (Guanine nucleotide Dissociation Inhibitor) activity toward heterotrimeric G-alpha proteins, thereby regulating signal transduction to facilitate neuroprotective responses in the wake of hypoxia and associated oxidative stress (PubMed:12860983, PubMed:18302932).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9ER97}. Mitochondrion matrix {ECO:0000250|UniProtKB:Q9ER97}. Note=Enriched in mitochondrial matrix

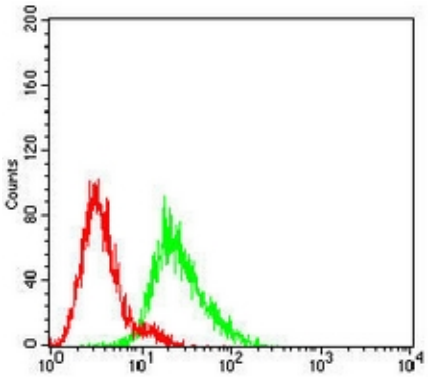
upon oxygen-glucose deprivation. {ECO:0000250|UniProtKB:Q9ER97}

Tissue Location Predominantly expressed in brain, the strongest expression is seen in the frontal lobe, the subthalamic nucleus and the thalamus.

Images



Western blot analysis of Neuroglobin expression in rat liver (A), mouse liver (B), mouse brain (C), A549 (D), HUVEC (E), Hela (F), U251 (G), HepG2 (H) whole cell lysates. (Predicted band size: 17 kD; Observed band size: 42 kD)



Flow cytometric analysis of HT29 cells using Anti-Neuroglobin Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.