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Myoglobin Antibody

Rabbit mAb
Catalog # AP90634

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	P02144
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	MB; MGC13548; MYG; Myoglobin; PVALB;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	17184

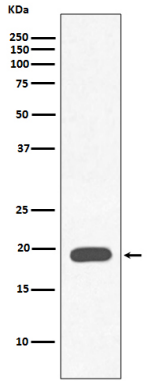
Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:30
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Myoglobin
Description	Myoglobin (MB) is an oxygen-binding protein that contains one polypeptide chain and one heme group. Reversible oxygen binding occurs by a linkage with the imidazole nitrogen of the 91st histidine residue in the myoglobin chain. Research studies indicate that the blockade of myoglobin in isolated cardiac myocytes mimics hypoxia when electrically stimulated for paced contractions. During fetal development, myoglobin is required to support cardiac function.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	MB (HGNC:6915)
Function	Monomeric heme protein which primary function is to store oxygen and facilitate its diffusion within muscle tissues. Reversibly binds oxygen through a pentacoordinated heme iron and enables its timely and efficient release as needed during periods of heightened demand (PubMed:30918256, PubMed:34679218). Depending on the oxidative conditions of tissues and cells, and in addition to its ability to bind oxygen, it also has a nitrite reductase activity whereby it regulates the production of bioactive nitric oxide (PubMed:32891753). Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (PubMed:34679218).
Cellular Location	Cytoplasm, sarcoplasm

Images



Western blot analysis of Myoglobin expression in Human heart muscle lysate.

Image not found : 202311/AP90634-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human skeletal muscle, using Myoglobin Antibody.

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