

Anti-Myoglobin Antibody (Monoclonal, MG-1)

Catalog # ABO10450

Product Information

Application	IHC-P
Primary Accession	Q9QZ76
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for Myoglobin, myoglobin (MB) detection. Tested with IHC-P in Human. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	59108
Other Names	Myoglobin, Mb
Calculated MW	17157
Application Details	Immunohistochemistry(Paraffin-embedded Section), 1-2 µg/ml, Human, By Heat
Source	Eukaryota
Protein Name	Myoglobin
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Clone Names	MG-1
Immunogen	Purified human skeletal muscle myoglobin.
Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the globin family.

Protein Information

Name	Mb {ECO:0000312 RGD:620411}
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: 3118370). 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. Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (By similarity).
Cellular Location	Cytoplasm, sarcoplasm {ECO:0000250 UniProtKB:P02144}

Background

Human myoglobin has 152 residues. Two myoglobin variants were found. The myoglobin locus mapped to 22q11-22q13. The myoglobin gene is about 10.5 kb long and contains two introns as in the case with hemoglobin genes. Myoglobin may serve a variety of functions in muscular oxygen supply, such as O(2) storage, facilitated O(2) diffusion, and myoglobin-mediated oxidative phosphorylation.

Images



Anti-Myoglobin antibody (monoclonal), ABO10450,
Western blottingWB: Rat Skeletal Muscle Tissue Lysate

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