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Anti-Myoglobin MB Rabbit Monoclonal Antibody

Catalog # ABO13980

Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P02144
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Myoglobin MB Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	4151
Other Names	Myoglobin, Nitrite reductase MB, 1.7.-.-, Pseudoperoxidase MB, 1.11.1.-, MB (HGNC:6915)
Calculated MW	17184
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:30
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: FOD-13
Immunogen	A synthesized peptide derived from human Myoglobin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

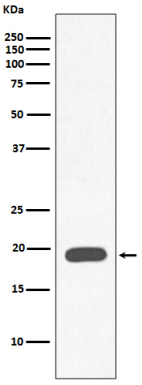
Protein Information

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

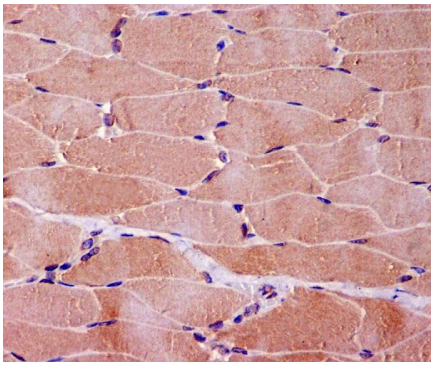
a pentacoordinated heme iron and enables its timely and efficient release as needed during periods of heightened demand (PubMed:30918256, PubMed:34679218). Depending on the oxidative conditions of tissues and cells, and in addition to its ability to bind oxygen, it also has a nitrite reductase activity 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.



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

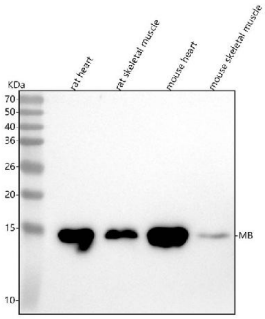


Figure 1. Western blot analysis of MB using anti-MB antibody (M04058).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: rat heart tissue lysates,
Lane 2: rat skeletal muscle tissue lysates,
Lane 3: mouse heart tissue lysates,
Lane 4: mouse skeletal muscle tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MB antigen affinity purified monoclonal antibody (Catalog # M04058) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent

detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MB at approximately 15 kDa. The expected band size for MB is at 17 kDa.

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