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Myoglobin Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2032b

Product Information

Application	WB, E
Primary Accession	P02144
Other Accession	P02189, P02150, NP_005359.1
Reactivity	Human, Mouse
Predicted	Monkey, Pig, Bovine, Rabbit
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	444CT19.2.1
Calculated MW	17184
Antigen Region	103-130

Additional Information

Gene ID	4151
Other Names	Myoglobin, MB
Target/Specificity	This Myoglobin antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 103-130 amino acids from human Myoglobin.
Dilution	WB~~1:250~1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Myoglobin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

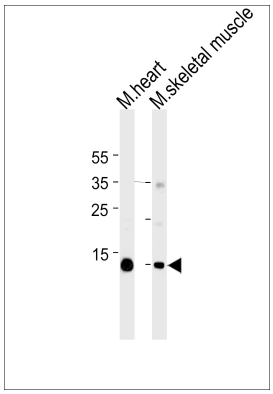
Background

This gene encodes a member of the globin superfamily and is expressed in skeletal and cardiac muscles. The encoded protein is a haemoprotein contributing to intracellular oxygen storage and transcellular facilitated diffusion of oxygen. At least three alternatively spliced transcript variants encoding the same protein have been reported.

References

Esquerra, R.M., et al. Phys Chem Chem Phys 12(35):10270-10278(2010)
Endeward, V., et al. Cardiovasc. Res. 87(1):22-29(2010)
Balobanov, V.A., et al. Mol. Biol. (Mosk.) 44(4):708-717(2010)
Kristiansen, G., et al. Br. J. Cancer 102(12):1736-1745(2010)
Rayner, B.S., et al. Biochem. J. 423(2):169-177(2009)

Images



Myoglobin Antibody (Cat. #AM2032b) western blot analysis in mouse heart and skeletal muscle tissue lysates (35µg/lane).This demonstrates the Myoglobin antibody detected the Myoglobin protein (arrow).

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