

Myoglobin Antibody (Ascites)

Mouse Monoclonal Antibody (Mab) Catalog # AM2032a

Product Information

Application	WB, E
Primary Accession	<u>P02144</u>
Other Accession	<u>P02189, P02150, NP_005359.1</u>
Reactivity	Human, Mouse
Predicted	Monkey, Pig
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~~1:500~8000 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
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 (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MB (<u>HGNC:6915</u>)
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: <u>30918256</u> ,

PubMed:<u>34679218</u>). 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:<u>32891753</u>). Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (PubMed:<u>34679218</u>).

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





Anti- at 1:1000 dilution + human skeletal muscle lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Myoglobin Antibody (Cat. #AM2032a) western blot analysis in mouse heart 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'.