

Myoglobin Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2032b**Specification**

Myoglobin Antibody - Product Information

Application	WB,E
Primary Accession	P02144
Other Accession	P02189 , P02150 , NP_005359.1 , P68082
Reactivity	Human, Mouse
Predicted	Horse, Monkey, Pig
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Antigen Region	103-130

Myoglobin Antibody - 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~~1:1000

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.

Myoglobin Antibody - 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

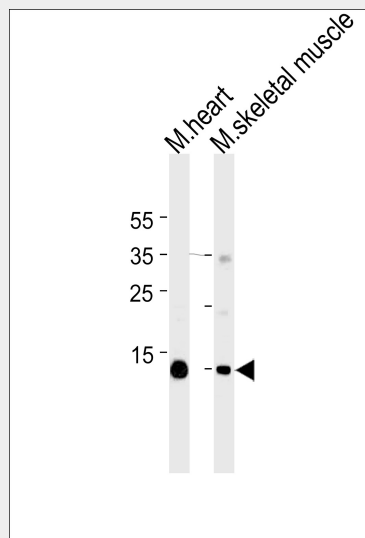
Cytoplasm, sarcoplasm

Myoglobin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Myoglobin Antibody - 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).

Myoglobin Antibody - 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.

Myoglobin Antibody - 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)