

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

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**Myoglobin Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB,E   |
| Primary Accession | <a href="#">P02144</a>   |
| Other Accession   | <a href="#">P02189</a> , <a href="#">P02150</a> , <a href="#">NP_005359.1</a> , <a href="#">P68082</a> |
| 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

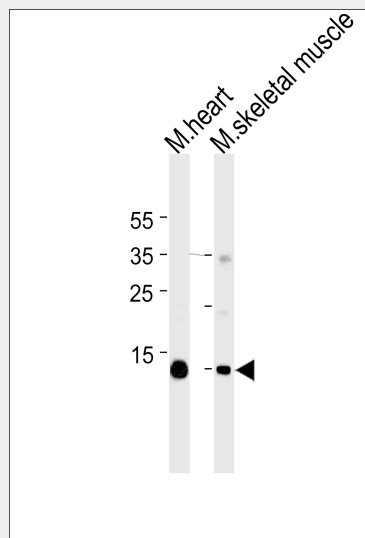
Cytoplasm, sarcoplasm

### 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)