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# Anti-Myoglobin Antibody (Monoclonal, MG-1)

**Catalog # ABO10450**

## Specification

### Anti-Myoglobin Antibody (Monoclonal, MG-1) - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | Q9QZ76 |
| Host | **Mouse** |
| Isotype | **Mouse IgG1** |
| Reactivity | **Human** |
| Clonality | **Monoclonal** |
| Format | **Lyophilized** |

**Description**
Mouse IgG monoclonal antibody for Myoglobin, myoglobin (MB) detection. Tested with IHC-P in Human. No cross reactivity with other proteins.

**Reconstitution**
Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

### Anti-Myoglobin Antibody (Monoclonal, MG-1) - Additional Information

**Gene ID** 59108

**Other Names**
Myoglobin, Mb

**Calculated MW**
17157 MW KDa

**Application Details**
Immunohistochemistry(Paraffin-embedded Section), 1-2 µg/ml, Human, By Heat<br> <br>

**Protein Name**
Myoglobin

**Contents**
Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

**Immunogen**
Purified human skeletal muscle myoglobin.

**Purification**
Ascites

**Cross Reactivity**
No cross reactivity with other proteins

| | |
|---|---|
| Storage | **At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be** |

**aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

**Sequence Similarities**
Belongs to the globin family.

## Anti-Myoglobin Antibody (Monoclonal, MG-1) - Protein Information

**Name** Mb {ECO:0000312|RGD:620411}

**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:<a href="http://www.uniprot.org/citations/3118370" target="_blank">3118370</a>). 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. Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (By similarity).

**Cellular Location**
Cytoplasm, sarcoplasm {ECO:0000250|UniProtKB:P02144}

## Anti-Myoglobin Antibody (Monoclonal, MG-1) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-Myoglobin Antibody (Monoclonal, MG-1) - Images

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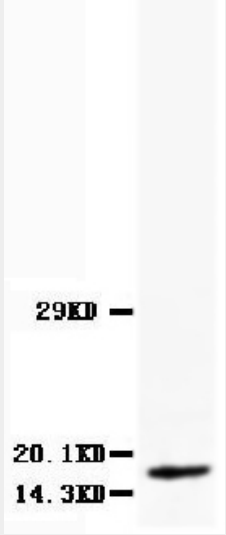


Anti-Myoglobin antibody (monoclonal), ABO10450, Western blottingWB: Rat Skeletal Muscle Tissue Lysate

**Anti-Myoglobin Antibody (Monoclonal, MG-1) - Background**

Human myoglobin has 152 residues. Two myoglobin variants were found. The myoglobin locus mapped to 22q11-22q13. The myoglobin gene is about 10.5 kb long and contains two introns as in the case with hemoglobin genes. Myoglobin may serve a variety of functions in muscular oxygen supply, such as O(2) storage, facilitated O(2) diffusion, and myoglobin-mediated oxidative phosphorylation.