

## **Anti-Myoglobin Picoband Antibody**

Catalog # ABO13025

# **Specification**

## **Anti-Myoglobin Picoband Antibody - Product Information**

Application WB
Primary Accession P02144
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Myoglobin(MB) detection. Tested with WB in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-Myoglobin Picoband Antibody - Additional Information

**Gene ID 4151** 

Other Names Myoglobin, MB

Calculated MW 17184 MW KDa

**Application Details** 

Western blot, 0.1-0.5 μg/ml, Human<br>

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

### **Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Myoglobin (3-35aa LSDGEWQLVLNVWGKVEADIPGHGQEVLIRLFK), different from the related mouse sequence by three amino acids, and from the related rat sequence by six amino acids.

### **Purification**

Immunogen affinity purified.

## **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.



### **Anti-Myoglobin Picoband 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:<a href="http://www.uniprot.org/citations/30918256" target="\_blank">30918256</a>, PubMed:<a href="http://www.uniprot.org/citations/34679218" target="\_blank">34679218</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 (PubMed:<a href="http://www.uniprot.org/citations/32891753" target="\_blank">32891753</a>). Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (PubMed:<a href="http://www.uniprot.org/citations/34679218" target=" blank">34679218</a></a>).

#### **Cellular Location**

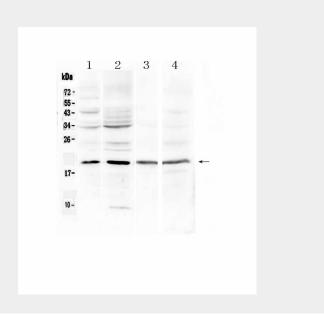
Cytoplasm, sarcoplasm

### **Anti-Myoglobin Picoband 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 Cytomety
- Cell Culture

# **Anti-Myoglobin Picoband Antibody - Images**





Tel: 858.875.1900 Fax: 858.875.1999

Figure 1. Western blot analysis of Myoglobin using anti-Myoglobin antibody (ABO13025).

## Anti-Myoglobin Picoband Antibody - Background

Myoglobin(MB) also known as PVALB, is a single-chain globular protein of 153 or 154 amino acids, containing a heme (iron-containing porphyrin) prosthetic group in the center around which the remaining apoprotein folds. It is a member of the globin superfamily and is expressed in skeletal and cardiac muscles. This gene is mapped to chromosome 22q11-q13. Myoglobin is released from damaged muscle tissue (rhabdomyolysis), which has very high concentrations of myoglobin. The released myoglobin is filtered by the kidneys but is toxic to the renal tubular epithelium and so may cause acute renal failure.