

Anti-Myoglobin Antibody
Catalog # ABO11135**Specification**

Anti-Myoglobin Antibody - Product Information

Application	IHC, WB
Primary Accession	P04247
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Myoglobin(MB) detection. Tested with WB, IHC-P in Mouse;Rat.

Reconstitution

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

Anti-Myoglobin Antibody - Additional Information

Gene ID 17189

Other Names

Myoglobin, Mb

Calculated MW

17070 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Rat, Mouse

Protein Name

myoglobin

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of mouse Myoglobin(138-154aa LFRNDIAAKYKELGFQG), identical to the related rat sequence.

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 Antibody - Protein Information

Name Mb {ECO:0000312|MGI:MGI:96922}

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:10468637, PubMed:11304494). 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 (By similarity). Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (PubMed:15132981).

Cellular Location

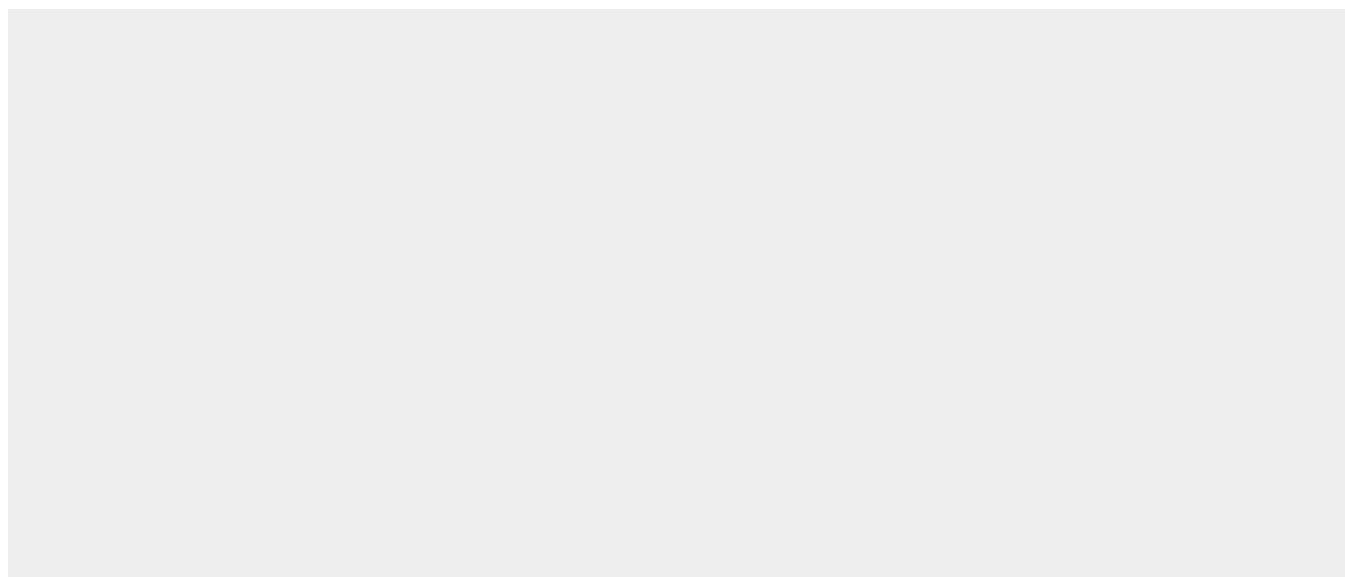
Cytoplasm, sarcoplasm {ECO:0000250|UniProtKB:P02144}

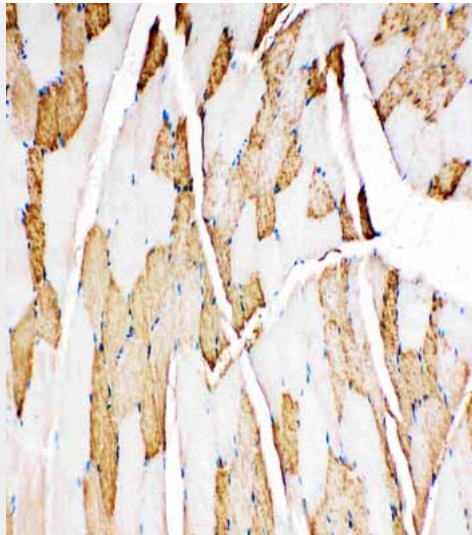
Anti-Myoglobin Antibody - Protocols

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

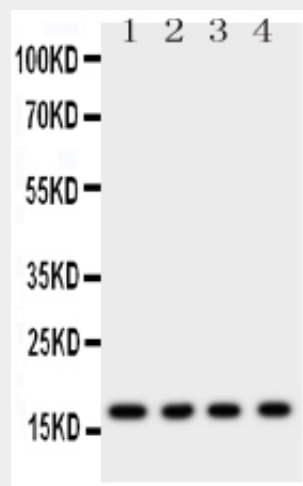
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Myoglobin Antibody - Images





Anti-Myoglobin antibody, ABO11135, IHC(P)IHC(P): Rat Skeletal Muscle Tissue



Anti-Myoglobin antibody, ABO11135, Western blottingAll lanes: Anti Myoglobin (ABO11135) at 0.5ug/mlLane 1: Rat Skeletal Muscle Tissue Lysate at 50ugLane 2: Rat Heart Tissue Lysate at 50ugLane 3: Rat Liver Tissue Lysate at 50ugLane 4: Rat Intestine Tissue Lysate at 50ugPredicted bind size: 17KDObserved bind size: 17KD

Anti-Myoglobin 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.