

# Anti-Myoglobin Antibody

Catalog # ABO11135

## Product Information

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|--------------------------|-------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC-P                                                                                       |
| <b>Primary Accession</b> | <a href="#">P04247</a>                                                                          |
| <b>Host</b>              | Rabbit                                                                                          |
| <b>Reactivity</b>        | Mouse, Rat                                                                                      |
| <b>Clonality</b>         | Polyclonal                                                                                      |
| <b>Format</b>            | Lyophilized                                                                                     |
| <b>Description</b>       | 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.

## Additional Information

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| <b>Gene ID</b>             | 17189                                                                                                                                                                             |
| <b>Other Names</b>         | Myoglobin, Mb                                                                                                                                                                     |
| <b>Calculated MW</b>       | 17070                                                                                                                                                                             |
| <b>Application Details</b> | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Rat, Mouse                                                      |
| <b>Source</b>              | Eukaryota                                                                                                                                                                         |
| <b>Protein Name</b>        | myoglobin                                                                                                                                                                         |
| <b>Contents</b>            | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.                                                                                            |
| <b>Immunogen</b>           | A synthetic peptide corresponding to a sequence at the C-terminus of mouse Myoglobin(138-154aa LFRNDIAAKYKELGFQG), identical to the related rat sequence.                         |
| <b>Purification</b>        | Immunogen affinity purified.                                                                                                                                                      |
| <b>Cross Reactivity</b>    | No cross reactivity with other proteins                                                                                                                                           |
| <b>Storage</b>             | At -20 °C for one year. After reconstitution, 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. |

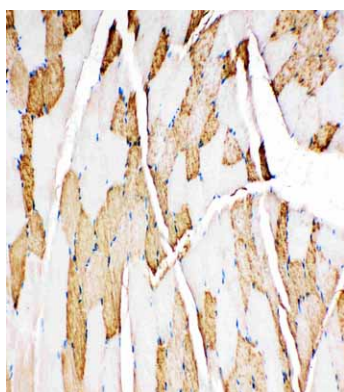
## Protein Information

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| 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: <a href="#">10468637</a> , PubMed: <a href="#">11304494</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 (By similarity). Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (PubMed: <a href="#">15132981</a> ). |
| Cellular Location | Cytoplasm, sarcoplasm {ECO:0000250   UniProtKB:P02144}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## 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.

## 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.