

Myoglobin Antibody

Rabbit mAb Catalog # AP90634

Specification

Myoglobin Antibody - Product Information

WB, IHC, ICC, IP Application

Primary Accession P02144 Reactivity Rat Clonality **Monoclonal**

Other Names

MB; MGC13548; MYG; Myoglobin; PVALB;

Isotype Rabbit IgG Host **Rabbit** Calculated MW 17184 Da

Myoglobin Antibody - Additional Information

Purification **Affinity-chromatography**

Immunogen A synthesized peptide derived from human

Myoglobin

Description Myoglobin (MB) is an oxygen-binding protein that contains one polypeptide

chain and one heme group. Reversible oxygen binding occurs by a linkage with the imidazole nitrogen of the 91st histidine residue in the myoglobin chain. Research studies indicate that the blockade of myoglobin in isolated cardiac myocytes

mimics hypoxia when electrically

stimulated for paced contractions. During fetal development, myoglobin is required

to support cardiac function.

Rabbit IgG in phosphate buffered saline, Storage Condition and Buffer

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

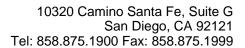
freeze / thaw cycle.

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:<a





href="http://www.uniprot.org/citations/34679218" target="_blank">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).

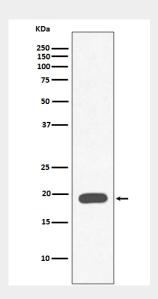
Cellular Location Cytoplasm, sarcoplasm

Myoglobin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Myoglobin Antibody - Images



Western blot analysis of Myoglobin expression in Human heart muscle lysate.