

Myoglobin Antibody

Rabbit mAb Catalog # AP90634

Specification

Myoglobin Antibody - Product Information

Application WB, IHC, ICC, IP

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

Dilution WB~~1:1000

IHC~~1:100~500

ICC~~N/A IP~~N/A

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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

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: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).

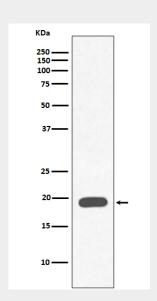
Cellular LocationCytoplasm, sarcoplasm

Myoglobin Antibody - Protocols

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

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

Myoglobin Antibody - Images



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