

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

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:<a

<http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/32891753)). Under stress conditions, like hypoxia and anoxia, it also protects cells against reactive oxygen species thanks to its pseudoperoxidase activity (PubMed:[34679218](http://www.uniprot.org/citations/34679218)).

Cellular Location

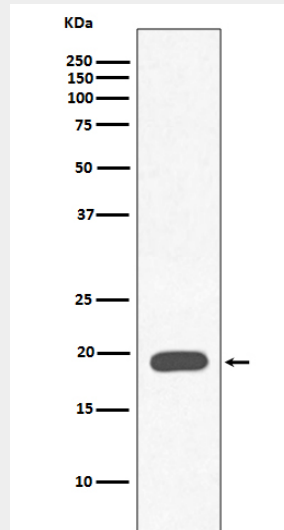
Cytoplasm, sarcoplasm

Myoglobin Antibody - Protocols

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

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

Myoglobin Antibody - Images



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