

**Mouse Anti-Myoglobin [MB/2105]: MC0289, MC0289RTU7**

**Intended Use:** For Research Use Only

**Description:** Myoglobin, an intracellular haemoprotein expressed in the heart and oxidative skeletal myofibres of vertebrates, binds molecular oxygen and may facilitate oxygen transport from erythrocytes to mitochondria, thereby maintaining cellular respiration during periods of high physiological demand. Antibody to myoglobin labels skeletal and cardiac muscle cells. In combination with other striated muscle markers such as vimentin and myogenin, myoglobin is helpful in identification of rhabdomyosarcoma and tumors with skeletal muscle differentiation. Recently, myoglobin has been reported to be expressed on epithelial cancer cells due to changed metabolic and environmental conditions. Myoglobin expression on cancer cells may play a causative role in tumor progression.

**Specifications**

Clone: MB/2105  
Source: Mouse  
Reactivity: Human, mouse, rat  
Isotype: IgG2b/k  
Localization: Nucleus, cytoplasm  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
:  
Package: IHC

Description	Catalog No.	Size
Myoglobin Concentrated	MC0289	1 ml
Myoglobin Prediluted	MC0289RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Heart muscle  
Concentrated Dilution: 25-100  
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE mouse heart stained with anti-Myoglobin using DAB

**References:**

1. MR Assessment of Acute Pathologic Process after Myocardial Infarction in a Permanent Ligation Mouse Model: Role of Magnetic Nanoparticle-Contrasted MRI. Park C, et al. Contrast Media Mol Imaging 2017:2870802, 2017.
2. Plasma biomarkers for neuronal ceroid lipofuscinosis. Hersrud SL, et al. FEBS J 283:459-71, 2016.
3. Isolation and characterization of hair follicle stem cells from Arbas Cashmere goat. He N, et al. Cytotechnology 68:2579-2588, 2016. Comparative Label-Free Mass Spectrometric Analysis of Mildly versus Severely Affected mdx Mouse Skeletal Muscles Identifies Annexin, Lamin, and Vimentin as Universal Dystrophic Markers. Holland A, et al. Molecules 20:11317-44, 2015.