

**Mouse Anti-Actin Alpha Sarcomeric [5C5]: MC0005, MC0005RTU7**

**Intended Use:** For Research Use Only

**Description:** Actin is a cytoskeletal protein that regulates cell motility, secretion, phagocytosis and cytokinesis. The NH<sub>2</sub>-terminal of actin may function as antigen. This terminal may also modulate actin interactions and may associate with proteins such as myosin. This antibody is specific for  $\alpha$ -skeletal and  $\alpha$ -cardiac muscle actins as characterized by ELISA, immunoblot and immunohistochemistry. The antibody shows wide species cross reactivity with tissue from human, sheep, bovine, rabbit, guinea pig, rat, frog, snake, and carp. However, it does not react with smooth muscle tissue.

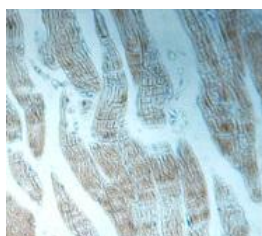
**Specifications:**

Clone: 5C5  
Source: Mouse  
Isotype: IgM  
Reactivity: Human, sheep, bovine, rabbit, guinea pig, rat, frog, snake, and carp  
Localization: Cytoplasm  
Formulation: Antibody in PBS pH7.2, containing < 0.09% gelatin and < 0.09% sodium azide (NaN<sub>3</sub>).  
Storage: Store at 2°- 8°C.  
Applications: IHC, ICC/IF, IP, WB  
Package:

Description	Catalog No.	Size
Actin Alpha Sarcomeric Concentrated	MC0005	1 ml
Actin Alpha Sarcomeric Prediluted	MC0005RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Skeletal muscle  
Concentrated Dilution: 50-200  
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 human skeletal muscle stained with anti-Actin alpha Sarcomeric using DAB

**References:**

1. Mitophagy is required for mitochondrial biogenesis and myogenic differentiation of C2C12 myoblasts. Sin, J., et al. Autophagy. 12: 369-80, 2016.
2. Divergent androgen regulation of unfolded protein response pathways drives prostate cancer. Sheng, X., et al. EMBO molecular medicine. 7: 788-801, 2015.
3. Coherent correlation networks among protein biomarkers of beef tenderness: What they reveal. Gagaoua, M., et al. Journal of proteomics. 128: 365-74, 2015.
4. The glucose-sensing transcription factor MLX promotes myogenesis via myokine signaling. Hunt, LC. et al. Genes & development. 29: 2475-89, 2015.
5. Understanding Early Post-Mortem Biochemical Processes Underlying Meat Color and pH Decline in the Longissimus thoracis Muscle of Young Blond d'Aquitaine Bulls Using Protein Biomarkers. Gagaoua, M., et al. J. Agric. Food Chem. 63: 6799-809, 2015.

Doc. 100-MC0005  
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