

**Mouse Anti-Myosin Skeletal Muscle [F59]: MC0029, MC0029RTU7**

**Intended Use:** For Research Use Only

**Description:** Myosin is a hexameric protein composed of a pair of myosin heavy chains (MYH) and two pairs of nonidentical light chains. Myosin heavy chains are encoded by a multigene family. In mammals at least 10 different myosin heavy chain (MYH) isoforms have been described from striated, smooth, and nonmuscle cells. These isoforms show expression that is spatially and temporally regulated during development. Myosin heavy chains are encoded by the MYH gene family and have Actin-activated ATPase activity which generates the motor function of myosin. Myosin heavy chains, which were initially isolated from a human fetal skeletal muscle, are the major determinant in the speed of contraction of skeletal muscle. Various isoforms of myosin heavy chain are differentially expressed depending on the functional activity of the muscle.

**Specifications**

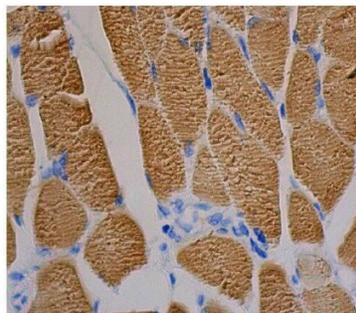
Clone: F59  
Source: Mouse  
Isotype: IgG1k  
Reactivity: Human, mouse, rat, avian  
Immunogen: Myosin purified from adult white Leghorn chicken pectoralis muscle  
Localization: Cytoplasm  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ICC/IF, IP, WB  
Package:

Description	Catalog No.	Size
Myosin Skeletal Muscle Concentrated	MC0029	1 ml
Myosin Skeletal Muscle Prediluted	MC0029RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Skeletal muscle  
Concentrated Dilution: 50-200  
Pretreatment: Tris EDTA pH9.0, 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-Myosin Skeletal Muscle using DAB

**References:**

1. Formoterol attenuates increased oxidative stress and myosin protein loss in respiratory and limb muscles of cancer cachectic rats. Salazar-Degracia A, et al. PeerJ 5:e4109, 2017.
2. Mutation-specific effects on thin filament length in thin filament myopathy. Winter JM, et al. Ann Neurol 79:959-69, 2016.
3. Patel N, et al. Circular and longitudinal muscles shortening indicates sliding patterns during peristalsis and transient lower esophageal sphincter relaxation. Am J Physiol Gastrointest Liver Physiol 309:G360-7, 2015.

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