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Product Information

Anti-Myosin (Skeletal)

antibody produced in rabbit, whole antiserum

Catalog No. M7523

Product Description

Antiserum is produced in rabbit using purified human skeletal myosin (heavy and light chain) as the immunogen. The antiserum has been treated to remove lipoproteins.

Anti-Myosin (Skeletal) is specific for the A band of human skeletal myosin by indirect immunofluorescent labeling. The product does not react with human smooth muscle myosin.

The antibody may be used with immunohistochemistry or immunofluorescent procedures on formalin-fixed or frozen sections of skeletal muscle to study the cytoskeletal architecture of thick filaments.

Myosin is a 480,000 dalton protein known to interact with actin in muscle and in non-muscle cells. It contains two identical heavy chains (200,000 daltons each) and four light chains (15,000-26,000 daltons). Myosin molecules consist of two major regions: tails (rods) and heads; they aggregate into filaments through the tail region and interact with actin and with ATP through the head region. Multiple forms of myosin heavy chains exist for each muscle type; skeletal, cardiac, smooth and non-muscle isomyosin forms exist in different types of skeletal muscle, depending on the physiological function of the muscle. These are designated at type I (slow-twitch) and type II (fasttwitch). Type II fibers can be further subdivided in types IIA, IIB, and IIC.

Reagent

Supplied as a liquid containing 15 mM sodium azide as preservative.

Precautions

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Product Profile

<u>Indirect immunofluorescence</u>: a minimum working dilution of 1:20 was determined using formalin-fixed, paraffin-embedded sections of human skeletal muscle.

<u>Immunohistochemistry</u> (formalin-fixed, paraffinembedded sections): 1:20 using human or animal skeletal muscle

Note: In order to obtain best results, it is recommended that each individual user determine their optimal working dilution by titration assay.

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