



Product Information Sheet

Monoclonal Anti-Tropomyosin (Sarcomeric)

Catalogue No. MA1097

Immunogen

Chicken muscle tropomyosin.

Lot No. 08A12

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Clone: ST-39

Ig type: mouse IgG1

Application

Western blot

Size: 100µg/vial

At 1-2µg/ml with the appropriate system to detect tropomyosin in cells and tissues.

Specificity

Human, rat, chicken.

Immunohistochemistry(P)

No cross reactivity with other proteins.

At 2-4µg/ml to detect tropomyosin in formalin fixed and paraffin embedded tissues.

Immunohistochemistry(F)

At 2-4µg/ml to detect tropomyosin in formalin or acetone fixed tissues.

Recommended application

Western blot

Other applications have not been tested.

Immunohistochemistry(P)

Optimal dilutions should be determined by end user.

Immunohistochemistry(F)

Formulation

Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg NaN₃ as preservative.

Reconstitution

1.2% sodium acetate or neutral PBS. If 1ml of PBS is used, the antibody concentration will be 100µg/ml.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

BACKGROUND

Tropomyosin is an alpha-helical, parallel, two-chain coiled coil which binds along the length of actin filaments in both muscle and non-muscle cells. This gene associates N-terminus to C-terminus to form a continuous strand along both sides of the actin filament and regulates its function. Tropomyosin contributes to most, if not all, functions of the actin cytoskeleton, and its role is essential for the viability

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of a wide range of organisms. The ability of tropomyosin to contribute to the many functions of the actin cytoskeleton is related to the temporal and spatial regulation of expression of tropomyosin isoforms.

REFERENCE

1. Coulton AT, Koka K, Lehrer SS, Geeves MA. Role of the Head-to-Tail Overlap Region in Smooth and Skeletal Muscle beta-Tropomyosin. *Biochemistry*. 2008 Jan 8;47(1):388-97. Epub 2007 Dec 11.
2. Singh A, Hitchcock-Degregori SE. Tropomyosin's Periods Are Quasi-Equivalent for Actin Binding but Have Specific Regulatory Functions. *Biochemistry*. 2007 Dec 25;46(51):14917-14927. Epub 2007 Dec
3. Gunning P, O'Neill G, Hardeman E. Tropomyosin-based regulation of the actin cytoskeleton in time and space. *Physiol Rev*. 2008 Jan;88(1):1-35.