



MYPT2 (Q-12): sc-65138

BACKGROUND

Protein phosphatase 1 regulatory subunit 12B (MYPT2) is a cytoplasmic protein found along actomyosin filaments and stress fibers within the cell skeleton. MYPT2 helps regulate the activity of myosin phosphatases and enhances the sensitivity of the contractile apparatus to Ca^{2+} . As part of the PP1 (protein phosphatase 1) complex, MYPT2 is responsible for binding the complex to myosin filaments. Cardiac myosin is the primary substrate targeted by the MYPT2 apoenzyme and its cofactor, however, it has also been identified along the A-band and Z-line of sarcomeres indicating it likely operates on multiple substrates.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PPP1R12B (human) mapping to 1q32.1; Ppp1r12b (mouse) mapping to 1 F.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

MYPT2 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MYPT2 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-65138 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MYPT2 (Q-12) is recommended for detection of MYPT2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); not recommended for mouse isoform 2 or human isoforms 3 or 4 of MYPT2.

Molecular Weight of MYPT2: 110 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.