

# MYBPC1 (E-14): sc-161891

## BACKGROUND

MYBPC1, also known as MYBPCS (myosin-binding protein C, slow-type) or MyBP-C, is a 1,141 amino acid protein that contains three Fibronectin type-III domains and seven Ig-like C2-type domains. Existing as a member of the immunoglobulin superfamily, MYBPC1 functions as a thick filament-associated protein that localizes to striated muscle bands in vertebrae and is thought to modify the activity of select ATPases. Additionally, MYBPC1 may play a role in the modulation of muscle contraction and in the overall structural integrity of the cell. The gene encoding MYBPC1 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: MYBPC1 (human) mapping to 12q23.2; Mybpc1 (mouse) mapping to 10 C1.

## SOURCE

MYBPC1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MYBPC1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-161891 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MYBPC1 (E-14) is recommended for detection of MYBPC1 of mouse, rat 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); non cross-reactive with MYBPC2 or MYBPC3.

Suitable for use as control antibody for MYBPC1 siRNA (h): sc-96079, MYBPC1 siRNA (m): sc-149730, MYBPC1 shRNA Plasmid (h): sc-96079-SH, MYBPC1 shRNA Plasmid (m): sc-149730-SH, MYBPC1 shRNA (h) Lentiviral Particles: sc-96079-V and MYBPC1 shRNA (m) Lentiviral Particles: sc-149730-V.

Molecular Weight of MYBPC1: 128 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **MYBPC1 (E-6): sc-515407**, our highly recommended monoclonal alternative to MYBPC1 (E-14).