

# MSY2 (C-15): sc-21316

## BACKGROUND

MSY2 and YB-2 (MSY3,4) belong to the Y-box family of multifunctional proteins that regulate both transcription and translation. Y-box proteins interact with a wide variety of nucleic acid structures to act as transcription factors and mRNA masking proteins. The modular structure of Y-box proteins includes a highly conserved N-terminal cold-shock domain (CSD, equivalent to the bacterial cold-shock proteins) and four basic C-terminal domains containing arginine clusters and aromatic residues. MSY2 is expressed in testis and ovary where it may repress translation of parental mRNA. The gene encoding human MSY2 maps to chromosome 17p13.1. YB-2 (MSY3,4 in mouse) is also known as DNA binding protein A and is highly expressed in the testis, heart and muscle. MSY2 and YB-2 bind to the consensus sequence 5'-UCCAUCA-3' contained in the Y-box element.

## CHROMOSOMAL LOCATION

Genetic locus: YBX2 (human) mapping to 17p13.1; Ybx2 (mouse) mapping to 11 B3.

## SOURCE

MSY2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MSY2 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-21316 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-21316 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MSY2 (C-15) is recommended for detection of MSY2 of mouse origin and Conrin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

MSY2 (C-15) is also recommended for detection of MSY2 of mouse origin and Conrin in additional species, including equine and bovine.

Suitable for use as control antibody for MSY2 siRNA (h): sc-38630, MSY2 siRNA (m): sc-38631, MSY2 shRNA Plasmid (h): sc-38630-SH, MSY2 shRNA Plasmid (m): sc-38631-SH, MSY2 shRNA (h) Lentiviral Particles: sc-38630-V and MSY2 shRNA (m) Lentiviral Particles: sc-38631-V.

MSY2 (C-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

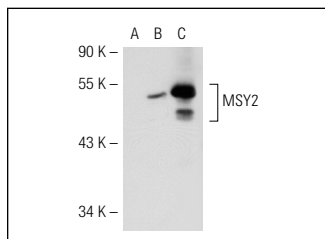
Molecular Weight of MSY2: 48 kDa.

Positive Controls: MSY2 (h2): 293T Lysate: sc-116103 or mouse testis extract: sc-2405.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



MSY2 (C-15): sc-21316. Western blot analysis of MSY2 expression in non-transfected: sc-117752 (A) and human MSY2 transfected: sc-116103 (B) 293T whole cell lysates and mouse testis tissue extract (C).

## SELECT PRODUCT CITATIONS

1. Chalmey, C., et al. 2013. Systemic compensatory response to neonatal estradiol exposure does not prevent depletion of the oocyte pool in the rat. PLoS ONE 8: e82175.

## 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.


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Try **MSY2 (A-12): sc-393840**, our highly recommended monoclonal alternative to MSY2 (C-15).