

MSY2 (N-13): sc-21314

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 17p11.2-13.1. 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.

REFERENCES

1. Tekur, S., et al. 1999. Contrin, the human homolog of a germ-cell Y-box binding protein: cloning, expression, and chromosomal localization. *J. Androl.* 20: 135-144.
2. Okamoto, T., et al. 2000. Direct interaction of p53 with the Y-box binding protein, YB-1: a mechanism for regulation of human gene expression. *Oncogene* 54: 6194-6202.
3. Levenson, V.V., et al. 2000. Pleiotropic resistance to DNA-interactive drugs is associated with increased expression of genes involved in DNA replication, repair, and stress response. *Cancer Res.* 18: 5027-5030.
4. Davies, H.G., et al. 2000. A sequence-specific RNA binding complex expressed in murine germ cells contains MSY2 and MSY4. *Dev. Biol.* 221: 87-100.

CHROMOSOMAL LOCATION

Genetic locus: Ybx2 (mouse) mapping to 11 B4.

SOURCE

MSY2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-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-21314 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-21314 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

MSY2 (N-13) is recommended for detection of MSY2 of mouse 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).

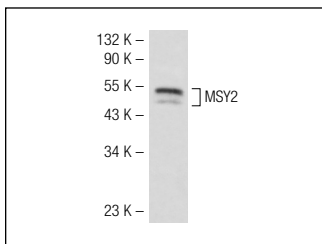
Suitable for use as control antibody for MSY2 siRNA (m): sc-38631, MSY2 shRNA Plasmid (m): sc-38631-SH and MSY2 shRNA (m) Lentiviral Particles: sc-38631-V.

MSY2 (N-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

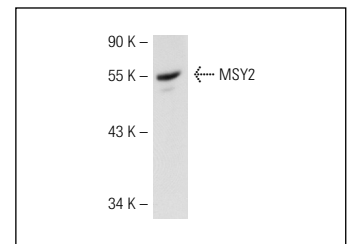
RECOMMENDED SECONDARY REAGENTS

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 (N-13): sc-21314. Western blot analysis of MSY2 expression in mouse testis tissue extract.



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RESEARCH USE

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

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Try **MSY2 (A-12): sc-393840**, our highly recommended monoclonal alternative to MSY2 (N-13).