SANTA CRUZ BIOTECHNOLOGY, INC.

RBM3 (N-12): sc-162080



BACKGROUND

RBM3 (RNA binding motif (RNP1, RRM) protein 3), also known as RNPL, is a 157 amino acid protein that contains one RRM domain and is subject to posttranslational dimethylation. Induced by cold shock and low oxygen tension, RBM3 exists as multiple alternatively spliced isoforms and is thought to function as a proto-oncogene, possibly playing a role in tumor transformation and metastasis. The gene encoding RBM3 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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- Danno, S., et al. 1997. Increased transcript level of RBM3, a member of the glycine-rich RNA-binding protein family, in human cells in response to cold stress. Biochem. Biophys. Res. Commun. 236: 804-807.
- Chappell, S.A. and Mauro, V.P. 2003. The internal ribosome entry site (IRES) contained within the RNA-binding motif protein 3 (RBM3) mRNA is composed of functionally distinct elements. J. Biol. Chem. 278: 33793-33800.
- Wellmann, S., et al. 2004. Oxygen-regulated expression of the RNA-binding proteins RBM3 and CIRP by a HIF-1-independent mechanism. J. Cell Sci. 117: 1785-1794.
- Martínez-Arribas, F., et al. 2006. Positive correlation between the expression of X-chromosome RBM genes (RBMX, RBM3, RBM10) and the proapoptotic Bax gene in human breast cancer. J. Cell. Biochem. 97: 1275-1282.
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CHROMOSOMAL LOCATION

Genetic locus: RBM3 (human) mapping to Xp11.23; Rbm3 (mouse) mapping to X A1.1.

SOURCE

RBM3 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RBM3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-162080 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

RBM3 (N-12) is recommended for detection of RBM3 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); non cross-reactive with other RBM family members.

RBM3 (N-12) is also recommended for detection of RBM3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RBM3 siRNA (h): sc-91221, RBM3 siRNA (m): sc-152741, RBM3 shRNA Plasmid (h): sc-91221-SH, RBM3 shRNA Plasmid (m): sc-152741-SH, RBM3 shRNA (h) Lentiviral Particles: sc-91221-V and RBM3 shRNA (m) Lentiviral Particles: sc-152741-V.

Molecular Weight of RBM3: 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **RBM3 (A-7): sc-390139**, our highly recommended monoclonal alternative to RBM3 (N-12).