RBM38 (C-19): sc-85873



The Power to Question

BACKGROUND

Damage to nuclear DNA can lead to unregulated cell division and ultimately the formation of a cancerous tumor. Recognition and repair of damaged DNA is initiated by proteins, such as p53, that regulate the cell cycle. p53 is a transcription factor that induces cell cycle arrest at the G_1/S regulation point when it functions to either activate repair proteins or initiate apoptosis. One protein induced by wildtype p53 is RBM38 (RNA-binding protein 38), also known as RNPC1 or SEB4. RBM38 is a cell cycle protein found in the cytosol and the nucleus that exists as two alternatively spliced isoforms, 1 (RNPC1a) and 2 (RNPC1b), of 239 and 121 amino acids, respectively. Independent of p53 expression, RBM38 isoform 1 induces cell cycle arrest in G_1 phase through maintaining transcript stability at the 3'-UTR of p21, a regulator of cell cycle progression at S phase. RBM38 is also an mRNA splicing factor that regulates the expression of FGFR2. RBM38 contains one RRM (RNA recognition motif) domain.

CHROMOSOMAL LOCATION

Genetic locus: RBM38 (human) mapping to 20q13.31; Rbm38 (mouse) mapping to 2 H3.

SOURCE

RBM38 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of RBM38 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85873 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

RBM38 (C-19) is recommended for detection of RBM38 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.

RBM38 (C-19) is also recommended for detection of RBM38 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for RBM38 siRNA (h): sc-76368, RBM38 siRNA (m): sc-152747, RBM38 shRNA Plasmid (h): sc-76368-SH, RBM38 shRNA Plasmid (m): sc-152747-SH, RBM38 shRNA (h) Lentiviral Particles: sc-76368-V and RBM38 shRNA (m) Lentiviral Particles: sc-152747-V.

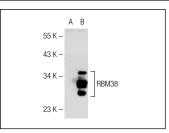
Molecular Weight of RBM38 isoforms: 13/25 kDa.

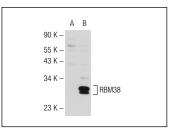
Positive Controls: RBM38 (h): 293T Lysate: sc-174921 or RBM38 (m2): 293T Lysate: sc-127449.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA





RBM38 (C-19): sc-85873. Western blot analysis of RBM38 expression in non-transfected: sc-117752 (**A**) and human RBM38 transfected: sc-174921 (**B**) 293T whole cell lysates.

RBM38 (C-19): sc-85873. Western blot analysis of RBM38 expression in non-transfected: sc-117752 (A) and mouse RBM38 transfected: sc-127449 (B) 293T whole cell lysates.

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.



Try RBM38 (A-8): sc-365898 or RBM24/38 (G-6): sc-393124, our highly recommended monoclonal aternatives to RBM38 (C-19).

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