

RBM29 (D-2): sc-374516

BACKGROUND

Proteins containing RNA recognition motifs, including various hnRNP proteins, are implicated in the regulation of alternative splicing and protein components of snRNPs. The RBM (RNA-binding motif) gene family encodes proteins with an RNA binding motif that have been suggested to play a role in the modulation of apoptosis. RBM29 (RNA binding motif protein 29), also known as ELMOD3 (ELMO domain-containing protein 3) or RBED1 (RNA-binding motif and ELMO domain-containing protein 1), is a 381 amino acid protein that contains one ELMO domain and exists as six alternatively spliced isoforms. The gene encoding RBM29 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

REFERENCES

1. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.
2. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (white) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
3. Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. *Nat. Genet.* 31: 79-83.

CHROMOSOMAL LOCATION

Genetic locus: ELMOD3 (human) mapping to 2p11.2; Elmod3 (mouse) mapping to 6 C1.

SOURCE

RBM29 (D-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 31-61 near the N-terminus of RBM29 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RBM29 (D-2) is available conjugated to agarose (sc-374516 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374516 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374516 PE), fluorescein (sc-374516 FITC), Alexa Fluor® 488 (sc-374516 AF488), Alexa Fluor® 546 (sc-374516 AF546), Alexa Fluor® 594 (sc-374516 AF594) or Alexa Fluor® 647 (sc-374516 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374516 AF680) or Alexa Fluor® 790 (sc-374516 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374516 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

RBM29 (D-2) is recommended for detection of RBM29 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 RBM29 siRNA (h): sc-94681, RBM29 siRNA (m): sc-152740, RBM29 shRNA Plasmid (h): sc-94681-SH, RBM29 shRNA Plasmid (m): sc-152740-SH, RBM29 shRNA (h) Lentiviral Particles: sc-94681-V and RBM29 shRNA (m) Lentiviral Particles: sc-152740-V.

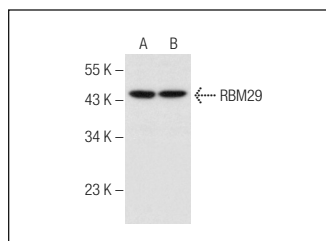
Molecular Weight of RBM29: 43 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242 or WEHI-231 whole cell lysate: sc-2213.

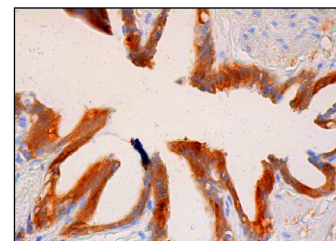
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



RBM29 (D-2): sc-374516. Western blot analysis of RBM29 expression in CTLL-2 (A) and WEHI-231 (B) whole cell lysates.



RBM29 (D-2): sc-374516. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic staining of respiratory epithelial cells.

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.