

RMP (D-2): sc-376011

BACKGROUND

RMP (RPB5-mediating protein), also known as C19orf2, NNX3 or URI, is a 534 amino acid protein that localizes to the nucleus and belongs to the RNA polymerase II subunit 5-mediating protein family. Expressed ubiquitously, RMP functions as a component of the multi-protein URI complex and is thought to play a role in protein scaffolding that may be involved in transcription and ubiquitination. Multiple isoforms of RMP exist due to alternative splicing events. The gene encoding RMP maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

CHROMOSOMAL LOCATION

Genetic locus: URI1 (human) mapping to 19q12.

SOURCE

RMP (D-2) is a mouse monoclonal antibody raised against amino acids 1-240 mapping at the N-terminus of RMP of human 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376011 X, 200 µg/0.1 ml.

RMP (D-2) is available conjugated to agarose (sc-376011 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376011 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376011 PE), fluorescein (sc-376011 FITC), Alexa Fluor® 488 (sc-376011 AF488), Alexa Fluor® 546 (sc-376011 AF546), Alexa Fluor® 594 (sc-376011 AF594) or Alexa Fluor® 647 (sc-376011 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376011 AF680) or Alexa Fluor® 790 (sc-376011 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

RMP (D-2) is recommended for detection of RMP of 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 RMP siRNA (h): sc-97138, RMP shRNA Plasmid (h): sc-97138-SH and RMP shRNA (h) Lentiviral Particles: sc-97138-V.

RMP (D-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

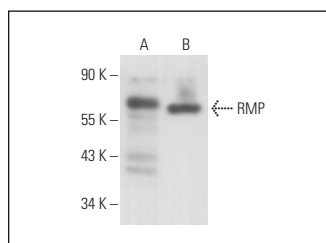
Molecular Weight of RMP: 64 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NCI-H1299 whole cell lysate: sc-364234 or T-47D cell lysate: sc-2293.

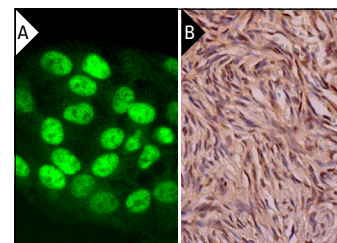
RECOMMENDED SUPPORT REAGENTS

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



RMP (D-2): sc-376011. Western blot analysis of RMP expression in NCI-H1299 (A) and F9 (B) whole cell lysates.



RMP (D-2): sc-376011. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic and nuclear staining of ovarian stroma cells (B).

SELECT PRODUCT CITATIONS

- Ji, Y., et al. 2019. RMP/URI inhibits both intrinsic and extrinsic apoptosis through different signaling pathways. *Int. J. Biol. Sci.* 15: 2692-2706.
- Xu, Y., et al. 2021. URI1 suppresses irradiation-induced reactive oxygen species (ROS) by activating autophagy in hepatocellular carcinoma cells. *Int. J. Biol. Sci.* 17: 3091-3103.

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 for detailed protocols and support products.