

RPUSD3 (C-2): sc-393209

BACKGROUND

RPUSD3 (RNA pseudouridylate synthase domain containing 3), also known as FLJ34707, FLJ37268 or MGC29784, is a 343 amino acid protein member of the pseudouridine synthase rluA family. Three RPUSD3 isoforms exist due to alternative splicing, and the gene encoding RPUSD3 maps to chromosome three which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

1. Dey, S. 1996. Aryl monooxygenase: a detoxifying enzyme from *Candida pulcherrima* MCMY2. Indian J. Biochem. Biophys. 33: 523-526.
2. Ofengand, J. 2002. Ribosomal RNA pseudouridines and pseudouridine synthases. FEBS Lett. 514: 17-25.
3. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
4. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
5. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. Genomics 85: 36-47.

CHROMOSOMAL LOCATION

Genetic locus: RPUSD3 (human) mapping to 3p25.3.

SOURCE

RPUSD3 (C-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 92-119 within an internal region of RPUSD3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RPUSD3 (C-2) is available conjugated to agarose (sc-393209 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393209 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393209 PE), fluorescein (sc-393209 FITC), Alexa Fluor[®] 488 (sc-393209 AF488), Alexa Fluor[®] 546 (sc-393209 AF546), Alexa Fluor[®] 594 (sc-393209 AF594) or Alexa Fluor[®] 647 (sc-393209 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393209 AF680) or Alexa Fluor[®] 790 (sc-393209 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393209 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

RPUSD3 (C-2) is recommended for detection of RPUSD3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RPUSD3 siRNA (h): sc-78352, RPUSD3 shRNA Plasmid (h): sc-78352-SH and RPUSD3 shRNA (h) Lentiviral Particles: sc-78352-V.

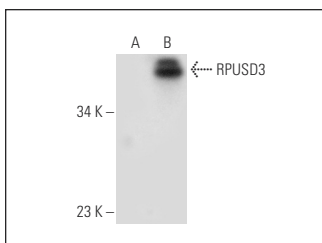
Molecular Weight of RPUSD3: 38 kDa.

Positive Controls: RPUSD3 (h): 293T Lysate: sc-370902, HEL 92.1.7 cell lysate: sc-2270 or Hep G2 cell lysate: sc-2227.

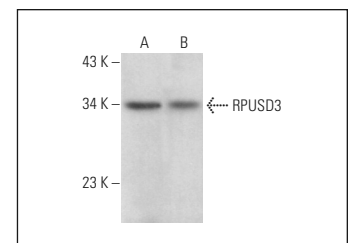
RECOMMENDED SUPPORT REAGENTS

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.

DATA



RPUSD3 (C-2): sc-393209. Western blot analysis of RPUSD3 expression in non-transfected: sc-117752 (A) and human RPUSD3 transfected: sc-370902 (B) 293T whole cell lysates.



RPUSD3 (C-2): sc-393209. Western blot analysis of RPUSD3 expression in HEL 92.1.7 (A) and Hep G2 (B) 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.

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.