

# RPUSD2 (D-17): sc-132080

## BACKGROUND

RPUSD2 (RNA pseudouridylate synthase domain-containing protein 2), also known as C15orf19 or C18B11, is a 545 amino acid member of the pseudouridine synthase rluA family and is encoded by a gene that is located on chromosome 15. Encoding more than 700 genes, chromosome 15 is made up of approximately 106 million base pairs and is about 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11-q13 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. In cases of Prader-Willi syndrome, there is a partial or complete deletion of this region from the paternal copy of chromosome 15. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

## REFERENCES

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- Maegawa, G.H., Tropak, M., Buttner, J., Stockley, T., Kok, F., Clarke, J.T. and Mahuran, D.J. 2007. Pyrimethamine as a potential pharmacological chaperone for late-onset forms of GM2 gangliosidosis. *J. Biol. Chem.* 282: 9150-9161.

## CHROMOSOMAL LOCATION

Genetic locus: RPUSD2 (human) mapping to 15q15.1; Rpsud2 (mouse) mapping to 2 E5.

## SOURCE

RPUSD2 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RPUSD2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-132080 P, (100 µg 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

RPUSD2 (D-17) is recommended for detection of RPUSD2 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 family members RPUSD1, RPUSD3 or RPUSD4.

RPUSD2 (D-17) is also recommended for detection of RPUSD2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for RPUSD2 siRNA (h): sc-90059, RPUSD2 siRNA (m): sc-153122, RPUSD2 shRNA Plasmid (h): sc-90059-SH, RPUSD2 shRNA Plasmid (m): sc-153122-SH, RPUSD2 shRNA (h) Lentiviral Particles: sc-90059-V and RPUSD2 shRNA (m) Lentiviral Particles: sc-153122-V.

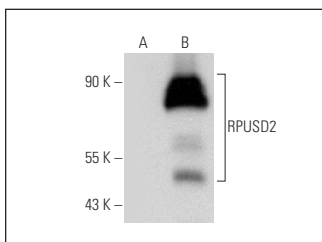
Molecular Weight of RPUSD2: 61 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or CUEDC1 (m3): 293T Lysate: sc-125185.

## 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.

## DATA



RPUSD2 (D-17): sc-132080. Western blot analysis of RPUSD2 expression in non-transfected: sc-117752 (A) and human RPUSD2 transfected: sc-113720 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.