

RPRD2 (D-15): sc-164748

BACKGROUND

RPRD2 (regulation of nuclear pre-mRNA domain-containing protein 2) is a 1,461 amino acid protein that contains one CID domain and associates with the RNA polymerase II complex. RPRD2 is phosphorylated upon DNA damage, most likely by ATM or ATR. Existing as four alternatively spliced isoforms, the gene encoding RPRD2 maps to human chromosome 1. Chromosome 1 spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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4. Matsuoka, S., et al. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.
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7. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. *Am. J. Psychiatry* 166: 206-215.
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CHROMOSOMAL LOCATION

Genetic locus: RPRD2 (human) mapping to 1q21.3; Rprd2 (mouse) mapping to 3 F2.1.

SOURCE

RPRD2 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RPRD2 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-164748 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RPRD2 (D-15) is recommended for detection of RPRD2 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 KIAA family members.

RPRD2 (D-15) is also recommended for detection of RPRD2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for RPRD2 siRNA (h): sc-88788, RPRD2 siRNA (m): sc-140149, RPRD2 shRNA Plasmid (h): sc-88788-SH, RPRD2 shRNA Plasmid (m): sc-140149-SH, RPRD2 shRNA (h) Lentiviral Particles: sc-88788-V and RPRD2 shRNA (m) Lentiviral Particles: sc-140149-V.

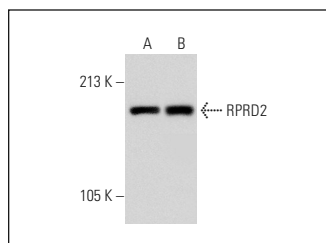
Molecular Weight of RPRD2: 156 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

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



RPRD2 (D-15): sc-164748. Western blot analysis of RPRD2 expression in HeLa (A) and HEK293 (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.