SANTA CRUZ BIOTECHNOLOGY, INC.

R3HDM1 (S-15): sc-169077

BACKGROUND

R3HDM1 (R3H domain-containing protein 1) is a 1,099 amino acid protein that contains one R3H domain. Existing as two alternatively spliced isoforms, the R3HDM1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 2q21.3. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is related to mutations in the ALMS1 gene. Chromosome 2 contains a probable vestigial second centromere as well as vestigial telomeres, which gives credence to the hypothesis that human chromosome 2 formed as a result of an ancient fusion of two ancestral chromosomes, which are still present in modern day apes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: R3HDM1 (human) mapping to 2q21.3; R3hdm1 (mouse) mapping to 1 E4.

SOURCE

R3HDM1 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of R3HDM1 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-169077 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

R3HDM1 (S-15) is recommended for detection of R3HDM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 R3HDML or R3HDM2.

R3HDM1 (S-15) is also recommended for detection of R3HDM1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for R3HDM1 siRNA (h): sc-94402, R3HDM1 siRNA (m): sc-152622, R3HDM1 shRNA Plasmid (h): sc-94402-SH, R3HDM1 shRNA Plasmid (m): sc-152622-SH, R3HDM1 shRNA (h) Lentiviral Particles: sc-94402-V and R3HDM1 shRNA (m) Lentiviral Particles: sc-152622-V.

Molecular Weight of R3HDM1 isoforms: 121/108 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.