

# SRBD1 (T-13): sc-137797

## BACKGROUND

SRBD1 (S1 RNA-binding domain-containing protein 1) is a 995 amino acid protein that contains one S1 motif domain. SRBD1 is a susceptibility gene for normal tension glaucoma (NTG) and may be involved in cell growth inhibition and apoptosis. Two isoforms of SRBD1 exist due to alternative splicing events, and the gene which encodes SRBD1 maps to human chromosome 2p21. 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 ichthyosis, 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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4. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
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6. Rooryck, C., et al. 2010. Array-CGH analysis of a cohort of 86 patients with oculoauriculovertebral spectrum. *Am. J. Med. Genet. A* 152A: 1984-1989.
7. Meguro, A., et al. 2010. Genome-wide association study of normal tension glaucoma: common variants in SRBD1 and ELOVL5 contribute to disease susceptibility. *Ophthalmology* 117: 1331-1338.
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## CHROMOSOMAL LOCATION

Genetic locus: SRBD1 (human) mapping to 2p21; Srd1 (mouse) mapping to 17 E4.

## SOURCE

SRBD1 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SRBD1 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-137797 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SRBD1 (T-13) is recommended for detection of SRBD1 isoforms 1 and 2 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).

SRBD1 (T-13) is also recommended for detection of SRBD1 isoforms 1 and 2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SRBD1 siRNA (h): sc-94948, SRBD1 siRNA (m): sc-153814, SRBD1 shRNA Plasmid (h): sc-94948-SH, SRBD1 shRNA Plasmid (m): sc-153814-SH, SRBD1 shRNA (h) Lentiviral Particles: sc-94948-V and SRBD1 shRNA (m) Lentiviral Particles: sc-153814-V.

Molecular Weight of SRBD1 isoforms 1/2: 112/70 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](http://www.scbt.com) or our catalog for detailed protocols and support products.