

RECS1 (K-12): sc-137711

BACKGROUND

BI1 family is evolutionarily conserved as integral membrane proteins containing multiple membrane-spanning segments and predominantly localized to intracellular membranes, similar to Bcl-2 family proteins. They share multiple motifs and transcriptional factors within the promoter and the coding regions. They may represent regulators of cell death pathways, which are concluded from structure conservation of BI1 family. RECS1, also known as TMBIM1 (transmembrane BAX inhibitor motif containing 1), is a 311 amino acid multi-pass membrane protein that belongs to the BI1 family. It has been suggested that RECS1 is a negative regulator of aortic matrix metalloproteinase-9 (MMP-9) production and plays protective roles in vascular remodeling. The RECS1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 2q35.

REFERENCES

1. Yoshisue, H., et al. 2002. Large scale isolation of non-uniform shear stress-responsive genes from cultured human endothelial cells through the preparation of a subtracted cDNA library. *Atherosclerosis* 162: 323-334.
2. Zhao, H., et al. 2006. RECS1 is a negative regulator of matrix metalloproteinase-9 production and aged RECS1 knockout mice are prone to aortic dilation. *Circ. J.* 70: 615-624.
3. Zhao, H., et al. 2006. RECS1 deficiency in mice induces susceptibility to cystic medial degeneration. *Genes Genet. Syst.* 81: 41-50.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610364. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Zhou, J., et al. 2008. Comparative genomics and function analysis on BI1 family. *Comput. Biol. Chem.* 32: 159-162.

CHROMOSOMAL LOCATION

Genetic locus: TMBIM1 (human) mapping to 2q35; Tmbim1 (mouse) mapping to 1 C3.

SOURCE

RECS1 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RECS1 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-137711 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

RECS1 (K-12) is recommended for detection of RECS1 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).

RECS1 (K-12) is also recommended for detection of RECS1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for RECS1 siRNA (h): sc-94855, RECS1 siRNA (m): sc-152788, RECS1 shRNA Plasmid (h): sc-94855-SH, RECS1 shRNA Plasmid (m): sc-152788-SH, RECS1 shRNA (h) Lentiviral Particles: sc-94855-V and RECS1 shRNA (m) Lentiviral Particles: sc-152788-V.

Molecular Weight of RECS1: 35 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.