SANTA CRUZ BIOTECHNOLOGY, INC.

RSHL1 (N-12): sc-139047



The Power to Question

BACKGROUND

RSHL1 (radial spoke head-like protein 1), also known as RSPH6A (radial spoke head protein 6 homolog A), is a 717 amino acid protein that belongs to the flagellar radial spoke RSP4/6 family. The gene encoding RSHL1 maps to human chromosome 19q13.32. Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Trans-locations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene BCL3.

REFERENCES

- 1. Olsen, A., et al. 1994. Gene organization of the pregnancy-specific glycoprotein region on human chromosome 19: assembly and analysis of a 700kb cosmid contig spanning the region. Genomics 23: 659-668.
- Teglund, S., et al. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. Genomics 23: 669-684.
- Wang, L., et al. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. Clin. Cancer Res. 6: 2988-2993.
- Eriksson, M., et al. 2001. A mammalian radial spokehead-like gene, RSHL1, at the myotonic dystrophy-1 locus. Biochem. Biophys. Res. Commun. 281: 835-841.
- 5. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
- 6. Le Meur, N., et al. 2004. Complete germline deletion of the STK11 gene in a family with Peutz-Jeghers syndrome. Eur. J. Hum. Genet. 12: 415-418.
- 7. Leeb, T., et al. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. Gene 343: 239-244.
- Barrow, A.D., et al. 2008. The extended human leukocyte receptor complex: diverse ways of modulating immune responses. Immunol. Rev. 224: 98-123.

CHROMOSOMAL LOCATION

Genetic locus: RSPH6A (human) mapping to 19q13.32.

SOURCE

RSHL1 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RSHL1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-139047 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

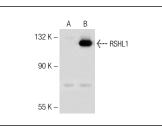
SHL1 (N-12) is recommended for detection of RSHL1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with RSHL3.

Suitable for use as control antibody for RSHL1 siRNA (h): sc-97641, RSHL1 shRNA Plasmid (h): sc-97641-SH and RSHL1 shRNA (h) Lentiviral Particles: sc-97641-V.

Molecular Weight of RSHL1: 81 kDa.

Positive Controls: RSHL1 (h): 293T Lysate: sc-129687.

DATA



RSHL1 (N-12): sc-139047. Western blot analysis of RSHL1 expression in non-transfected: sc-117752 (A) and human RSHL1 transfected: sc-129687 (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.

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.