

# SH3YL1 (G-13): sc-135519

## BACKGROUND

SH3YL1 (SH3 domain-containing YSC84-like protein 1), alternately known as RAY, is a 342 amino acid protein that plays a role in hair follicle formation. Expressed at high levels during meiosis, SH3YL1 is found in stomach, kidney, colon, small intestine and skin (where it localizes to the hair shaft, bulb and outer root sheath). SH3YL1 expression is highest during mid and late anagen phases of the hair-growth cycle and is found at lower levels during the catagen, telogen and early anagen phases. SH3YL1 contains one SH (Scr homology) 3 domain, belongs to the SH3YL1 family and interacts with SH3D19. Five SH3YL1 isoforms are produced as a result of alternative splicing events, and the gene encoding SH3YL1 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, Sitosterolemia and Alström syndrome.

## REFERENCES

- Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.
- Aoki, N., et al. 2000. A novel mouse gene, SH3YL1, is expressed in the anagen hair follicle. *J. Invest. Dermatol.* 114: 1050-1056.
- Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.
- Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
- Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. *Nat. Genet.* 31: 79-83.

## CHROMOSOMAL LOCATION

Genetic locus: SH3YL1 (human) mapping to 2p25.3; Sh3yl1 (mouse) mapping to 12 A2.

## SOURCE

SH3YL1 (G-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SH3YL1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135519 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

SH3YL1 (G-13) is recommended for detection of SH3YL1 isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with SH3YL1 isoform 5.

SH3YL1 (G-13) is also recommended for detection of SH3YL1 isoforms 1-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SH3YL1 siRNA (h): sc-94818, SH3YL1 siRNA (m): sc-153443, SH3YL1 shRNA Plasmid (h): sc-94818-SH, SH3YL1 shRNA Plasmid (m): sc-153443-SH, SH3YL1 shRNA (h) Lentiviral Particles: sc-94818-V and SH3YL1 shRNA (m) Lentiviral Particles: sc-153443-V.

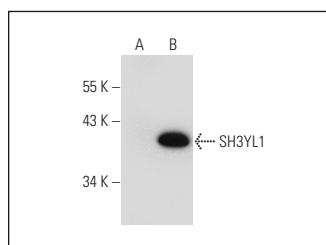
Molecular Weight of SH3YL1 isoforms: 37/35/27/25/11 kDa.

Positive Controls: SH3YL1 (h2): 293T Lysate: sc-177919 or rat small intestine extract: sc-364811.

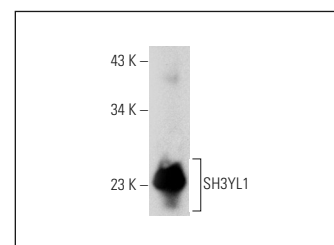
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



SH3YL1 (G-13): sc-135519. Western blot analysis of SH3YL1 expression in non-transfected: sc-117752 (A) and human SH3YL1 transfected: sc-177919 (B) 293T whole cell lysates.



SH3YL1 (G-13): sc-135519. Western blot analysis of SH3YL1 expression in rat small intestine tissue extract.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.