# SANTA CRUZ BIOTECHNOLOGY, INC.

# STKLD1 (6G9): sc-134290



## BACKGROUND

Chromosome 9 consists of about 145 million bases and 4% of the human genome, encoding nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene-encoding Endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 though through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

## REFERENCES

- 1. Manning, G., et al. 2002. The protein kinase complement of the human genome. Science 298: 1912-1934.
- Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 6: 262.
- 3. Coppo, P., et al. 2006. Bcr-Abl activates STAT3 via JAK and MEK pathways in human cells. Br. J. Haematol. 134: 171-179.
- Greenman, C., et al. 2007. Patterns of somatic mutation in human cancer genomes. Nature 446: 153-158.
- Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
- Fernandez-L, A., et al. 2007. Gene expression fingerprinting for human hereditary hemorrhagic telangiectasia. Hum. Mol. Genet. 16: 1515-1533.
- Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
- Gardiner, J., et al. 2007. Potential role of tubulin acetylation and microtubule-based protein trafficking in familial dysautonomia. Traffic 8: 1145-1149.
- 9. Temtamy, S.A., et al. 2007. Phenotypic and cytogenetic spectrum of 9p trisomy. Genet. Couns. 18: 29-48.

# CHROMOSOMAL LOCATION

Genetic locus: STKLD1 (human) mapping to 9q34.2.

# SOURCE

STKLD1 (6G9) is a mouse monoclonal antibody raised against recombinant STKLD1 protein of human origin.

## PRODUCT

Each vial contains 100  $\mu g \; lgG_{2a}$  kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

# **RESEARCH USE**

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

# APPLICATIONS

STKLD1 (6G9) is recommended for detection of STKLD1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for STKLD1 siRNA (h): sc-92721, STKLD1 shRNA Plasmid (h): sc-92721-SH and STKLD1 shRNA (h) Lentiviral Particles: sc-92721-V.

Molecular Weight of STKLD1: 76/23/23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or human STKLD1 transfected 293T whole cell lysate.

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

#### DATA



STKLD1 (6G9): sc-134290. Western blot analysis of STKLD1 expression in human STKLD1 transfected (**A**) and non-transfected (**B**) 293T whole cell lysates.

#### **STORAGE**

Store at 4° C, \*\*D0 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 for detailed protocols and support products.