SANTA CRUZ BIOTECHNOLOGY, INC.

SERHL/L2 (K-19): sc-66631

BACKGROUND

Members of the AB hydrolase superfamily have diverse catalytic functions and play a crucial role in the metabolism of lipids. SERHL (serine hydrolase-like) also known as SERHL2 (serine hydrolase-like 2) is a ubiquitously expressed 314 amino acid member of the AB hydrolase superfamily. Localized to peroxisomes and to the perinuclear region of the cytoplasm, SERHL is thought to be involved in muscle hypertrophy, a phenomenon characterized by growth and increase in size of muscle cells in response to mechanical stress or passive stretch. SERHL is a probable serine hydrolase that is expressed at normal levels during muscle development and is overexpressed in response to skeletal muscle stretch *in vivo*. Expression of SERHL is upregulated in breast cancer cells, suggesting a possible role in carcinogenesis. Three isoforms exist due to alternative splicing events. SERHL2 (serine hydrolase-like 2) shares high homology with SERHL and is thought to be expressed by a gene which may be a duplicate of the gene encoding SERHL.

REFERENCES

1. Kemp, T.J., Sadusky, T.J., Simon, M., Brown, R., Eastwood, M., Sassoon, D.A. and Coulton, G.R. 2001. Identification of a novel stretch-responsive skeletal muscle gene (Smpx). Genomics 72: 260-271.
2. Sadusky, T.J., Kemp, T.J., Simon, M., Carey, N. and Coulton, G.R. 2001. Identification of SERHL, a new member of the serine hydrolase family induced by passive stretch of skeletal muscle *in vivo*. Genomics 73: 38-49.
3. Okerberg, E.S., Wu, J., Zhang, B., Samii, B., Blackford, K., Winn, D.T., Shreder, K.R., Burbaum, J.J. and Patricelli, M.P. 2005. High-resolution functional proteomics by active-site peptide profiling. Proc. Natl. Acad. Sci. USA 102: 4996-5001.
4. Lacroix, M. 2006. Significance, detection and markers of disseminated breast cancer cells. Endocr. Relat. Cancer 13: 1033-1067.
5. Hawkins, J., Mahony, D., Maetschke, S., Wakabayashi, M., Teasdale, R.D. and Bodén, M. 2007. Identifying novel peroxisomal proteins. Proteins 69: 606-616.

CHROMOSOMAL LOCATION

Genetic locus: SERHL/SERHL2 (human) mapping to 22q13.2-q13.31.

SOURCE

SERHL/L2 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SERHL2 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-66631 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.

APPLICATIONS

SERHL/L2 (K-19) is recommended for detection of SERHL and SERHL2 of 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).

Molecular Weight of SERHL/L2: 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.

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.