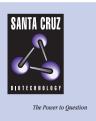
# SANTA CRUZ BIOTECHNOLOGY, INC.

# saposin C (K-12): sc-27020



BACKGROUND

The saposin family includes four structurally related activator proteins, saposin A, B, C, and D, that are cleaved from a single precursor protein prosaposin. The gene encoding human prosaposin maps to chromosome 10. Prosaposin is synthesized as a 53 kDa protein that is post-translationally modified to a 65 kDa form and then further glycosylated to yield a 70 kDa secretory product. This 70 kDa form subsequently undergoes partial proteolysis to produce saposin A, B, C, and D, each of which are between 12-14 kDa in mass. Each member acts in conjunction with hydrolase enzymes to facilitate the breakdown of glycosphingolipids within the lysosome. The saposins modify the environment of target lipids to make them accessible to the active sites of specific enzymes. Saposin A and C are involved in the hydrolysis of glucosylceramidase, and defects in saposin C are linked to Gaucher's disease. Saposin B facilitates the hydrolysis of the sulfate group from cerebroside sulfate, and defects in this protein are responsible for a form of metachromatic leukodystropy, a progressive neurodegenerative condition. Saposin D may stimulate the hydrolysis of sphingomyelin and ceramide, but its exact physiological role is not clear.

#### REFERENCES

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- Tatti, M., et al. 1999. Structural and membrane-binding properties of saposin D. Eur. J. Biochem. 263: 486-494.
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# CHROMOSOMAL LOCATION

Genetic locus: PSAP (human) mapping to 10q21-q22; Psap (mouse) mapping to 10 B4.

#### SOURCE

saposin C (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of saposin C of mouse origin.

#### **STORAGE**

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

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27020 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

saposin C (K-12) is recommended for detection of saposin C of mouse and rat 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).

Suitable for use as control antibody for saposin siRNA (m): sc-44457.

Molecular Weight of prosaposin C: 70 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, NIH/3T3 whole cell lysate: sc-2210 or mouse spleen extract: sc-2391.

#### **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) Immunofluo-rescence: use 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.