**BACKGROUND**

The saposin family includes four structurally related activator proteins, saposin A, B, C and D, that are cleaved from the single precursor protein prosaposin. The gene encoding human prosaposin maps to chromosome 10. Prosaposin is synthesized as a protein that is posttranslationally modified to a shorter form and then further glycosylated to yield a secretory product. This form subsequently undergoes partial proteolysis to produce saposin A, B, C and D. Each saposin family 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. Saposins 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 leukodystrophy, a progressive neurodegenerative condition. Saposin D may stimulate the hydrolysis of sphingomyelin and ceramide, but its exact physiological role is not clear.

**REFERENCES**


**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-27007 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Saposin A (S-16) is recommended for detection of saposin A of human and, to a lesser extent, 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).

Saposin A (S-16) is also recommended for detection of saposin A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for saposin siRNA (h): sc-44456, saposin shRNA Plasmid (h): sc-44456-SH and saposin shRNA (h) Lentiviral Particles: sc-44456-V.

**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: 1:200-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:200-1:5000), 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-FTC: 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.