



Protein Engineering Company

## Product Manual

**Product name:** Recombinant Human Saposin B  
**Catalog #** SAPB-301

### Product details:

Saposin B is a small, non-enzymatic glycosphingolipid activator protein (79 amino acids) required for the breakdown of cerebroside sulfates (sulfatides) in lysosomes. The protein can extract target lipids from membranes, forming soluble protein-lipid complexes that are recognized by arylsulfatase A.

Recombinant human saposin B is produced in *E. coli* as an N-terminal His-tag fusion and purified by proprietary chromatographic techniques with subsequent removal of the tag through a site-specific proteolytic cleavage.

Saposins are glycosylated in a native state; however, non-glycosylated recombinant saposins produced in *E. coli* retain their respective activation effects in functional *in vitro* assays (1, 2).

### Saposin B sequence

GDVQCDCIQMVTDIQTAVRTNSTFVQALVEHVKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCD E

**Storage buffer:** 25 mM Phosphate buffer, pH 7.2, 75 mM NaCl and 50% glycerol.

**Concentration:** 0.5 - 2.0 mg/mL by A280 ( $E^{1\%}$  3.4) (please see protein concentration for specific lot number on the vials for this product)

**Purity:** >90% by Coomassie staining

**Storage** is recommended at -20°C for longer periods of time.

**This product is for laboratory research use only.**

### References

1. Qi, X. et al. Functional human saposins expressed in *Escherichia coli*. Evidence for binding and activation properties of saposins C with acid beta-glucosidase. *J Biol Chem.* 1994 Jun 17; 269(24):16746-53.
2. Ahn, V. et al. Crystal Structure of Saposin B Reveals a Dimeric Shell for Lipid Binding. *Proc Natl Acad Sci U S A* 2003 Jan 7;100(1): 38-43.