



Protein Engineering Company

Product Description

Product name: Recombinant human saposin A
Catalog # SAPA-301

Product details:

Recombinant human saposin A 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). Saposins are used as scaffolding proteins in a versatile lipid nanoparticle system to reconstitute membrane proteins in a lipid environment (2, 3).

Saposin A sequence

SMGSLPCDICKDVVTAAGDMLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDIKGEMSRPGEVCSAL
NLCES

Storage buffer: 20 mM Tris-HCl, pH 7.5, 50 mM NaCl, and 50% Glycerol.
Concentration: 1.0 – 2.0 mg/mL by A280 (E^{1%} 9.3).
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. Popovic, K. et al. Structure of saposin A lipoprotein discs. *Proc Natl Acad Sci U S A.* 2012 Feb 21; 109(8):2908-12.
3. Frauenfeld, J. et al. A saposin-lipoprotein nanoparticle system for membrane proteins. *Nat Methods.* 2016 Apr; 13(4): 345–351.