





Recombinant Staphylococcus aureus Alphahemolysin (hly)

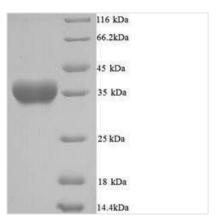
Product Code	CSB-YP639324FLF
Relevance	Alpha-toxin binds to the mbrane of eukaryotic cells resulting in the release of low-molecular weight molecules and leading to an eventual osmotic lysis. Heptamer oligomerization and pore formation is required for lytic activity.
Abbreviation	Recombinant Staphylococcus aureus hly protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q2G1X0
Alias	Alpha-toxin
Product Type	Recombinant Protein
Immunogen Species	Staphylococcus aureus (strain NCTC 8325)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ADSDINIKTGTTDIGSNTTVKTGDLVTYDKENGMHKKVFYSFIDDKNHNKKLLVI RTKGTIAGQYRVYSEEGANKSGLAWPSAFKVQLQLPDNEVAQISDYYPRNSID TKEYMSTLTYGFNGNVTGDDTGKIGGLIGANVSIGHTLKYVQPDFKTILESPTD KKVGWKVIFNNMVNQNWGPYDRDSWNPVYGNQLFMKTRNGSMKAADNFLD PNKASSLLSSGFSPDFATVITMDRKASKQQTNIDVIYERVRDDYQLHWTSTNW KGTNTKDKWIDRSSERYKIDWEKEEMTN
Research Area	Others
Source	Yeast
Target Names	hly
Protein Names	Recommended name: Alpha-hemolysin Short name= Alpha-HL Alternative name(s): Alpha-toxin
Expression Region	27-319aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	35.3kDa
Protein Length	Full Length of Mature Protein
Image	

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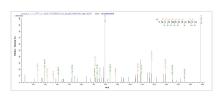




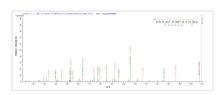




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of Yeast host and target protein, the LC-MS/MS Analysis result of CSB-YP639324FLF could indicate that this peptide derived from Yeast-expressed Staphylococcus aureus (strain NCTC 8325) hly.



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Description

Recombinant full-length of Mature Staphylococcus aureus Alpha-hemolysin (hly) Protein (27-319 amino acids) with a 6xHis tag at the C-terminus was expressed in the yeast. SDS-PAGE analysis of the purified hly protein gave one band at 34–40 kDa of the target molecule. The purity of this hly protein is greater than 90%. The identification of the hly protein was validated by the LC-MS/MS Analysis. The delivery time is relatively short because the hly protein is in-stock.

Alpha-hemolysin (hly), also known as hla, is a single component toxin generated by Staphylococcus aureus, a potential human causative agent that can cause various acute and chronic infections. Hly plays an important role in the pathogenesis of Staphylococcus aureus. The interaction between hly and the specific cell receptor ADAM10 forms cylindrical transmembrane heptameric pores. The resulting pores allow the influx and efflux of ions and small molecules, ultimately leading to disruption of ionic equilibrium, osmotic expansion, and cell death.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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