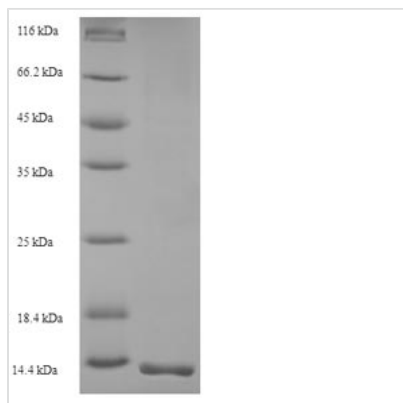


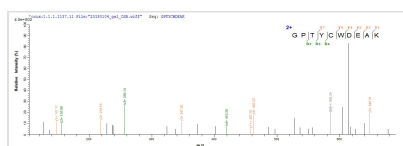


Recombinant Scytonema varium Scytovirin

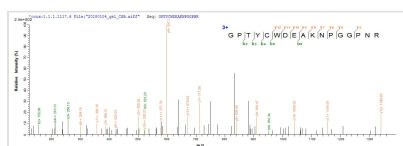
Product Code	CSB-YP308458SEH
Relevance	Has strong anti-HIV activity against T-tropic strains of HIV-1 and weaker activity against M-tropic strains of HIV-1. Inhibits HIV-1 fusion and infection of CD4 LTR beta-gal cells in vitro. Inhibits fusion of HIV infected C-SS cells with uninfected C-SS cells, and fusion of HIV-1 Env expressing HL2/3 cells with CD4 LTR beta-gal cells. Binds to HIV gp120, HIV gp160 and to a lesser extent HIV gp41. Binding to HIV gp120 is glycosylation dependent. Binds with high specificity to the tetrasaccharide Man-alpha-1,2-Man-alpha-1,6-Man-alpha-1,6-Man and also binds the higher-order oligosaccharides oligomannose 8 and oligomannose 9. Does not bind to monosaccharides, complex or hybrid N-linked oligosaccharides or chitin.
Abbreviation	Recombinant Scytonema varium Scytovirin 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.	P86041
Product Type	Recombinant Protein
Immunogen Species	Scytonema varium
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	GSGPTYCWNEANNPGGPNRCSNNKQCDGARTCSSSGFCQGTSRKPDGPK GPTYCWDEAKNPGGPNRCSNSKQCDGARTCSSSGFCQGTAGHAAA
Research Area	Others
Source	Yeast
Protein Names	Recommended name: Scytovirin Short name= SVN
Expression Region	1-95aa
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	11.7kDa
Protein Length	Full Length
Image	



(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-YP308458SEH could indicate that this peptide derived from Yeast-expressed *Scytonema varium* N/A.



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Description

The synthesis of Recombinant *S. varium* Scytovirin protein began with the isolation of Scytovirin gene from the native genome. The next step was to amplify the Scytovirin gene by inserting the Scytovirin gene into an expression vector and then introducing the vector into the selected host cell, Yeast. Significant amounts of recombinant *S. varium* Scytovirin protein were produced by the host only when expression genes were added. For the purpose of protein purification, the vector contains N-terminal 6xHis tag to the Scytovirin DNA sequence. The purity of this protein is 90%+ determined by SDS-PAGE.

Scytovirin (SVN) is an antiviral protein isolated from *scytonema varium*. SVN contains two apparent domains, which display significant homology to each other and a similar pattern of disulfide bonds. SVN is active against multiple viruses, including HIV, Zaire ebolavirus, Marburg virus, and SARS-CoV. SVN binds with high affinity to mannose-rich oligosaccharides on the envelope glycoprotein, blocking entry into target cells.

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

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.