

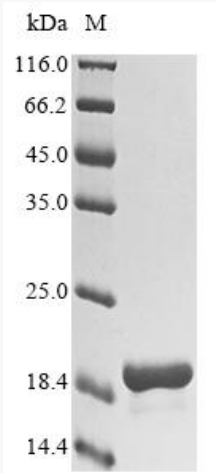
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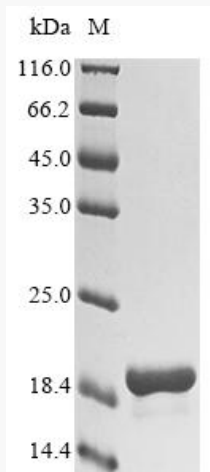
Datasheet

Product Name	Recombinant Griffithsia sp. Griffithsin
Catalog Number	AAA18661
Expression host	<i>Yeast</i>
Product Info	N-terminal 6xHis-tagged
Buffer	Lyophilized from 0.2 µm sterile filtered 20 mM Tris-HCl, 0.5 M NaCl, 6%Trehalose, pH 8.0. The volume before lyophilization is 1000µl/vial.
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Relevance	Mixed specificity lectin with anti-HIV activity. Binds to HIV envelope glycoproteins, including exterior membrane glycoprotein gp120, and inhibits viral entry into cells. Binding to gp120 is dependent on gp120 being glycosylated, and is inhibited by mannose, glucose and N-acetylglucosamine.
AA sequence	SLTHRKFGGSGGSPFSGGLSSIAVRSGSYLDSIIIDGVHHGGSGGNLSPTFTFGSGE YISNMTIRSGDYIDNISFETNMGRRFPGPYGGSGGSANTLSNVKVIQINGSAGDYL DSLDIYYEQY
References	"Crystallographic, thermodynamic, and molecular modeling studies of the mode of binding of oligosaccharides to the potent antiviral protein griffithsin." Ziolkowska N.E., Shenoy S.R., O'Keefe B.R., McMahon J.B., Palmer K.E., Dwek R.A., Wormald M.R., Wlodawer A. Proteins 67:661-670(2007)

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Certificate of Analysis

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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℃/-80℃. Our default final concentration of glycerol is 50%. Customers could use it as reference.		
Batch Number	DD04553a5g0		
Nature	Griffithsia sp. Griffithsin-(AA 1-121)- P84801 -Full Length		
Purification	Affinity purified using IMAC		
Recommended Storage	Short term	2 to 8 ℃, one week from the date of receipt	
	Long term	-20 to -80 ℃, twelve months from the date of receipt	
Form	Lyophilized powder		
Date of detection	2023.11.16		
Test Items	Specifications		Results
Purity	≥85%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		85%
Molecular Weight	Predicted band size: 14.7 kDa		Observed band size: 19 kDa The reducing (R) protein migrates as 19 kDa in SDS-PAGE may be due to relative charge.



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Electrophoretic parameters	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.	
Aseptic Processing	Lyophilized protein has been sterile filtered prior to lyophilization. However, the lyophilization process could potentially compromise sterility and please follow the instruction below if customers need a sterile filtered protein. Please sterile filter reconstituted lyophilized proteins with a 0.22µm filter in a clean bench (or other sterile environment) after reconstitution. Customers could use it as reference.	
Endotoxin Level	<1.0 EU per 1µg of the protein by the LAL method.	pass
Activity	Not tested	
Conclusion	pass	