for research use only Certificate of Analysis

Product Name	Recombinant Porphyromonas gingivalis Lys-gingipain(kgp) ,partial				
Catalog Number	AAA18541				
Expression host	E.coli				
Product Info	N-terminal 6xHis-SUMO-tagged				
Buffer	Lyophilized from 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0. The volume before lyophilization is 100µl/vial.				
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.				
Batch Number	DA04399b1g0				
Nature	Porphyromonas gingivalis kgp-(AA 229-594)- B2RLK2- Partial Protein				
Purification	Affinity purified using IMAC				
Recommended Storage	Short term 2 to 8 °C, one week from the date of receipt			of receipt	
	Long term -20 to -80 °C, twelve months from the date of receipt				
Form	Lyophilized powder				
Date of detection	2024.08.22				
Test Items	Specifications			Results	
Purity	≥90%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		kDa M 116.0 66.2 45.0 35.0	90%	
Molecular Weight	Predicted band size: 53.6 kDa		25.0 18.4 14.4	Observed band size: 57 kDa	

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Electrophoretic	(Tris-Glycine gel) Discontinuou SDS-PAGE (reduced) with 5% enrichment gel and 15% separation
parameters	gel.
Aseptic	
Processing	Not done
Endotoxin Level	Untreated
Activity	Not tested
Conclusion	pass

for research use only Datasheet

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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	Cysteine proteinase with a strong preference for substrates with Lys in the P1 position. Hydrolyzes bovine hemoglobin, bovine serum albumin, casein, human placental type I collagen and human IgA and IgG. Disrupts the functions of polymorphonuclear leukocytes. May act as a virulence factor in the development of peridontal disease. Involved in the coaggregation of P.gingivalis with other oral bacteria.		
AA sequence	DVYTDHGDLYNTPVRMLVVAGAKFKEALKPWLTWKAQKGFYLDVHYTDEAEVGTTNASIKAFIHKKYNDGL AASAAPVFLALVGDTDVISGEKGKKTKKVTDLYYSAVDGDYFPEMYTFRMSASSPEELTNIIDKVLMYEKATMP DKSYLEKALLIAGADSYWNPKIGQQTIKYAVQYYYNQDHGYTDVYSYPKAPYTGCYSHLNTGVGFANYTAHG SETSWADPSLTATQVKALTNKDKYFLAIGNCCVTAQFDYPQPCFGEVMTRVKEKGAYAYIGSSPNSYWGEDY YWSVGANAVFGVQPTFEGTSMGSYDATFLEDSYNTVNSIMWAGNLAATHAGNIGNITHIGAHYYWEAYHV LGDGSVM		
References	"Determination of the genome sequence of Porphyromonas gingivalis strain ATCC 33277 and genomic comparison with strain W83 revealed extensive genome rearrangements in P. gingivalis." Naito M., Hirakawa H., Yamashita A., Ohara N., Shoji M., Yukitake H., Nakayama K., Toh H., Yoshimura F., Kuhara S., Hattori M., Hayashi T., Nakayama K. DNA Res. 15:215-225(2008)		