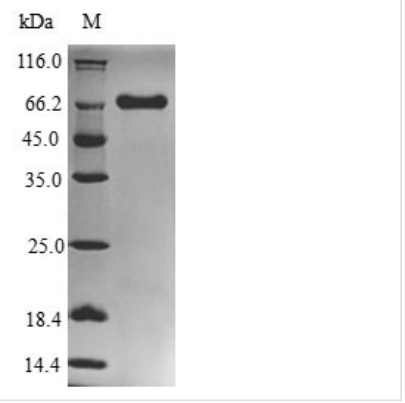
Recombinant Porphyromonas gingivalis Gingipain R1 (rgpA), partial

Product Code	CSB-EP338957PQP
Relevance	Thiol protease. Acts synergistically with RgpB to catalyze the maturation of fimbrial subunits, such as FimA. Its proteolytic activity is a major factor in both periodontal tissue destruction and in evasion of host defense mechanisms.
Abbreviation	Recombinant Porphyromonas gingivalis rgpA protein, partial
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.	P28784
Alias	Arg-gingipain Gingipain 1 RGP-1
Product Type	Recombinant Protein
Immunogen Species	Porphyromonas gingivalis
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	YTPVEEKQNGRMIVIVAKKYEGDIKDFVDWKNQRGLRTEVKVAEDIASPVTAN AIQQFVKQEYEKEGNDLTYVLLVGDHKDIPAKITPGIKSDQVYGQIVGNDHYNE VFIGRFSCESKEDLKTQIDRTIHYERNITTEDKWLGQALCIASAEGGPSADNGE SDIQHENVIANLLTQYGYTKIIKCYDPGVTPKNIIDAFNGGISLVNYTGHGSETA WGTSHFGTTHVKQLTNSNQLPFIFDVACVNGDFLFSMPCFAEALMRAQKDGK PTGTVAIIASTINQSWASPMRGQDEMNEILCEKHPNNIKRTFGGVTMNGMFAM VEKYKKDGEKMLDTWTVFGDPSLLVRTLVPTKMQVTAPAQINLTDASVNVSCD YNGAIATISANGKMFGSAVVENGTATINLTGLTNESTLTLTVVGYNKETVIKTINT NGEPNPYQPVSNLTATTQGQKVTLKWDAPSTKTNATTNTARSVDGIRELVLLS VSDAPELLRS
Research Area	others
Source	E.coli
Target Names	rgpA
Protein Names	Recommended name: Gingipain R1 EC= 3.4.22.37Alternative name(s): Arg-gingipain Gingipain 1 RGP-1
Expression Region	228-720aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-B2M-tagged
Mol. Weight	68.0kDa
Protein Length	Partial

Image



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

Description

The recombinant Porphyromonas gingivalis rgpA protein is encoded by a recombinant DNA that was cloned into the expression vector and then transformed into the E.coli that supports the expression of the gene. The recombinant DNA was constructed by fusing the N-terminal 6xHis-B2M tag gene to the gene fragment coding for the 228-720aa of the Porphyromonas gingivalis rgpA protein. After purification, the product is the recombinant Porphyromonas gingivalis rgpA protein. This recombinant rgpA protein was subjected to the SDS-PAGE determination. Its purity reaches over 90% evaluated by Bandscan software analysis combined with SAS-PAGE. This rgpA protein ran to the molecular weight of about 70 kDa under SDS-PAGE condition.

Porphyromonas gingivalis is a well-known bacterium that causes periodontitis and gingivitis. Inflammagens of porphyromonas gingivalis are associated with the development of various inflammatory conditions. Gingipains consist of rgpA and rgpB, and Lys-gingipain (Kgp). They play a central role in the virulence of this organism. Gingipain R1 is synergistically with RgpB to catalyze the maturation of fimbrial subunits, such as FimA. In recent years, findings suggested that Gingipain R1 (rgpA) from porphyromonas gingivalis has major effects on blood clot morphology and mechanics.

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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