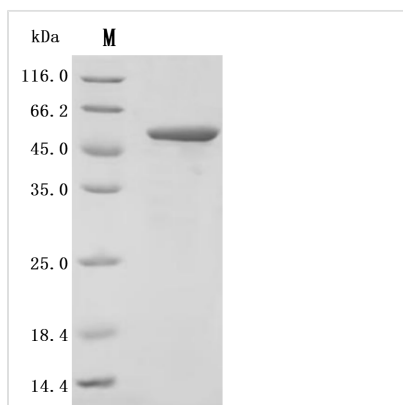


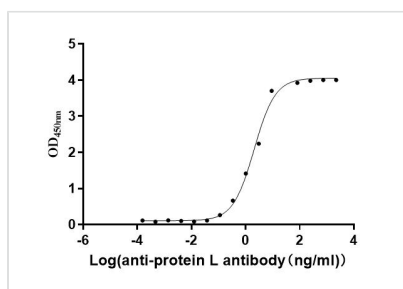


Recombinant Finegoldia magna ATCC 53516 LPXTG-motif cell wall anchor domain protein, partial (Active)

Product Code	CSB-MP5116GUR
Abbreviation	Recombinant Finegoldia HMPREF0391_11247 protein, partial (Active)
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?/-80?. The shelf life of lyophilized form is 12 months at -20?/-80?.
Uniprot No.	D6S9W1
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered PBS, 6% Trehalose, pH 7.4
Product Type	Recombinant Protein
Immunogen Species	Finegoldia magna ATCC 53516
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Peptostreptococcus magnus protein L at 2 µg/mL can bind Anti-protein L recombinant antibody(CSB-RA006163MA1HU).The EC50 is 1.601-1.944 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE. Greater than 95% as determined by SEC-HPLC.
Sequence	KEETPETPETDSEEEVTIKANLIFANGSTQTAEFKGTFEKATSEAYAYADTLKK DNGEYTVDVADKGYTLNKFAGKEKTPEEPKEEVTIKANLIYADGKTQTAEFKG TFEEATAEAYRYADALKKDNGEYTVDVADKGYTLNKFAGKEKTPEEPKEEVTI KANLIYADGKTQTAEFKGTFEATAEAYRYADLLAKENGKYTVDVADKGYTLNI KFAGKEKTPEEPKEEVTIKANLIYADGKTQTAEFKGTFAEATAEAYRYADLLAK ENGKYTADLEDGGYTINIRFAGKKVDEKPEEKEQVTIKENIYFEDGTVQTATFK GTFAEATAEAYRYADLLSKEHGKYTADLEDGGYTINIRFAG
Source	Mammalian cell
Expression Region	106-470aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4? for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	43.3 kDa
Protein Length	Partial
Image	

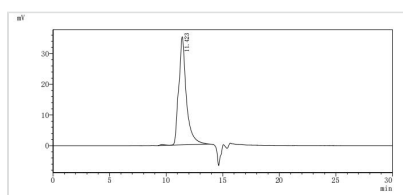


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity

Measured by its binding ability in a functional ELISA. Immobilized *Peptostreptococcus magnus* protein L at 2 µg/ml can bind Anti-CTLA4 recombinant antibody(CSB-RA006163MA2HU).The EC₅₀ is 1.601-1.944 ng/mL.



The purity of Protein L was greater than 95% as determined by SEC-HPLC

Description

The recombinant LPXTG-motif cell wall anchor domain protein from *Finnegoldia magna* ATCC 53516 is an active protein expressed in a mammalian system to ensure proper folding and functional integrity. This protein covers amino acids 106 to 470 of the native sequence and includes an N-terminal 10xHis tag for convenient purification and detection. Supplied as a lyophilized powder, it demonstrates exceptional purity, greater than 95% as confirmed by both SDS-PAGE and SEC-HPLC. Functional activity was assessed using ELISA, where the recombinant LPXTG-motif cell wall anchor domain protein binds specifically to anti-protein L recombinant antibody (CSB-RA006163MA1HU), with an EC₅₀ ranging from 1.601 to 1.944 ng/mL. These results validate its utility in studies involving bacterial adhesion mechanisms, antibody interaction assays, and microbiome-related research.

The LPXTG-motif cell wall anchor domain protein is significant for *Finnegoldia magna*, a Gram-positive anaerobic bacterium. This protein domain is recognized as essential for attaching proteins to the bacterial cell wall via the action of sortases, which cleave the LPXTG motif and facilitate this anchoring process. Specifically, strain ATCC 53516 of *Finnegoldia magna* may express such proteins. However, detailed molecular characterizations are limited and merit further investigation.

Finnegoldia magna is an increasingly recognized opportunistic pathogen, often



isolated from clinical specimens associated with various infections, including soft tissue abscesses, septic arthritis, and necrotizing fasciitis [1][2]. It resides within the normal human microbiota, particularly in the gastrointestinal tract and skin, which raises questions regarding its pathogenic potential versus its role as a commensal organism [3][4]. The bacterium expresses multiple surface proteins, some of which may include LPXTG motif proteins that have roles in adhesion and immune evasion [5][6].

The binding capabilities of these proteins, particularly those that can interact with human serum albumin (HSA) [7][8], imply a sophisticated adaptation to the host environment. The PAB (peptostreptococcal albumin-binding) protein identified in *F. magna* demonstrates a domain with considerable homology to HSA-binding proteins, illustrating its mechanism for immune evasion by sequestering vital host molecules [9]. Moreover, the ability of this bacterium to induce significant inflammatory responses through its secreted proteins underscores its pathogenic mechanisms [3][10].

Furthermore, the presence of LPXTG-motif proteins in *F. magna* represents an important area of study for understanding the strategies employed by this organism to colonize human tissues effectively and circumvent host defenses, making it a relevant target for research focusing on bacterial virulence factors [5][11]. Continued exploration into the specific functions of the LPXTG-motif anchor proteins in *F. magna* will enhance our understanding of its pathogenicity and adaptation within the human host.

References:

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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°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.