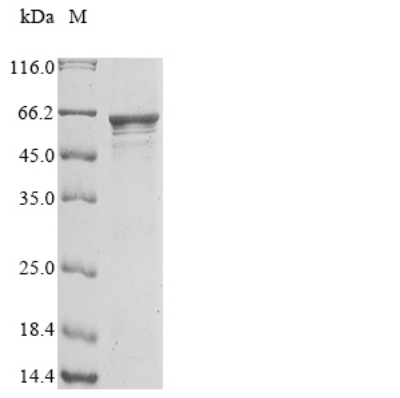
Recombinant Human Leucine-rich repeat-containing protein 15 (LRRC15), partial

Product Code	CSB-EP819484HU
Abbreviation	Recombinant Human LRRC15 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.	Q8TF66
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	YHGCPSECTCSRASQVECTGARIVAVPTPLPWNAMSLQILNTHITELNESPFLN ISALIALRIEKNELSRITPGAFRNLGSLRYLSLANNKLQVLPIGLFQGLDSLESLLL SSNQLLQIQPAHFSQCSNLKELQLHGNHLEYIPDGAFDHLVGLTKLNLGKNSLT HISPRVFQHLGNLQVLRLYENRLTDIPMGTFDGLVNLQELALQQNQIGLLSPGL FHNNHNLQRLYLSNNHISQLPPSVFMQLPQLNRLTLFGNSLKELSPGIFGPMP NLRELWLYDNHISSLPDNVFSNLRQLQVLILSRNQISFISPGAFNGLTELRELSL HTNALQDLDGNVFRMLANLQNISLQNNRLRQLPGNIFANVNGLMAIQLQNNQL ENLPLGIFDHLGKLCELRLYDNPWRCDSDILPLRNWLLLNQPRLGTDTVPVCF SPANVRGQSLIIINVNVAVPSVHVPEVPSYPETPWYPDTPSYPDTTSVSSTTEL TSPVEDYTDLTTIQVTDDRSVWGMTQAQSG
Research Area	Others
Source	E.coli
Target Names	LRRC15
Protein Names	Recommended name: Leucine-rich repeat-containing protein 15 Alternative name(s): Leucine-rich repeat protein induced by beta-amyloid homolog Short name= hLib
Expression Region	22-538aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	65.2 kDa

Protein Length Partial

Image



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

Description

To express the recombinant human LRRC15 protein in E.coli cells, a DNA fragment encoding the human LRRC15 protein (22-538aa) is inserted into a plasmid vector along with the N-terminal 10xHis and C-terminal Myc-tag gene and transferred to the E.coli cells. Cells containing the plasmid are screened, cultured, and induced to express the LRRC15 protein. Lysing the cells allows for the collection of the recombinant human LRRC15 protein, which is purified through affinity purification and then identified through SDS-PAGE and subsequent staining of the gel with Coomassie Brilliant Blue. The purity of the recombinant human LRRC15 protein obtained is greater than 90%.

LRRC15 is a cell surface glycoprotein that plays crucial roles in various biological processes. It is normally expressed in specific tissues like the invasive cytotrophoblast layer of the placenta [1]. LRRC15 has been identified as a tumor antigen and is overexpressed in androgen-independent metastatic prostate cancer [2]. Recent studies have highlighted LRRC15's significance in cancer biology, particularly in the context of tumor immunity suppression [3]. LRRC15 is associated with cancer-associated fibroblasts (CAFs) and linked to cancer grade and outcome [4]. Moreover, LRRC15 has been implicated in viral infections, such as being a receptor for SARS-CoV-2 spike protein and influencing antiviral and antifibrotic transcriptional programs [5]. It has also been suggested that LRRC15 may have a role in controlling infection and suppressing lung fibrosis [6].

LRRC15's involvement in various diseases and its potential as a therapeutic target has garnered significant attention. Studies have explored targeting LRRC15 for inhibiting metastatic dissemination in ovarian cancer [7]. J. Purcell and his colleagues have developed LRRC15 as a stromal target for antibody-drug conjugates in cancer treatment [8]. Furthermore, LRRC15 has been proposed as a promising anti-cancer target due to its overexpression in mesenchymal-derived tumors and cancer-associated fibroblasts in the microenvironment of different types of tumors [9].

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.