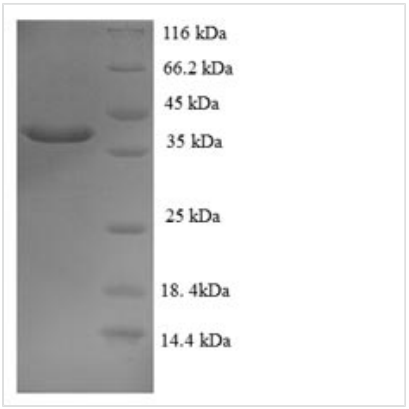
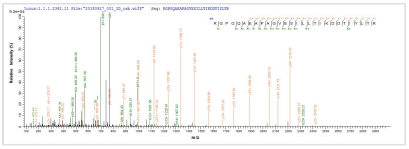
Recombinant Human Mucin-2 (MUC2), partial

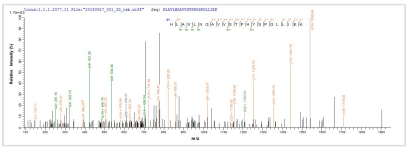
Product Code	CSB-EP015222HU
Relevance	Coats the epithelia of the intestines, airways, and other mucus mbrane-containing organs. Thought to provide a protective, lubricating barrier against particles and infectious agents at mucosal surfaces. Major constituent of both the inner and outer mucus layers of the colon and may play a role in excluding bacteria from the inner mucus layer.
Abbreviation	Recombinant Human MUC2 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.	Q02817
Alias	Intestinal mucin-2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	VCSTWGNFHYKTFDGDVFRFPGLCDYNFASDCRGSYKEFAVHLKRGPGQAE APAGVESILLTIKDDTIYLTRHLAVLNGAVVSTPHYSPGLLIEKSDAYTKVYSRA GLTLMWNREDALMLELDTKFRNHTCGLCGDYNGLQSYSEFLSDGVLFSPLEF GNMQKINQPDVVCEDPEEEVAPASCSEHRAECERLLTAEAFADCQDL
Research Area	Signal Transduction
Source	E.coli
Target Names	MUC2
Protein Names	Recommended name: Mucin-2 Short name= MUC-2Alternative name(s): Intestinal mucin-2
Expression Region	36-240aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	38.8kDa
Protein Length	partial
Image	



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP015222HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) MUC2.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP015222HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) MUC2.

Description

The synthesis of the recombinant plasmid containing the gene encoding the Human MUC2 protein (36-240aa) is the first step to produce the recombinant Human MUC2 protein. After that, the recombinant plasmid is transformed into e.coli cells. e.coli cells capable of enduring a specific antibiotic are selected, demonstrating successful uptake of the recombinant plasmid. The e.coli cells containing the recombinant plasmid are cultured under conditions that encourage the expression of the gene of interest. A N-terminal 6xHis-SUMO tag is linked to the protein. Following expression, affinity purification is employed to isolate and purify the recombinant Human MUC2 protein from the cell lysate. Denaturing SDS-PAGE is applied to resolve the resulting recombinant Human MUC2 protein, indicating a purity level exceeding 90%.

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.