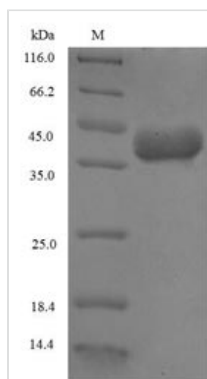




Recombinant Triticum aestivum Omega-5 gliadin, partial

Product Code	CSB-EP2020TQN
Abbreviation	Recombinant Triticum aestivum Omega-5 gliadin 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.	Q402I5
Product Type	Recombinant Protein
Immunogen Species	Triticum aestivum (Wheat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	<p> QQQFPQQQSPQQQFPQQQFPQQQQLPQKQFPQPQQIPQQQQIPQQPQQF PQQQFPQQQFPQQQEFPPQQQFPQQQFHQQQLPQQQFPQQQFPQQQFPQ QQQFPQQQQLTQQQFPRPQQSPEQQQFPQQQFPQQPPQQFPQQQFPIYP PQQSEEPSYQQYPQQQPSGSDVISISGL </p>
Research Area	Others
Source	E.coli
Expression Region	262-439aa
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	37.5kDa
Protein Length	Partial

Image



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

Description

Recombinant Triticum aestivum Omega-5 gliadin is an E.coli cell-expressed partial protein. E.coli expression systems are popular because bacteria are easy



to culture, grow fast and produce high yields of recombinant protein. Traditional strategies for Triticum aestivum Omega-5 gliadin recombinant protein expression involve transforming the recombinant plasmid into the E. coli host. The cells were directly replicated, transcribed and translated, and IPTG was added to express the desired protein. Typically, the cells are then lysed to extract the expressed protein for subsequent purification. Also, many proteins become insoluble as inclusion bodies that are very difficult to recover, so mild conditions and subsequent cumbersome protein-refolding procedures are used to ensure the final provided protein is soluble.

Omega-5 gliadin is a protein component of gluten in triticum aestivum (wheat). Different to gluten proteins, omega gliadins are distinguished from the others on the basis of their amino acid compositions, being exceptionally rich in proline and glutamine with little or no methionine and cysteine. Of the wheat allergens, omega-5 gliadin has been implicated as the most frequent trigger of WDEIA. Omega-5 gliadin allergy is a rare wheat allergy that presents with severe anaphylaxis. Exercise is the key co-factor, and other known co-factors include alcohol, menstruation and aspirin/NSAIDs.

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.