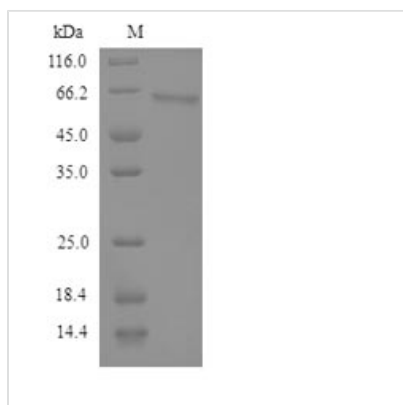




Recombinant Human Semenogelin-2 (SEMG2)

Product Code	CSB-YP021002HU
Relevance	Participates in the formation of a gel matrix (sperm coagulum) entrapping the accessory gland secretions and ejaculated spermatozoa.
Abbreviation	Recombinant Human SEMG2 protein
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.	Q02383
Alias	Semenogelin II Short name: SGII
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QKGGSKGQLPSGSSQFPHGQKGQHYFGQKDQHTKSKGSFSIQHTYHVDIN DHDWTRKSQQYDLNALHKATKSKQHLGGSQQLLNYKQEGRDHDKSKGHFH MIVIIHKGGAHHGTQNPSSQDQGNPSGKGLSSQCSNTEKRLWVHGLSKEQ ASASGAQKGRQTQGSQSSYVLQTEELVVNKQQRETKNSHQNKGHYQNVVDV REEHSSKLQTSLHPAHQDRLQHGPDKDFTTQDELLVYNKNQHQTKNLSQDQE HGRKAHKISYPSSRTEERQLHHGEKSVQKDVSKGSISIQTEEKIHGKSQNQVTI HSQDQEHGHKENKISYQSSSTEERHLNCGEKGIQKGVSKGSISIQTEEQIHGK SQNQVRIPSQAQEQYGHKENKISYQSSSTEERRLNSGEKDVQKGVSKGSISIQT EEKIHGKSQNQVTIPSQDQEHGHKENKMSYQSSSTEERRLNYGGKSTQKDVS QSSISFQIEKLVEGKSQIQTPNPNDQWQSGQNAKGKSGQSADSKQDLLSHEQ KGRYKQESSESHNIVITEHEVAQDDHLTQQYNEDRNPIST
Research Area	Signal Transduction
Source	Yeast
Target Names	SEMG2
Protein Names	Recommended name: Semenogelin-2 Alternative name(s): Semenogelin II Short name= SGII
Expression Region	24-582aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	64.9kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

A truncated version of Semenogelin-2/SEMG2 lacking the 1-23 amino-acid signal peptide of the C-terminus and carrying a 6xHis-tag at the N-terminus was produced in the yeast. The resulting protein is a full-length of mature SEMG2 protein. It contains aa of 24-582 of the human SEMG2 protein. It was purified by SDS-PAGE and reached up to 90% in purity. On the reducing SDS-PAEG gel, this SEMG2 protein migrated on the molecular weight band of about 65 kDa. The result is slightly higher than that of the calculated one due to glycosylation. This recombinant SEMG2 protein may be used to produce specific antibodies or on the SEMG2-associated signal transduction.

SEMG2 also referred to as SgII, is secreted by the seminal vesicles. Together with SgII and fibronectin, SEMG2 is involved in the formation of the coagulum formed by newly ejaculated human semen. Upon semenogelins' proteolysis by prostate-specific antigen (PSA), the sperm coagulum was liquefied within 5-20 minutes and released the trapped spermatozoa and accessory gland secretions. Besides, SEMG2 interaction with transglutaminase and activation to sperm hyaluronidase shows that it also participates in the degradation of the envelope around the ovum during fertilization.

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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