



Recombinant Human coronavirus OC43 Spike glycoprotein (S), partial

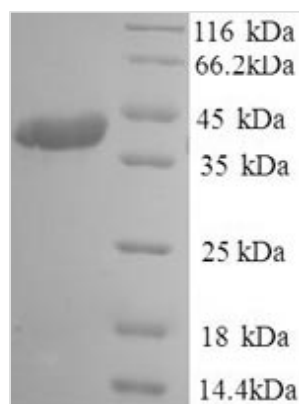
Product Code	CSB-YP336163HIY
Relevance	S1 attaches the virion to the cell mbrane by interacting with sialic acid-containing cell receptors, initiating the infection.S2 is a class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell mbrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell mbranes.
Abbreviation	Recombinant Human coronavirus OC43 S 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.	P36334
Alias	E2;Peplomer protein
Product Type	Recombinant Protein
Immunogen Species	Human coronavirus OC43 (HCoV-OC43)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	VIGDLKCTSDNINDKDTGPPPISTDTVDVTNGLGTYYYLDRVYLNTTLFLNGYY PTSGSTYRNMALKGSVLLSRLWFKPPFLSDFINGIFAKVKNTKVIKDRVMYSEF PAITIGSTFVNTSYSVVVQPRINSTQDGDNKLQGLLEVSVQCQYNMCEYPQTIC HPNLGNHRKELWHLDTGVVSCLYKRNFTYDVNADYLYFHFYQEGGTFYAYFT DTGVVTKFLFNVYLGMAISHYVVMPLTCNSKLTLEYWVTPLTSRQYLLAFNQD GIIFNAEDCMSDFMSEIKCKTQSIAPPTGVYELNGYTVQPIADVYRRKPNLPNC NIEAWLNDK
Source	Yeast
Target Names	S
Protein Names	Recommended name: Spike glycoprotein Short name= S glycoproteinAlternative name(s): E2 Peplomer proteinCleaved into the following 2 chains: 1. Spike protein S1Alternative name(s): 90B Spike protein S2Alternative name(s): 90A
Expression Region	15-344aa
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 39.6kDa

Protein Length Partial

Image



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

Description

CUSABIO expressed the human coronavirus OC43 (HCoV-OC43) spike glycoprotein (S) amino acid residues Val15-Lys344 carrying an N-terminal 6xHis-tag in the yeast. The product is the recombinant partial-length HCoV-OC43-S protein. Its purity is greater than 90% determined by SDS-PAGE. The observed molecular mass was approximately 44 kDa, slightly higher than the calculated one (39.62 kDa) due to glycosylation. In addition to being the immunogen for specific antibody production, this recombinant HCoV-OC43-S protein also may be used in the studies of the microbiology research area.

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.