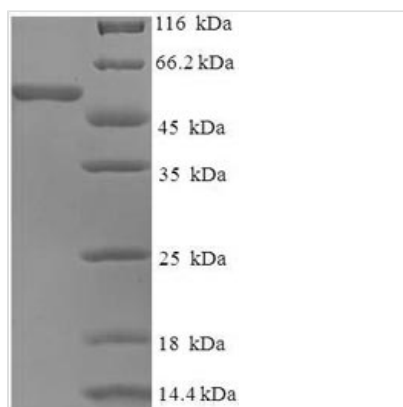




Recombinant Human coronavirus OC43 Spike glycoprotein (S), partial

Product Code	CSB-EP336163HIY
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	VIGDLKCTSDNINDKDTGPPPISTDTVDVTNGLGTYYYVLDREVYLNNTTLFLNGYY PTSGSTYRNMALKGSVLLSRLWFKPPFLSDFINGIFAKVKNTKVIKDRVMYSEF PAITIGSTFVNTSYSVVVQPRINSTQDGDNKLQGLLEVSVQCQYNMCEYPQTIC HPNLGNHRKELWHLDTGVVSCLYKRNFYDVNADYLYFHFYQEGGTFYAYFT DTGVVTKFLFNVYLGMAISHYVVMPLTCNSKLTLEYWVTPLTSRQYLLAFNQD GIIFNAEDCMSDFMSEIKCKTQSIAPPTGVYELNGYTVQPIADVYRRKPNLPNC NIEAWLNDK
Source	E.coli
Target Names	S
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-SUMO-tagged
Mol. Weight	53.6kDa
Protein Length	Partial
Image	



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

Description

E.coli-expressed human coronavirus OC43 (HCoV-OC43) spike glycoprotein (S) CSB-EP336163HIY is a recombinant fusion protein of partial HCoV-OC43-S coupled to a 6xHis-SUMO-tag at the N-terminus. This protein consists of the 15-344AA of HCoV-OC43-S and is calculated molecular weight of 53.9 kDa. The SDS-PAGE determined its purity over 90%. This recombinant HCoV-OC43-S protein is in-stock now.

HCoV-OC43 S protein is essential for viral entry into the host and critically determines the tropism of host and tissue. It mediates the binding to cell-surface receptors. The S protein binds to sugar-based receptor-determinants, specifically to 9-O-acetylated sialic acids (9-O-Ac-Sias) attached as terminal residues to glycan chains on glycoproteins and lipids.

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.