

Recombinant MERS-CoV S Protein, His-tagged

Cat. No. S-014M Lot. No. (See product label)

SPECIFICATION

Product Overview

Recombinant MERS-CoV Spike, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Species

MERS-CoV

Source

Insect cells

Description

MERS-CoV, which causes the Middle East Respiratory Syndrome (MERS), belongs to a family of viruses known as coronaviruses. MERS-CoV was first identified in the Kingdom of Saudi Arabia in 2012, which is a single and positive stranded RNA virus. Dromedary camels are widely considered as the source of the transmission of MERS-CoV. The rate of human transmission among household contacts of MERS patients has been approximately 5 % based on serological analysis. MERS-CoV has four structural proteins, known as the S (spike), E (envelope), M (membrane), and N (nucleocapsid) proteins. The spike protein, responsible for allowing the virus to attach to and fuse with the membrane of a host cell and is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. MERS-CoV S mediates viral attachment and fusion to human cells via human cellular receptor DPP4, also known as CD26. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. Recombinant MERS-CoV Spike, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

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Form	Liquid
Molecular Mass	141.6kDa
AA Sequence	YVDVGPDSVKSACIEVDIQQTFFDKTWPRPIDVSKADGIIPQGRTYSNITITYQGLFP YQGDHGDMMYVYSAGHATGTPQKLFVANYSQDVKQFANGFVVRIGAAANSTGTVII SPSTSATIRKIYPFMLGSSVGNFSDGKMGRFFNHTLVLLPDGCGTLLRAFYCILEPR SGNHCPAGNSYTSFATYHTPATDCSDGNYNRNASLNSFKEYFNLRNCTFMYTYNIT EDEILEWFGITQTAQGVHLFSSRYVDLYGGNMFQFATLPVYDTIKYYSIIPHSIRSIQS DRKAWAAFYVYKLQPLTFLDFSVDGYIRRAIDCGFNDLSQLHCSYESFDVESGVYS VSSF EAKPSGSVVEQAEGVECDFSPLLSGTPPQVYNFKRLVFTNCNYNLTKLLSLFS VNDFTCSQISPAAIASNCYSSLILDYFSYPLSMKSDLSVSSAGPISQFNYKQSFNPT CLILATVPHNLTITITKPLKYSYINKCSRLLSDDRTEVPQLVNANQYSPCVSIVPSTVWE DGDYYRKQLSPLEGGGWLVASGSTVAMTEQLQMGGFQITVQYGTDTNSVCPKLEFA NDTKIASQLGNCVEYSLYGVSGRGVFQNCTAVGVRQQRFFVYDAYQNLVGYYSDDG NYYCLRACVSVPVSVIYDKETKTHATLFGSVACEHISSTMSQYSRSTRSMLKRRDST YGPLQTPVGCVLGLVNSSLFVEDCKLPLGQSLCALPDTPSTLTPRSVRSVPGEMRL ASIAFNHPIQVDQLNSSYFKLSIPTNFSFGVTQEYIQTTIQKVTVDCKQYVCNGFQKC EQLLREYGGQFCSKINQALHGANLRQDDSVRNLFASVKSSQSSPIPGFGGDFNLTL EPVSISTGSRARSARSAIEDLLFDKVTIADPGYMQGYDDCMQQGPASARDLICAQYVAG YKVLPLMDVNMEEAAYTSSLLGSIAGVGWTAGLSSFAAIPFAQSIFYRLNGVGITQQV LSENQKLIANKFNQALGAMQTGFTTTNEAFQKVQDAVNNAQALSKLASELSNTFG AISASIGDIIQRLDVLEQDAQIDRLINGRLTTLNAFVAQQQLVRSESAALSAQLAKDKVN ECVKAQSKRSGFCGQGTHIVSFVFNAPNGLYFMHVGYYPSNHIEVVSAYGLCDAAN PTNCIAPVNGYFIKTNNTRIVDEWSYTGSSFYAPEPITSLNTKYVAPQVTYQNISTNLP PPLLGNSTGIDFQDELDEFFKNVSTSIPNFGSLTQINTLLDLTYEMLSLQQVVKALNE SYIDLKELGNYTYYNKWP
Endotoxin	< 1 EU/μg of protein (determined by LAL method)

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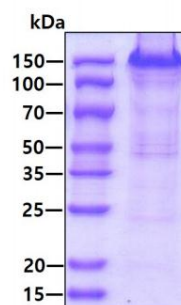
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Purity	> 85% by SDS-PAGE
Applications	SDS-PAGE
Storage	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -93 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.25 mg/mL (determined by Bradford assay)
Storage Buffer	Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

GENE INFORMATION

Official Symbol	S
Synonyms	Middle East respiratory syndrome coronavirus; Human betacoronavirus 2c EMC/2012; MERS-CoV; MERS; MERSCoV SP; Spike glycoprotein; S glycoprotein; S; Spike protein
UniProt ID	K0BRG7

SDS-PAGE



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3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain

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