Bioassayplus Inc.

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Certificate of Analysis

Important Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product name: Recombinant human *Coronavirus* OC43 nucleoprotein

Catalog: CoV-OC43-NP

Description: OC43 is one of seven known coronaviruses to infect human, including HCoV-229E, HCoV-NL63, HCoV-HKU1 , MERS-CoV, the original SARS-CoV1, and SARS-CoV-2 (Covid 19) . Along with human alpha- coronavirus 229E and NL63, and beta-coronavirus HCoV OC43 and HCoV-HKU1 are responsible for the common cold. It has, like other beta-coronavirus, an additional shorter spike protein called hemagglutinin esterase (HE).

Human coronavirus OC43 (HCoV-OC43) is a member of the species beta-coronavirus with an enveloped, positive-sense, single-stranded RNA virus which enters its host cell by binding to the N-acetyl-9-O-acetylneuraminic acid receptor.

Recombinant human *coronavirus* OC43 nucleoprotein is full length protein except the predicted signal peptide of the first 30 amino acids, and a 6 x his tag at its C terminal. This protein has the following sequence and migrate at 50kDa.

Protein sequence:

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DQFRNVQTRG RRAQPKQTST SQQPSGGNVV PYYSWFSGIT
QFQKGKEFEF AEGQGVPIAP GVPATEAKGY WYRHNRRSFK
TADGNQRQLL PRWYFYYLGT GPHAKDQYGT DIDGVFWVAS
NQADVNTPAD IVDRDPSSDE AIPTRFPPGT VLPQGYYIEG
SGRSAPNSRS TSRTSSRASS AGSRSRANSG NRAPTSGVTP
DMADQIASLV LAKLGKDATK PQQVTKHTAK EVRQKILNKP
RQKRSPNKQC TVQQCFGKRG PNQNFGGGEM LKLGTSDPQF
PILAELAPTA GAFFFGSRLELAKVQNLSGN  PDEPQKDVYE
LRYNGAIRFD STLSGFETIM KVLNENLNAY QQQDGMMNMS
PKPQRQRGLK NGQGENDNIS VAAPKSRVQQ NKSRELTAED
ISLLKKMDEP YTEDTSEI
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HCoV OC43 nucleoprotein 1.8mg/ml, E072020

Source: *E. coli*

Format: purified, Liquid

Purification: >90% pure (10% SDS-PAGE, Coomassie blue stain)

Concentration: 1.8mg/ml (Lot: E072020)

Buffer: PBS with 25mM K2CO3

Applications: Immunoassay

Dilution: use PBS, 25mM K_2CO_3

Storage: Short time in 4ºC and long term in -20°C. avoid multiple freeze/thaw cycles.