

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Nucleocapsid Protein [1 - 448] Human CoV OC43

Enzyme description:- Human CoV OC43 N Protein [1 - 448]

Clone number:- DU 67704

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 76,066.25 daltons

Average Mass 76,113.93 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 8.99

Purity:- 80 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA,
0.1 % 2-mercaptoethanol, 0.03 % Brij-35

Storage temperature:- -70 °C

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Clone Data Sheet

Nucleocapsid Protein [1 - 448] Human CoV OC43

<u>Protein</u>	Human CoV OC43 N Protein [1 – 448]
<u>Clone number</u>	DU 67704
<u>Accession number</u>	AEN19370.1
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	<p>MSPILGYWKIKGLVQPTRLLEYLEEKYEEHLYERDEGDKWRNKK FELGLEFPNLPYYIDGDVKLTSMAIIRYIADKHNMLGGCPKERA EISMLEGAVLDIRYGVSRIAYS KDFETLKVDFLSKLP EMLKMFED RLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFK KRIEAI PQIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLEVL <u>QGPLGSMSTPGKQSSSRASSGNRSGNGILKWADQSDQFRNVQTR</u> <u>GRRAPKQATATSQQPSGGNVVPYYSWFSGITQFQKGEFEFAEQ</u> <u>GVP IAPGVPATEAKGYWYRHNRRSFKTADGNQRQLLPRWYFYLG</u> <u>TGPHAKDQYGTDINGVYWVASNQADVNTPADIVDRDPSSDEAIPT</u> <u>RFPPGTVLPQGYIEGSGRSAPNSRSTSRSSRASSAGSRSRANS</u> <u>GNRTPTSGVTPDMADQIASLVLAKLGKDATKPQOVTKHTAKEVRQ</u> <u>KILNKPRQKRSPNKQCTVQQCFGKRGPNQNFGGGEMCLKGTS DPQ</u> <u>FPILAELAPTAGAFFFGSKLELAKVQNLSGNPDEPQKD VYELRYN</u> <u>GAIRFDSTLSGFETIMKVLSEN LNAYQQQDGMVNMSPKPQRQRGH</u> <u>KNGQGENDNISVAVPKSRVQQNKSIELTAEDISLLKKMDEPFTED</u> <u>TSEI</u></p>
<u>Native sequence</u>	Amino acids M1 – I448 (end). Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 – 228