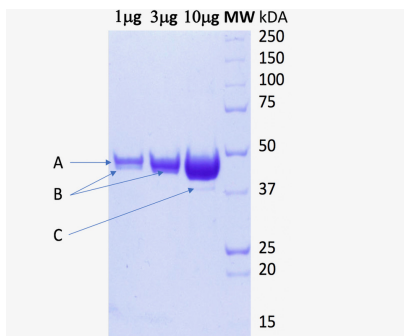


SARS-CoV-2 Nucleocapsid Protein (His-tagged)

A purified, soluble recombinant SARS-CoV-2 nucleocapsid protein, His-tagged



SDS-PAGE Analysis of His-tagged NCP

Protein loaded at 10, 3 or 1 µg/ well analyzed on a 10% polyacrylamide gel, stained with Coomassie Blue.

Proteomic analysis indicates *E. coli* protein contamination of less than 1% in main band A. Bands B and C identified as fragments of NCP by proteomic analysis.

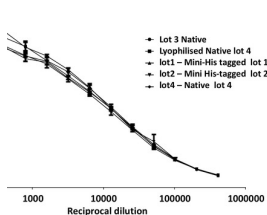
Sequence - SARS-CoV-2 Nucleocapsid protein (His-Tagged)

```
MHHHHHSGDNGPQNQRNAPRITFGGSPDSTGSNNGERSGARSKQRRPQGLPNNTASWF
TALTQHGKEDLKFFRGQGVPIINTSSPDDQIGYYRRATRIRGGDGKMKDLSRWYFYLL
GTGPEAGLPYGANKDGIWVATEGALNTPKDHIGTRNPANNAIIVLQLPGTTLKGFYA
EGSRGGSQASSRSSRSRNSSTPGSSRGTSARMAGNGGDAALALLLLDLRLNQLESK
MSGKGQQQQQTVTKKSAAEASKKPRQKRTATKAYNVTQAFGRRGPEQTQGNFGDQELIR
QGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAIKLDDKDPNFKDQVILL
NKHIDAYKTFPPTEPKKDKKKKADETQALPQRQKQQTVTLLPAADLDDFSKQLQQSMSS
ADSTQA
```

Please see downloads section for PDF version

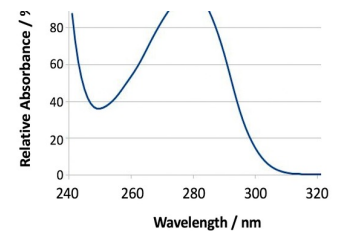
Reproducibility of Recombinant Nucleocapsid Protein in ELISA

STANDARD CURVES



Dilutions of a covid19 sample tested in parallel batches of Nucleocapsid (mini-His-tagged), lots native batches, lots 3. We also tested a lyophilised native batch lot 4.

ELISA performed as described in Med 26, 1033-1036 (2020)



Absorbance spectrum of His-tagged NCP

A Purified, recombinant SARS-CoV-2 nucleocapsid protein.

This protein represents the nucleocapsid protein from the original SARS-CoV-2 strain, first identified in Wuhan.

Details (see spec sheet for more details)

- Host: E. coli
- Tag: minimal N-terminal six-histidine tagged (HHHHHHG)
- Purity: >95%, assessed by SDS-PAGE.
- Formulation: Aqueous solution flash frozen at -80 °C
- Quantities available: 1 mg, 10 mg & 100 mg. Multiples may be ordered.

For other pack sizes/larger quantities or questions regarding aliquoting please contact us.

Please select the correct licence to reflect the quantity being ordered.

Sequence

MHHHHHHGSDNGPQNQRNAPRITFGGPDSTGSNQNGERSGARSKQRRPQGLPNNTASWF
TALTQHGKEDLKFPARGQGVPIINTNSSPDDQIGYYRRATRIRGGDGKMKDLSRWYFYLL
GTGPEAGLPYGANKDGIWVATEGALNTPKDHIGTRNPANNAIIVLQLPQGTTLPKGFYA
EGSRGGSQASSRSSRSRNSSRNSTPGSSRGTSARMAGNGGDAALALLLDRLNQLESK
MSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKAYNVTQAFGRRGPEQTQGNFGDQELIR
QGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAIKLDDKDPNFKDQVILL
NKHIDAYKTFPPTPEPKDKKKKADETQALPQRQKKQQTVTLLPAADLDDFSKQLQQSMSS
ADSTQA

(Note: N-terminal Met is removed on processing in E. coli, so that amino acids 9-426 of the sequence above matches residues 2-419 of SARS-CoV-2 Nucleocapsid protein GenBank entry QHD43423.2.)

Background

The coronavirus nucleocapsid (N) protein has a structural role, binding to the viral RNA and forming the nucleocapsid. The N protein is highly immunogenic and abundantly expressed during infection which makes it an important marker in diagnostic assays for COVID-19. Recombinant nucleocapsid proteins are commonly used in viral quantification assays and in ELISAs for detection of human antibodies against coronavirus.

Ordering

Particular attention should be paid when selecting the licence.

Delivery and checkout questions

A charge is added at checkout to cover packing and shipping costs. This will be £20 for UK orders and £50 for EU orders. The material will be packaged with dry ice and shipped by DHL.

For deliveries outside the UK or EU please enquire for shipping costs.

Recipients are asked to provide details of their intended use for the material.

For International orders: The University ships this material internationally using INCOTERMS DAP (Delivered at Place). Under these terms, the seller (Sheffield) is required to clear the goods for export and the buyer is responsible for effecting customs clearance, and paying any customs duties.

PLEASE NOTE: The customer will be contacted by the courier to clear the shipment at customs and pay any customs or import duty. **Please provide the appropriate contact details, at the checkout stage, for the person responsible for making payment for customs charges and be sure to comply with courier enquiries in order to avoid shipment delays.**

Keywords

SARS-CoV-2, nucleocapsid, protein, coronavirus, COVID, COVID-19, 2019-ncov

Further information

Further information on the research group may be found at:

<https://www.sheffield.ac.uk/medicine/people/iicd/jon-r-sayers>

<https://www.sheffield.ac.uk/news/nr/sheffield-coronavirus-antibody-research-1.893554>

Authors

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<https://licensing.sheffield.ac.uk/product/sars-cov-2-nucleocapsid-protein-his-tagged>