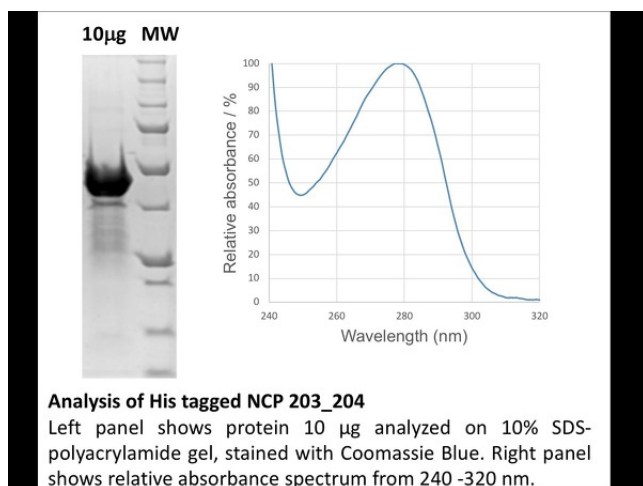


# SARS-CoV-2 Nucleocapsid Protein (203/204: RG>KR mutant, His-tagged)

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



## A purified, recombinant SARS-CoV-2 nucleocapsid protein (R203K-G204R).

This protein represents the nucleocapsid protein from the variant of the original SARS-CoV-2 strain, in which the arginine-glycine amino acids in position 203-204 have been substituted with lysine-arginine (203/204: RG>KR mutation).

**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**

MHHHHHHGSDNGPQNQRNAPRITFGGSPDSTGSNQNGERSGARSKQRRPQGLPNNTASWF  
TALTQHGKEDLKFPRGQGVPIINTNSSPDDQIGYYRRATRRIRGGDGKMKDLSPRWYFYLL  
GTGPEAGLPYGANKDGIWVATEGALNTPKDHIGTRNPANNAIVLQLPQGTTLPKGFYA  
EGSRGGSQASSRSSSRNSSRNSTPGSSKRTSPARMAGNGGDAALALLLLDRLNQLESK  
MSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKAYNVTQAFGRRGPEQTQGNFGDQELIR  
QGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAIKLDDKDPNFKDQVILL  
NKHIDAYKTFPPTPEPKDKKKKADETQALPQRQKKQQTVTLLPAADLDDFSKQLQQSMSS  
ADSTQA

(Note: Amino acids 9-426 of the sequence above matches residues 2-419 of SARS-CoV-2 Nucleocapsid protein GenBank entry QIQ08827)

## **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.

Many isolates encode this variant, for a fuller list of identical protein sequences see <https://www.ncbi.nlm.nih.gov/ipg/QIQ08827.1>

## **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, variant, mutant, 203-204, RG>KR, R203K, G204R, arginine-glycine, lysine-arginine

### **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**

Prof Jon Sayers

<https://licensing.sheffield.ac.uk/product/sars-cov-2-nucleocapsid-protein-203204-rgkr-mutant-his-tagged>