

## Full length SARS CoV-2 Spike Protein in MSP1D1-His\_POPC nanodiscs

Product	Catalog No.	Package size
CoV-2 spike protein nanodisc complex (25 µg)	29301	1 x 25 µg
CoV-2 spike protein nanodisc complex (100 µg)	29303	4 x 25 µg

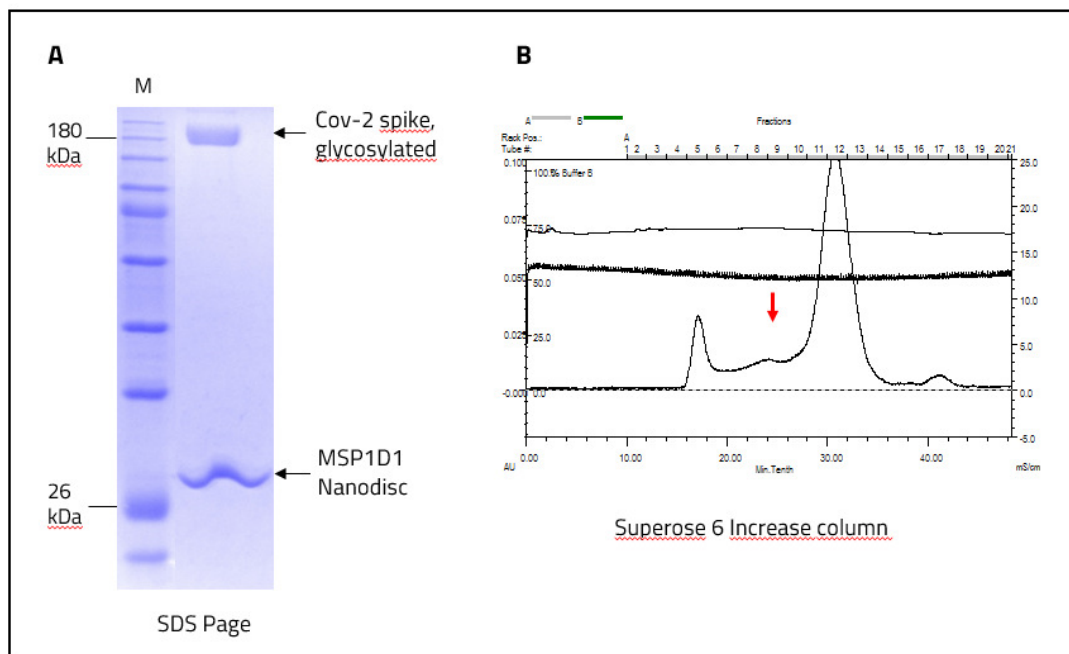
Please contact us for bulk quantities and for SARS CoV-2 spike protein in synthetic DIBMA Glycerol nanodisc.

### Product Description

Alternative names	SPIKE_SARS2 Spike glycoprotein
UniProt number	PODTC2
Protein class	Single span transmembrane protein
Organism	Severe acute respiratory syndrome coronavirus 2 (2019-nCoV) (SARS-CoV-2)
Sequence	Full-length sequence (aa 1 – 1273), furin cleavage site "RRAR" mutated to "GSAG"; C-terminal Rho1D4 tag fused with spacer "GSSG" to protein sequence
Affinity tag	C-terminal Rho1D4
Expression Host	Hek293 Expi cells
Size	1286 amino acids (including Rho1D4 tag and linker) 142114 Da
Buffer composition	20 mM Hepes pH 7.5; 150 mM NaCl,
Nanodisc	MSP1D1-His, assembly with POPC lipids (Membrane scaffold protein based nanodisc; MSP1D1 = 25,3 kDa)
Function	host cell surface receptor binding; fusion of virus membrane with host endosome membrane

## Quality Control

Purity (SDS-PAGE)	>98% as determined by SDS-PAGE, see Fig. 1 A and B
Homogeneity	Size exclusion chromatography, Superose 6 Increase, see Fig. 1 C
Activity	not determined



**Fig. 1: Size, purity and oligomerization state of CoV-2 spike protein in MSP1D1 nanodisc assessed by SDS-PAGE (A) and size exclusion chromatography (SEC) on a Superose 6 Increase column. CoV-2 spike trimer in nanodisc runs at 12.5 ml; approx. 670 kDa (B, red arrow)**

## Preparation:

Expression system	Hek293 Expi cells
Purification	PureCube Rho1D4 Agarose
Buffer	20 mM HEPES pH 7.5, 150 mM NaCl
Stabilization agent	MSP1D1-His nanodisc (membrane scaffold protein based nanodisc)
Form	Liquid

## Applications

- ELISA assays
- Ligand binding assays (e.g. SPR)
- Biochemical and biophysical analyses

## Shipping & Storage

Shipping conditions	Dry ice
Storage conditions	-80°C. Avoid freeze-thaw cycles

**Disclaimer:** Our products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.