



LD Biopharma, Inc.  
7384 Trade Street, Suite B  
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Tel: 858-876-8266  
<http://www.ldbiopharma.com>

## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant sfGFP-SARS-CoV-2 **ORF6** Fusion Protein  
**Catalog Number:** VRP-3085  
**Manufacturer:** LD Biopharma, Inc. USA

### Introduction

Coronaviruses are a group of enveloped positive-stranded RNA viruses that consist of four structural proteins including spike (S) glycoprotein, envelope (E) protein, membrane (M) protein, and nucleocapsid (N) protein. The **Orf6** of SARS-CoV is 61aa protein which antagonizes host interferon signaling by perturbing nuclear transport<sup>33</sup> and the NUP98-RAE1. Its activities could be a determinant of virus virulence.

Full-length SARS-coV2 viral **ORF6** cDNA (60aa) was constructed with codon optimization gene synthesis and expressed with a SuperGFP Protein N-terminal (sfGFP; 257aa) fusion at target protein N-terminal in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

**Gene Symbol:** SARS-Cov2 **ORF6**  
**Accession Number:** QHI42199.1  
**Species:** Coronavirus  
**Size:** 30 µg / Vial  
**Composition:** 0.3 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose, DTT and others.  
**Storage:** In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Davld E. Gordon.et al., **A SARS-CoV-2 protein interaction map reveals targets for drug repurposing.** *Nature* <https://doi.org/10.1038/s41586-020-2286-9> (2020)



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Wu, F. et al., 2020: *A new coronavirus associated with human respiratory disease in China.*  
Nature 579(7798): 265-269.

## Applications

1. May be used for SARS-CoV2 ORF6 protein-protein interaction assay.
2. As native SARS-CoV2 ORF6 immunogen for its specific antibody production.

## Quality Control

- Purity: > 92 % by SDS-PAGE.
- SuperGFP protein: [Ex λ](#) = 485, and [Em λ](#) = 510.

Recombinant **sfGFP**- SARS\_CoV2 **ORF6** Protein Sequence (36.0 kD)

**MKHHHHHHQVSKGEELFTGVVPILEVELDGDVNGHKFSVRGEGEGDATNGKLTTLKFICTTGKLPV  
PWPTLVTTLTYGVCFSRYPDHMKRHDFKFSAMPEGYVQERTISFKDDGTYKTRAEVKFECDTL  
VNRIELKGIDFKEDGNILGHKLEYNFNHNVYITADKQKNGIKANFKIRHNVEDGSVQLADHYQ  
QNTPIGDGPVLLPDNHYLSTQSVLSKDPNEKRDHMLLEFVTAAGITHGMDELYKSGLRSGGSG  
GGEFHLVDFQVTIAEILLIIMRTFKVSIWNLDYIINLI IKNLSKSLTENKYSQLDEEQPMEID**