

SARS-CoV-2 Open Reading Frame-8 (ORF8), Truncated

Type:	Recombinant	Cat. No.:	41A255
Tag:	None	Size:	0.1 mg
Source:	<i>E.coli</i>	Purity:	>95%
Other names:	ORF8	Endotoxin	< 5 EU/mg

Description

Expressed in *E. coli* with total 96AA. MW: 17.1 kDa.

Truncated ORF8 (27aa-122aa) (excluding signal peptide and α -helix region).

Includes rTEV cleavage site (ENLYFQG).

Introduction

The genome of SARS-CoV-2 encodes accessory genes that differ significantly within coronaviruses and contribute to the virus pathogenicity. Among accessory genes, open reading frame 8 (ORF8) stands out by being highly variable and showing structural changes suspected to be related with the virus ability to spread. SARS-CoV-2 ORF8 is a 122 amino acid protein with less than 20% sequence identity to SARS-CoV ORF8. It has an N-terminal signal sequence for the protein secretion, followed by an alpha-helix domain and a beta-sheet containing six strands. The recombinant ORF8 generated by Immunodiagnostics does not contain the α -helix region to increase the solubility.

Amino Acid Sequence

QHQPYYVDDPCPIHFYSKWYIRVGARKSAPLIELC

VDEAGSKSPIQYIDIGNYTVSCLP-FTINCQEPKLGSLVVRCSFYEDFLEYHDVRRVVLDFI

Formulation: Liquid containing ORF8 (2.0 mg/ml) in 50mM Tris, 300mM NaCl, 10% Glycerol, pH8.0.

Storage: Store protein at -20°C or -80°C . Avoid repeated freezing / thawing cycles.

Applications: ELISA and Western blotting.

Quality Control Test

BCA to determine quantity of the protein.

SDS-PAGE to determine purity of the protein.

SDS-PAGE Gel

