

Rev02
 Update: Jan,18,2022

DATASHEET

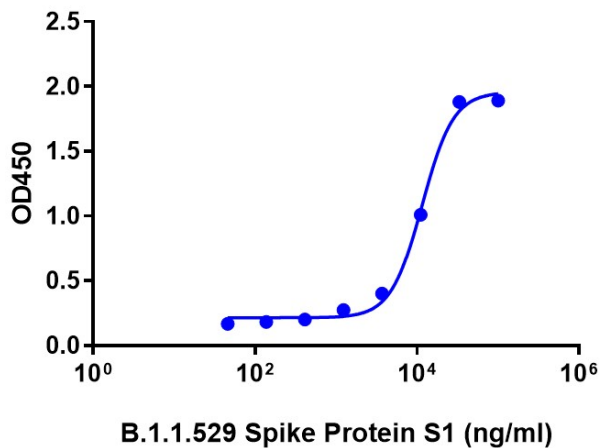
SARS-CoV-2 Spike protein S1, Omicron Variant, His Tag

Cat. No.: Z03729

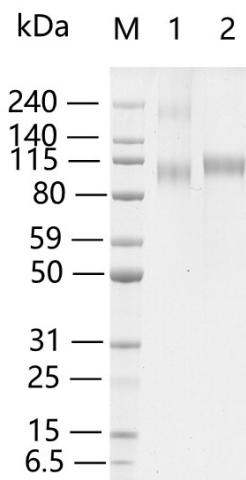
Product Introduction

Species	SARS-CoV-2
Protein Construction	Expressed with the mutations of A67V, del69-70, T95I, G142D, del143-145, del211, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H.
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;"> S1 protein (Gln14-Arg685) Accession # P0DTC2 <small>N-term</small> </div> <div style="background-color: #76b82a; color: white; padding: 5px; text-align: center;"> Poly-His <small>C-term</small> </div> </div>
Purity	≥ 90% as analyzed by SDS-PAGE
Endotoxin Level	≤ 1 EU/μg of protein by gel clotting method
Biological Activity	SARS-CoV-2 Spike protein S1, Omicron Variant, His Tag can bind with human ACE2 (Cat. No.: Z03516) in functional ELISA assay.
Expression System	293 Cells
Theoretical Molecular Weight	79 kDa
Apparent Molecular Weight	~117 kDa, on SDS-PAGE under reducing conditions.
Formulation	Supplied as a solution in PBS pH 7.4
Concentration	Please refer to the COA for the specific lot.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -20 °C or below. Avoid repeated freeze-thaw cycles.

Examples



Immobilized ACE-2 Fc Chimera, Human (Cat. No. Z03516) at 10 µg/mL can bind SARS-CoV-2 Spike protein S1, Omicron Variant, His Tag (Cat. No. Z03729) with a serial dilution. THE™ His Tag Antibody [HRP], mAb, Mouse (Cat.No.A00612) is used as a secondary antibody (0.2 µg/mL).



Lane 1: 1 µg of SARS-CoV-2 Spike protein S1, Omicron Variant, His Tag (Cat. No. Z03729) (R)
 Lane 2: 1 µg of SARS-CoV-2 Spike protein S1, Omicron Variant, His Tag (Cat. No. Z03729) (NR)
 ≥ 90% as analyzed by SDS-PAGE

Background

Target Background : SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) also known as 2019-nCoV (2019 Novel Coronavirus) is a virus that causes illnesses ranging from the common cold to severe diseases. Recently, the new B.1.1.529 variant was confirmed in South Africa and preliminary evidence suggests an increased risk of reinfection with this variant. The B.1.1.529 variant was first reported to WHO on 24 November 2021 and WHO has designated this variant as a VOC (Variant of Concern), named Omicron. There are more than 30 mutations in the spike protein.

Synonyms : B.1.1.529; Omicron variant

References :

1. [Classification of Omicron \(B.1.1.529\): SARS-CoV-2 Variant of Concern.](#)
2. [Omicron: What Is Known — and Still Unknown.](#)

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.