

SARS-COV-2 JN.1 Spike RBD Protein (Omicron variant) Cat No:HR4S0023

For research use only

Overview

Quantity I Gene Symbol Gene ID Accession Alternative	NA	
Gene ID Accession		
Accession		
Alternative		
Name		
Species		
Source	SARS-CoV-2	
Description i	The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that SARS-CoV-2 (COVID-19 coronavirus, 2019-nCoV) can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.	
Functions		
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, protectants before lyophilization. Specific concentrations are included us for any concerns or special requirements.	
Solubility		
Appearance	Lyophilized powder	
Molecular Weight		
Purity	? 95 % (SDS-PAGE); ? 90 % (SEC-HPLC)	
Concentration		info@bioelsa.co

Shipping Condition		
Storage Condition	Store at -20?C/-80?C upon receipt, aliquoting is necessary for mutiple use. Avoid repeated freeze-thaw cycles.	

