InnoCyto Inc.
15375 Barranca Pkwy, Suite I-103
Irvine, CA 92618

Technical Data Sheet

SARS-CoV-2 Spike S1 XBB.1.5 Protein (C-Fc)

Catalog Number: 603401, 603402
Size: 25 ug, 100 ug
Target Name: SARS-CoV2 Spike S1 Protein, S1 Protein
Regulatory Status: RUO

Product Details

Application: ELISA, BLI
Format: Liquid, Purified
Expression Host: CHO
Species: SARS-CoV-2
Accession Number: QHD43416.1
Sources: Recombinant SARS-CoV-2 S protein S1 domain (Val16-Arg685) with mutations T19I, del24-26, A27S, V83A, G142D, Y144del, H146Q, Q183E, V213E, G339H, R346T, L368I, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, V445P, G446S, N460K, S477N, T478K, E484A, F486P, F490S, Q498R, N501Y, Y505H, D614G, H655Y, N679K, P681H and with C-terminus Fc tag was expressed in CHO Cells.
Molecular Weight: This protein has a predicted molecular weight of 100.8 kDa. Under DTT-reducing conditions, the protein migrates at approximately 120-150 kDa on SDS-PAGE.
Affinity Tag: C-Fc
Purity: >95% based on SDS-PAGE under reducing condition
Formulation: 1xPBS buffer, pH7.4, 0.22 μm filtered
Endotoxin level: Not tested
Protein Concentration: 25μg size is bottled at 0.2mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at <= –70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

Background Information

The S1 domain of the SARS-CoV-2 spike (S) protein is the N-terminal portion responsible for host cell recognition. It is one of two major subunits of the spike protein—the other being the S2 domain, which mediates membrane fusion. The S1 domain contains two key regions N-terminal domain (NTD) and Receptor-binding domain (RBD). Due to its central role in viral attachment and its immunogenicity, the S1 domain is a key target for neutralizing antibodies, vaccines, and diagnostic assays. The XBB.1.5 variant of SARS-CoV-2 is a sublineage of the recombinant XBB. XBB.1.5 features several adaptive mutations in the S1 domain, especially F486P, which enhances binding to

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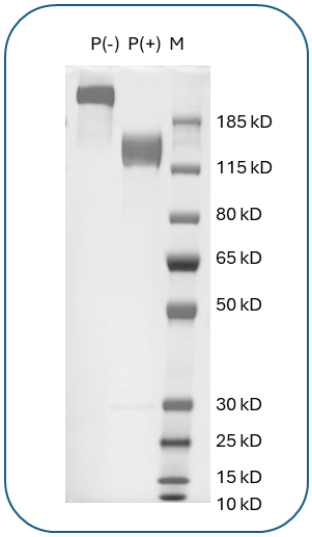
ACE. Compared to the wild-type, XBB.1.5 shows significantly higher immune evasion and greater transmissibility, making it one of the most immune-evasive Omicron subvariants to date

Product Data



Recombinant SARS-CoV-2 (XBB.1.5) Spike S1 Protein (Fc Tag) on SDS-PAGE under reducing (P+) and non-reducing (P-) conditions. The purity of the purified protein appears to be greater than 95%. The band at 28 kDa in reducing conditions is a Fc tag protein due to a furin cleavage site at the C-terminus of S1 protein.