

Validation data for Spike-S1-His (D614G)

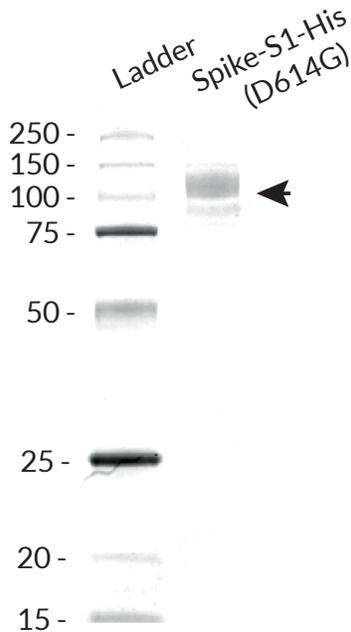
<https://www.invivogen.com/sars2-spike-s1-proteins>

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Version 20L04-NJ

Spike-S1-His (D614G) is a soluble SARS-CoV-2 fusion protein generated by fusing the full-length Spike S1 subunit (V16-R685) to a C-terminal poly-histidine (6 x Histidine) tag with a 3 amino acid linker. Spike-S1-His (D614G) features the D614G amino acid mutation identified early in the COVID-19 pandemic and which has rapidly become the dominant variant around the world. This fusion protein has a molecular weight of ~114 kDa on a SDS PAGE gel (Figure 1). The recognition of the Spike-S1-His protein by an Anti-SARS-CoV-Spike human IgM (clone CR3022) has been verified by ELISA (Figure 2).

Spike-S1-His (D614G) purity analysis by SDS PAGE



Recognition of Spike-S1-His (D614G) by an Anti-SARS-CoV-Spike (CR3022) human IgM

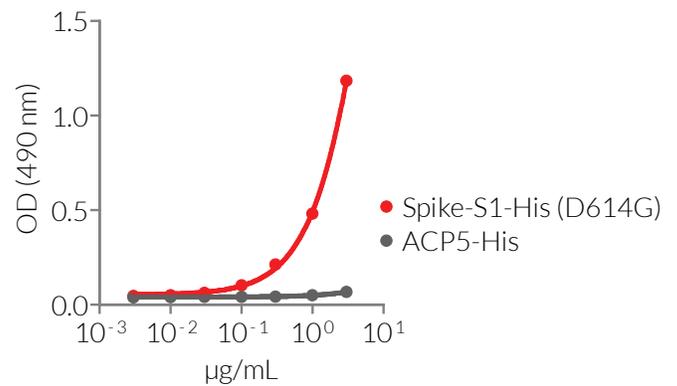


Figure 2: ELISA detection of Spike-S1-His (D614G) fusion protein with an Anti-SARS-CoV spike human IgM (CR3022). Anti-SARS-CoV-Spike hIgM antibody (5 µg/ml) was coated onto ELISA plates overnight. Following this, a 3-fold serial dilution of Spike-S1-His (D614G) (red curve) or control protein (ACP5-His; grey curve) were added and incubated for 1 hour. Binding was detected using a HRP-labelled anti-His antibody (1/1000 dilution) and the HRP substrate OPD (o-phenylenediamine dihydrochloride). Absorbance was read at 490 nm.

Figure 1: SDS PAGE analysis of the SARS-CoV-2 Spike-S1-His (D614G) protein. 2 µg of the fusion protein was loaded onto a 12% Mini-PROTEAN® TGX Stain-Free™ Precast Gel (Bio-Rad). Detection was performed as per manufacturer's instructions.

TECHNICAL SUPPORT

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