

## 21-1013: SARS-CoV-2 Spike S1 Mutant Sampler Set

**Application :** ELISA

### Description

This SARS-CoV-2 Spike S1 Mutant Sampler Set contains: wild type Spike S1 protein (Cat. No. [21-1008](#)), D614G mutant (Cat. No. [21-1009](#)), N439K mutant (Cat. No. [21-1012](#)), K417N/E484K/N501Y (South African) mutant (Cat. No. [21-1017](#)), and S13I/W152C/L452R (Southern California) mutant (Cat. No. [21-1018](#)) recombinant proteins expressed in CHO-K1.

The spike protein S1 subunit of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S1 mediates this interaction. The S protein plays key parts in the induction of neutralizing antibodies and T-cell responses, as well as protective immunity.

### Product Info

<b>Amount :</b>	25 µg X 5
<b>Purification :</b>	>95% by SDS-PAGE.
<b>Content :</b>	PBS and 10% Glycerol.
<b>Storage condition :</b>	SARS-CoV-2 Spike S1 Mutant Sampler Set is shipped on ice packs. Upon arrival, store at -20°C. Do not freeze-thaw multiple times.
<b>Amino Acid :</b>	The target proteins are expressed in CHO-K1 cells with sequence (AA 14-683) of SARS-CoV-2/COVID-19 Spike S1 fused with a 10xHis tag in C-Terminal.

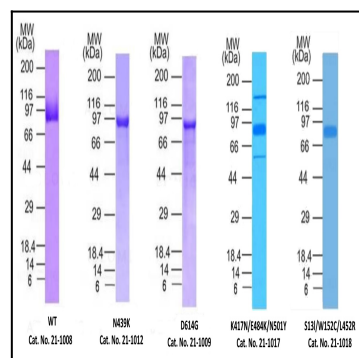


Figure-1: Recombinant SARS-CoV-2 Spike S1 wild type (WT), N439K, D614G, K417N/E484K/N501Y and S13I/W152C/L452R mutant proteins were run on a 4-20% SDS-PAGE gel followed by Coomassie blue staining.

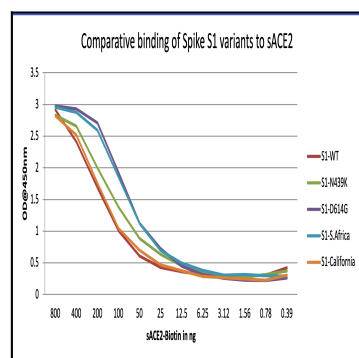


Figure-2: Comparative binding of Spike S1 variants to sACE2: Wells of a 96-well microtiter plate were coated with 100 ng in duplicates each of S1-WT (Cat# 21-1008), S1-N439K (Cat# 21-1012), S1-D614G (Cat# 21-1009), S1-South Africa (Cat# 21- 1017), and S1-Southern California (Cat# 21-1018). Binding to sACE2 was determined by adding different concentrations of biotinylated-sACE2 (Cat# 21-1006).