

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

12-8431: Anti-SARS-CoV-2 Spike (Clone: 2143) Purified No Carrier Protein

Clonality: Monoclonal **Clone Name:** 2143 Application: **ELISA**

Alternative Name: COV2-2143, SARS-CoV-2 Spike Antibody

Isotype: Human IgG1

Description

Specificity: Anti-SARS-CoV-2 Spike, clone 2143, specifically targets an epitope on the SARS-CoV-2 full length Spike protein (not specific to RBD or NTD).

Antigen Distribution: The spike is expressed on the surface of SARS-CoV-2.

Background: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of coronavirus disease 2019 (COVID-19), is an enveloped, single-stranded, positive-sense RNA virus that belongs to the Coronaviridae family 1. The SARS-CoV-2 genome, which shares 79.6% identity with SARS-CoV, encodes four essential structural proteins: the spike (S), envelope (E), membrane (M), and nucleocapsid protein (N) 2. The S protein is a transmembrane, homotrimeric, class I fusion glycoprotein that mediates viral attachment, fusion, and entry into host cells 3. Each ~180 kDa monomer contains two functional subunits, S1 (~700 a.a) and S2 (~600 a.a), that mediate viral attachment and membrane fusion, respectively. S1 contains two major domains, the N-terminal (NTD) and C-terminal domains (CTD). The CTD contains the receptor-binding domain (RBD), which binds to the angiotensin-converting enzyme 2 (ACE2) receptor on host cells 3-5.

Product Info

Amount: $100 \mu g / 500 \mu g$

Purity:>=90% monomer by analytical SEC and SDS-Page

Preparation: Recombinant antibodies are manufactured in an animal free facility using only in **Purification:** vitro protein free cell culture techniques and are purified by a multi-step process including the

use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or

aggregates.

Concentration:>=1.0 mg/ml

Formulation: This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein,

Content: potassium, calcium or preservatives added. Due to inherent biochemical properties of

antibodies, certain products may be prone to precipitation over time. Precipitation may be

removed by aseptic centrifugation and/or filtration.

This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term

Storage condition: storage, aseptically aliquot in working volumes without diluting and store at <= -70°C.?Avoid

Repeated Freeze Thaw Cycles.