



# Rabbit Anti-HCoV-229E Spike (S1) Polyclonal Antibody (CABT-Z820R)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

| Immunogen          | Recombinant HCoV-229E spike subunit 1 antigen.                               |
|--------------------|--|
| Isotype            | IgG  |
| Source/Host        | Rabbit   |
| Species Reactivity | HCoV-229E  |
| Purification       | Protein A purified   |
| Conjugate          | Unconjugated   |
| Applications       | ELISA, WB Recommended dilution: WB: 1:1000 ELISA: 1:1000-1:3000              |
| Format             | Liquid   |
| Concentration      | Lot specific   |
| Size               | 100 μg   |
| Buffer             | PBS, 0.2µm filtered.   |
| Preservative       | 0.09% Sodium Azide.  |
| Storage            | Store at 4°C for short term; -20°C for long term. Avoid freeze / thaw cycle. |
| Ship               | Wet ice  |

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## **BACKGROUND**

#### Introduction

The coronaviruses are a family of related RNA viruses within the order Nidovirales. They contain a positive-sense, single-stranded, 26-32kb RNA genome protected by a nucleocapsid of helical symmetry. Their viral capsids are surrounded by a lipid envelope, which is interrupted by trimeric Spike proteins that project from the capsid surface. Prior to early 2000, only two human coronaviruses were recognized: Human coronavirus 229E (HCoV-229E) and Human coronavirus OC43 (HCoV-OC43). However, in late 2002, a third human coronavirus (SARS-CoV) was implicated as the aetiological agent of severe acute respiratory syndrome (SARS) and since then, several more human coronaviruses have been identified, including HCoV-NL63 associated with upper and lower respiratory tract infections (Van der Hoek, 2004) and HCoV-HKU1 in patients with pneumonia (Woo et al., 2005), as well as the more lethal, Middle East respiratory syndrome (MERS) coronavirus and Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2). Like the other mild cold-causing human coronaviruses, HCoV-NL63, HCoV-OC43 and HCoV-HKU1, HCoV-229E has a worldwide distribution, with seasonal surges occurring in the winter months (Wat et al., 2004). Like the other cold-causing coronaviruses, reinfection with HCoV-229E is common. The reason for this is not yet clearly defined but may be due to a weak antibody response (Raoult et al., 2020).

### Keywords

SARS-CoV Spike Protein S1;SARS;SARS-CoV;CoV;Coronavirus;SARS S1