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(54) Title: METHODS AND KITS FOR DETECTING OR DETERMINING AN AMOUNT OF AN ANTI-B-CORONAVIRUS ANTIBODY IN A SAMPLE

(57) Abstract: Disclosed herein are methods, kits, systems, algorithms and improvements for detecting the presence of or determining an amount, quantity, concentration and/or level of an antibody against at least one type of β -coronavirus, such as, for example, an antibody against SARS-CoV or SARS-CoV-2, in one or more samples obtained from a subject. In some aspects, the methods, kits and systems relate to detecting the presence of or determining an amount, quantity, concentration and/or level of at least one type of anti- β -coronavirus antibody, such as an IgG and/or IgM antibody, in one or more samples obtained from a subject. The methods, kits systems, algorithms and improvements can also be used to monitor a subject's response and/or treatment to a β -coronavirus, determine whether or not a subject will develop or experience a cytokine storm, predict outcome in a subject, determine whether a subject can be administered a vaccine for a β -coronavirus, monitoring antibody response in individuals that have received a β -coronavirus vaccine (such as a SARS-CoV-2 vaccine), and/or determine the immune status of a subject.

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