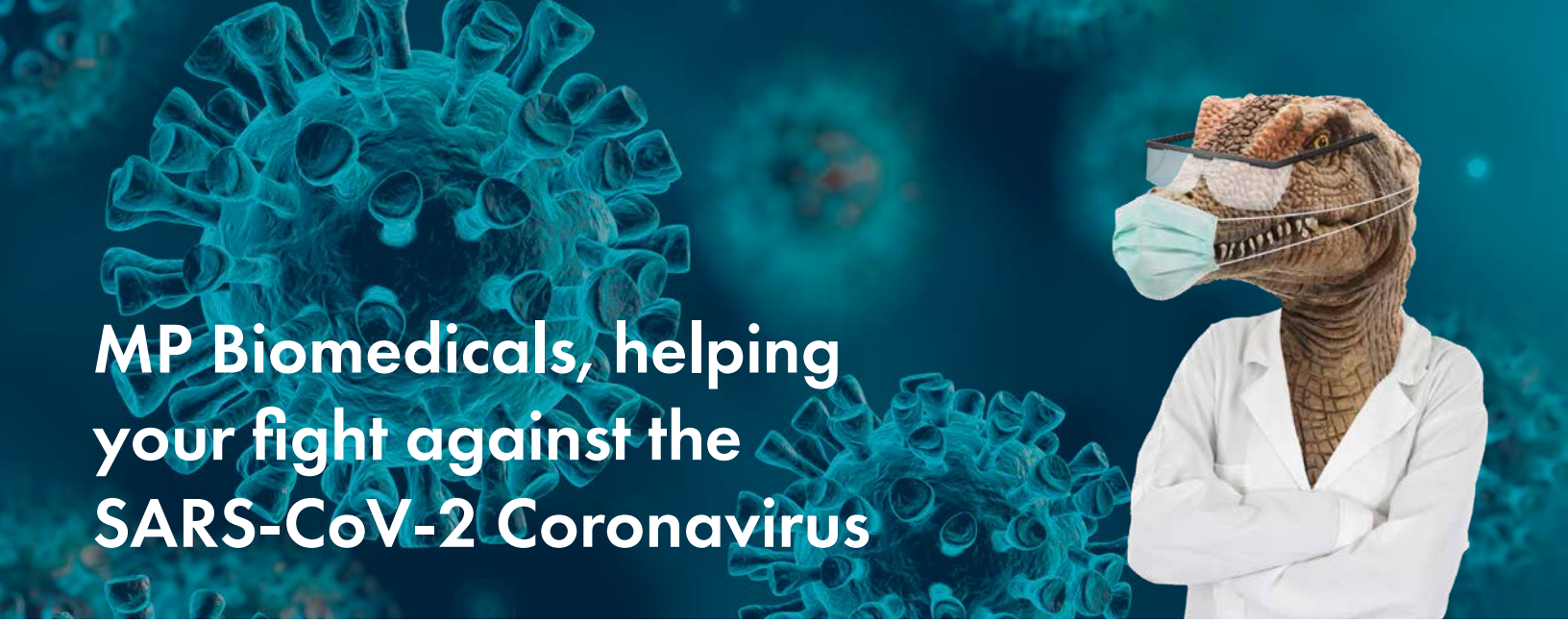

MP Biomedicals, helping your fight against the SARS-CoV-2 Coronavirus

Anti-Coronavirus Antibodies

2019 Novel Coronavirus (SARS-CoV-2) is a coronavirus identified as the cause of an outbreak of respiratory illness. Its genome encodes four structural proteins, i.e. spike (S), envelope (E), membrane (M), and nucleocapsid (N). The spike protein (S-protein) contains two subunits, S1 and S2. S1 defines the range of hosts and specificity of the virus, and thus recognizes and binds with the cell surface receptor. S2 subunit contains basic elements needed for membrane fusion. The spike protein is the common target for immunodiagnostics reporting antibodies and for neutralizing antibodies and vaccines.

MP Biomedicals is stepping in to support scientists worldwide in understanding SARS-CoV-2 and discovering solutions to combat the disease. We now offer three monoclonal antibodies from mouse with high affinity to the SARS-CoV-2 spike proteins for use in various applications, including western blot, immunoprecipitation, ELISA tests, rapid tests and flow cytometry. We have also added to our portfolio five recombinant antigens for SARS-CoV-2 diagnostics and research applications. Please contact us to learn more.

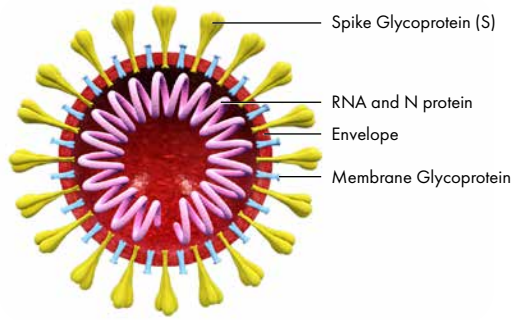

Figure 1.

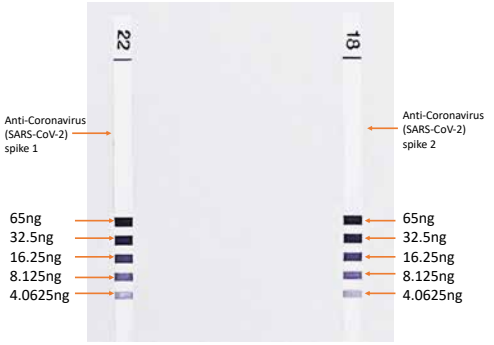

Figure 2.

Figure 2. Slot blot analysis of interaction between SARS-CoV-2 spike protein (S1+S2) and two Anti-Coronavirus (SARS-CoV-2) spike antibodies. High sensitivity/affinity can be observed for these antibodies under serial dilution analysis ranging from 67.5 ng to 4.0625 ng.

Description	Applications	Isotype	Clonality	Host	Conjugate	Size	Cat. No.
Anti-coronavirus (SARS-CoV-2) spike S1, mouse, mAb	WB, ELISA, IP, FACS	IgG1	Monoclonal	Mouse	Unconjugated	50 µg	08720301
						250 µg	08720302
Anti-coronavirus (SARS-CoV-2) spike S2, mouse, mAb	WB, ELISA, IP, FACS	IgG1	Monoclonal	Mouse	Unconjugated	50 µg	08720401
						250 µg	08720402
Anti-coronavirus (SARS-CoV-2) (B) spike S2, mouse, mAb	WB, ELISA, IP, FACS	IgG1	Monoclonal	Mouse	Unconjugated	50 µg	08720411
						250 µg	08720412

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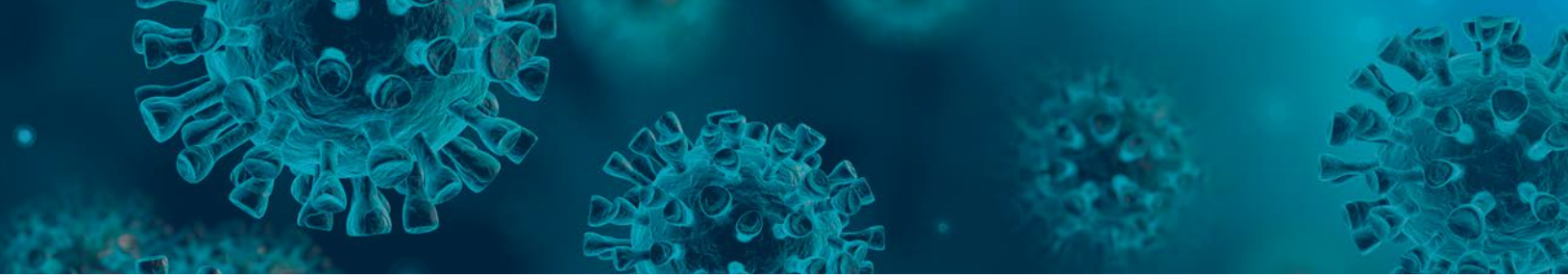

SARS-CoV-2 Recombinant Antigens

In addition to antibodies, MP Bio offers a selection of recombinant protein antigens for coronavirus, expressed in *E. coli* and HEK293 cells, including the spike protein, host receptor ACE2, and the nucleocapsid protein. The spike protein of coronavirus is a large type I transmembrane protein divided into two functional units, S1 and S2. S1 facilitates virus infection by binding to host receptors, ACE2. ACE2 is an exopeptidase that catalyses the conversion of angiotensin I to the nonapeptide angiotensin, or the conversion of angiotensin II to angiotensin 1-7. The nucleocapsid protein is the most abundant protein in coronavirus. It is a highly immunogenic phosphoprotein and is typically very conserved.

Description	Expressed Host	Species	Amino Acids	Molecular Mass	Size	Cat. No.
SARS-CoV-2 Nucleocapsid Protein, His tag (*E. coli*) Protein Construction: A DNA sequence encoding the SARS-CoV-2 Nucleocapsid Protein was expressed with a polyhistidine tag at the N- and C-terminus.	*E. coli*	SARS-CoV-2	431	47.28 kDa	250 µg	08720501
					1 mg	08720502
SARS-CoV-2 Nucleocapsid Protein, His tag (HEK293 cells) Protein Construction: A DNA sequence encoding the SARS-CoV-2 Nucleocapsid Protein was expressed with a polyhistidine tag at the N- and C-terminus.	HEK293 cells	SARS-CoV-2	431	47.28 kDa	25 µg	08720511
					100 µg	08720512
SARS-CoV-2 Spike Protein (S1+S2), His tag (HEK293 cells) Protein Construction: A DNA sequence encoding the full length of SARS-CoV-2 Spike Protein (S+S2) was expressed with a polyhistidine tag at the N- and C-terminus.	HEK293 cells	SARS-CoV-2	1229	141.53 kDa	25 µg	08720421
					100 µg	08720422
ACE2, His tag (*E. coli*) Protein Construction: A DNA sequence encoding the human ACE2 (Met1-Ser740) was expressed with a polyhistidine tag at the N- and C-terminus.	*E. coli*	Human	740	84.54 kDa	250 µg	08720601
					1 mg	08720602
ACE2, His tag (HEK293 cells) Protein Construction: A DNA sequence encoding the human ACE2 (Met1-Ser740) was expressed with a polyhistidine tag at the N- and C-terminus.	HEK293 cells	Human	740	84.54 kDa	25 µg	08720611
					100 µg	08720612

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