

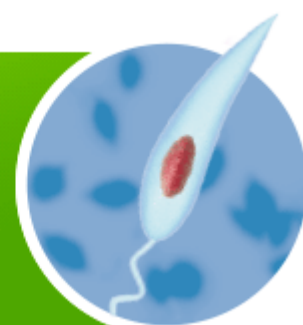
Newsletter April/May 2020

BIOSCIENTIFIC ARE CONSTANTLY SOURCING TOP QUALITY PRODUCTS

– PLEASE ENQUIRE FOR THAT “HARD TO FIND” PRODUCT! –



Jena Bioscience
Building Blocks of Life



Validated Covid-19 Testkit and Virus RNA Prep Kit available

After an increased demand due to the Corona Pandemic we can now offer:

- Viral RNA+DNA Preparation Kit
- Complete validated Covid-19 test kit
- Mastermixes and raw materials for development of Covid-19 test

CLICK labeling: Pyrimidyl tetrazines make unreactive alkenes get a move on

- Pyrimidyl tetrazines are the compounds of choice to tackle poor dienophiles under physiological conditions.



TAKING THE STING OUT OF COVID-19

STING AGONIST cGAMP IS A POTENT VACCINE ADJUVANT

We know the cGAS–STING pathway is a key activator of the innate immune response to cellular damage or microbial infection. Cyclic GMP-AMP Synthase (cGAS) catalyzes the formation of cyclic GMP-AMP (cGAMP) in response to the presence of foreign DNA in the cytoplasm. Cyclic GAMP is a potent activator of the immune response in eukaryotes, where infected cells can induce an antiviral response in effector cells through direct transfer of cGAMP by inclusion in enveloped virions^{1,2}.

Recently, studies have shown that activation of the immune response by cGAMP is an effective strategy for boosting the response to vaccination. This makes cGAMP a potential new vaccine adjuvant for viral diseases like influenza and COVID-19. A recent study by Wang et al. reports cGAMP adjuvants can stimulate a potent immune response³. Additionally, cGAMP induces significantly higher CD4⁺ and CD8⁺ T cell responses in immunized mice, and up-regulates IFN- γ expression in lung tissue of mice in the early stages of a virus challenge. As such, viral vectors loaded with cGAMP is a promising potential vaccine strategy for the novel coronavirus and other emerging pandemics.

Arbor Assays developed the first immunoassay for measuring 2',3'-Cyclic GAMP ELISA ([K067-H1/H5, H1D](#)) in 2019, and our newest assay, 3',3'-Cyclic GAMP ELISA ([K073-H1/H5](#)), accurately measures 3',3'-cGAMP in bacterial or eukaryotic cell lysates using a simple and convenient ELISA format. These innovative and valuable tools will facilitate further understanding of the role cyclic dinucleotides play in health and disease.

The world's first full length S protein with trimer structure verified by MALS

BIOSYSTEMS
Acro

Spike
Membrane
Envelope
Nucleocapsid
RNA

2019-nCoV Full Length Trimer S Protein

Inhibitor Screening Kit

S-RBD ACE2-biotin SA-HRP 2019-nCoV Inhibitor

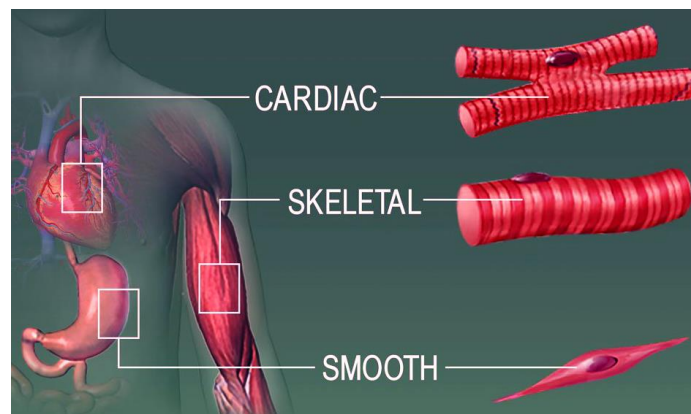
BIOSYSTEMS
Acro

Spike
Membrane
Envelope
Nucleocapsid
RNA

HEK293 expressed 2019-nCoV proteins with bioactivity verified by SPR and BLI

- ★ SPR/ BLI/ ELISA protocols are offered for free.
- ★ Buy a large size of ACE2, S, S1 and other proteins can get a small size one for free.
- ★ No extra shipping cost if dry ice shipping is needed for liquid products.

See website for blogs and more information on these topics and many others;





alzet[®]
OSMOTIC PUMPS



SUCCESS IS IN THE DELIVERY

No More Injections

- + Implantable infusion pumps for convenient dosing
- + Over 40 years of proven quality and reliable results
- + Small sizes available for mice and rats
- + Simple design and easy to use

BIO Scientific pty. ltd.

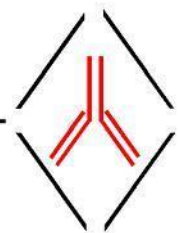
info@biosci.com.au

AU: 1300 246 724

NZ: 0800 444 157

Learn more
www.alzet.com

BIO Scientific pty. ltd.



Aus: 1300 BIOSCI (246724)

NZ: 0800 444 157

Int: +61 (0)2 9521 2177

I: www.biosci.com.au

E: info@biosci.com.au