

COVID-19 Omicron Variant Research Tools

AMSBIO has announced new additions to its **portfolio of tools for COVID-19 research** - two monoclonal antibodies that recognize the Spike RBD (B.1.1.529, Omicron Variant) protein and neutralizes its interaction with ACE2. The human ACE2 receptor is found on the surface of type I and II pneumocytes, endothelial cells, and ciliated bronchial epithelial cells. Research has shown that ACE2 mediates COVID-19 infection through direct binding of the SARS-CoV-2 Spike protein.

AMSBIO's new Spike neutralizing monoclonal antibodies

(clone G10xA5 and G10xA1) recognize the SARS-CoV-2 Spike RBD (B.1.1.529, Omicron Variant) protein and neutralize its interaction with ACE2. Both these neutralizing antibodies have been functionally tested using the Spike S1 RBD (B.1.1.529, Omicron Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit.



Also new is AMSBIO's Spike S1 RBD: ACE2 Inhibitor Screening Assay Kit.

This key colorimetric assay kit is designed for screening and profiling inhibitors or neutralizing antibodies of the interaction between the Omicron variant SARS-CoV-2 Spike RBD and human ACE2. The new assay requires only a few steps to use. Firstly, SARS-CoV-2 Spike RBD (B.1.1.529, Omicron variant) is coated on a 96-well plate overnight. After washing and blocking, the protein is pre-incubated with an inhibitor or neutralizing antibody. Following incubation with



Biotin-ACE2, the plate is treated with Streptavidin-HRP then addition of a colorimetric HRP substrate to produce color, which can be quenched and measured using a UV/Vis microplate reader.

Since the beginning of the global pandemic -

several new SARS-CoV-2 variants have emerged, each with differing mutations that impact transmissibility, COVID-19 disease severity, and the effectiveness of vaccines. AMSBIO now offers a series of recombinant antigens and pseudotyped lentivirus with key Spike mutations in order to evaluate the efficacy of antibodies and vaccines. These products form part of a larger COVID-19 Tools for Research portfolio, including other high quality recombinant proteins, Spike pseudotyped lentivirus, and reagents for vaccine development and evaluation.

For further information

on the latest tools for COVID-19 Omicron Variant (B.1.1.529) research please visit <u>https://www.amsbio.com/sars-cov-2-spike-mutants/</u> or contact AMSBIO on +44-1235-828200 / +1-617-945-5033 / <u>info@amsbio.com</u>.

AMS Biotechnology (AMSBIO)

Founded in 1987, **AMS Biotechnology (AMSBIO)** is recognized today as a leading transatlantic company contributing to the acceleration of discovery through the provision of cutting-edge life science technology, products and services for research and development in the medical, nutrition, cosmetics and energy industries. AMSBIO has in-depth expertise in extracellular matrices to provide elegant solutions for studying cell motility, migration, invasion and proliferation. This expertise in cell culture and the ECM allows AMSBIO to partner with clients in tailoring cell systems to enhance organoid and spheroid screening outcomes using a variety of 3D culture systems, including organ-on-a-chip microfluidics. For drug discovery research, AMSBIO offers assays, recombinant proteins and cell lines. Drawing upon a huge and comprehensive biorepository, AMSBIO is widely recognised as a leading provider of high-quality tissue specimens (including custom procurement) from both human and animal tissues. The company provides unique clinical grade products for stem cell and cell therapy applications-these include high quality solutions for viral delivery (lentivirus, adenovirus and adeno-associated virus) in addition to GMP cryopreservation technology.



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