DESIGN AND INNOVATION

Smart Notes



Can immunoassay plates help in SARS-CoV-2 research?

Yes, the next wave in SARS-CoV-2 research is immunological testing and Thermo Scientific[™] Nunc[™] Immunoassay Plates are an ideal tool.

Background

Nunc Immunoassay Plates are ideal for SARS-CoV2 antibody/antigen testing. Now that the detection methods for the SARS-CoV-2 have been made available, the focus has turned to serological testing to identify those who have developed an immunological response. This type of research will reveal who has been exposed to the virus and consequently generated antibodies against the virus. The results could be far-reaching in the fight to better understand the dynamics of the SARS-CoV-2 pandemic and the development of potential vaccines.

Several targets have been identified on SARS-CoV-2 that can be mimicked and used as the capture reagent, more specifically, either the spike protein or a piece of the spike protein. Depending on the target, the Thermo Scientific[™] Nunc[™] MaxiSorp[™] or MediSorp[™] Plates, with hydrophilic passive binding surfaces, are ideal for assay development and production through their immobilization of glycoproteins and proteins (Figure 1).



Nunc Immunoassay Plates



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What is the surface technology used on Nunc Immunoassay Plates?

Thermo Scientific advanced immunoassay surface technology is available to fit your specific needs including passive binding surfaces for biomacromolecules, covalent coupling surfaces for smaller biomolecules, and affinity capture surfaces for affinity-tagged biomolecules. Immunoassay techniques are extremely sensitive with detection limits in the range of 10 fmol. In order to obtain accurate, reproducible, and sensitive results, it is essential that you choose the appropriate surface with optimized conditions. With more than 30 years of industry leading experience in immunoassay plate technology, and a broad range of surfaces and formats to optimize your assay, we can work to fill your specific needs. Refer to our **plate guide brochure** for more information on the features of the Nunc Immunoassay Plates. For guidance on the optimal immunoassay plate for your application please use our **online plate selection tool**. Lastly, visit our online tools to see how Thermo Scientific products can meet any of your **SARS-CoV-2 needs**.



Figure 1. Diagram of the types of biomacromolecules which can be bound to the available modified surfaces for passive binding. Based on the physiochemical characteristics of the biomolecule to be immobilized, a surface can be chosen which is appropriate for robust binding. As is indicated in the diagram, MaxiSorp Plates has the widest breadth applications as it is capable of binding the greatest range of molecules.



Nunc Strip Modules



Nunc Strip and Solid Plates

Find out more at thermofisher.com/diagnosticplates

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