New BD Assay Advances Immunology Research Capabilities in the Developing Field of Multiomics

BD Rhapsody™ TCR/BCR Multiomic Assay speeds discovery in autoimmune disorders, immuno-oncology and infectious diseases

FRANKLIN LAKES, N.J. (Mar 30, 2022) – BD (Becton, Dickinson and Company) (NYSE: BDX), a leading global medical technology company, recently released the BD Rhapsody™ TCR/BCR Multiomic Assay, an innovative set of reagents that enables researchers to more easily and comprehensively analyze important cells in the immune system, providing a tool to advance research in autoimmune disorders, immuno-oncology and infectious diseases.

Multiomics is a rapidly developing field where researchers look at multiple types of molecules on the same cell, which can provide greater biological insights than the traditional approach of analyzing molecules in aggregate, across many cells. The BD Rhapsody™ TCR/BCR Multiomic Assay supplies immunology researchers the specific reagents required to profile full-length T cell and B cell receptors, two of the most important cellular elements in the immune system, to better understand the adaptive immune response and enable applications such as evaluating cellular responses to new drugs.

“Understanding the contribution of these heterogeneous cell subsets at the single-cell level is of extreme relevance,” said Susan Ribeiro, PhD, Assistant Professor, Emory University School of Medicine. “This coupling of single RNAseq/AbSeq along with TCR/BCR sequencing opens a new horizon for the understanding of the contribution of T and B cell receptors to the diversity of immune responses observed in people. The new BD Rhapsody™ TCR/BCR Multiomic Assay can be very helpful to guide the discovery of new therapeutic targets.”

The BD Rhapsody™ TCR/BCR Multiomic Assay has a wide range of applications, including screening for antigen specific cells in response to infectious diseases, immune repertoire profiling of tumor infiltrating lymphocytes, and vaccine development and evaluation of efficacy. The assay is optimized to work with the company’s BD Rhapsody™ Single-Cell Analysis System workflow, which enables higher capture rates than currently available solutions, preserving fragile cells in the process. This first-generation kit is now available globally and is the latest addition to the fast-growing portfolio of tools for multiomic analysis at BD.

“With the release of the BD Rhapsody™ TCR/BCR Multiomic Assay, we are reinforcing our commitment to the incredibly exciting field of multiomics and single-cell research and the delivery of robust, easy-to-use tools that offer researchers valuable and deep insights,” said Puneet Sarin, worldwide president at BD Biosciences. “Single-cell analysis tools like the BD Rhapsody™ TCR/BCR Multiomic Assay and BD Rhapsody™ Single-Cell Analysis System support our customers’ need for greater sensitivity and specificity studying cells of interest and drive rapid advancements in immunology, including research in therapeutic response and cell therapy.”

About the BD Single-Cell Multiomics Portfolio

To further knowledge of the immune system, BD empowers immunology researchers with a range of tools for multiomic analysis. BD advances the future of immunology research with the BD® AbSeq Assay, an innovative product that leverages 40 years of BD leadership in immunology research. The BD® AbSeq Antibody portfolio currently encompasses more than 450 different clones of both mouse and human specificities. In addition, BD also offers customers the option to conjugate their in-house antibodies of interest with oligos compatible with the BD Rhapsody™ Single-Cell Analysis System to generate custom BD® AbSeq Antibodies. In 2021, BD introduced the BD® AbSeq Immune Discovery Panel (IDP), a state-of-the-art, pre-titrated antibody-oligo based discovery tool designed to investigate 30 immune markers in a single experiment.

BD has continued to build on its BD Rhapsody™ Single-Cell Analysis System, a comprehensive portfolio of reagents, instruments, software and targeted gene panels, to offer additional single-cell analysis capabilities. These include the BD Rhapsody™ Whole Transcriptome Analysis Amplification Kit designed to analyze the entire transcriptome and targeted RNA panels. Importantly, all BD assays are multiomics enabled and allow researchers to simultaneously analyze protein and RNA information at the single-cell level.

More information on the new BD Rhapsody™ TCR/BCR Multiomic Assay is available here.

About BD

BD is one of the largest global medical technology companies in the world and is *advancing the world of health*™ by improving medical discovery, diagnostics and the delivery of care. The company supports the heroes on the frontlines of health care by developing innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for health care providers. BD and its 75,000 employees have a passion and commitment to help enhance the safety and efficiency of clinicians' care delivery process, enable laboratory scientists to accurately detect disease and advance researchers' capabilities to develop the next generation of diagnostics and therapeutics. BD has a presence in virtually every country and partners with organizations around the world to address some of the most challenging global health issues. By working in close collaboration with customers, BD can help enhance outcomes, lower costs, increase efficiencies, improve safety and expand access to health care. For more information on BD, please visit bd.com or connect with us on LinkedIn at www.linkedin.com/company/bd1/ and Twitter @BDandCo.

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