NEWS RELEASE

Bruker Announces EpicIFTM, Revolutionary Fluorescence Signal Removal Technology, Transforming CellScape Spatial Proteomics Platform

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New Technology Expands Antibody Compatibility and Doubles Throughput while maintaining Tissue Integrity and Lack of Cross-Reactivity

BILLERICA, Mass.--(BUSINESS WIRE)-- **Bruker Corporation** (Nasdaq: BRKR) today announced a major technological breakthrough in the **CellScape™ Precise Spatial Proteomics** platform for highly multiplexed immunofluorescence (IF). Launched in 2022, the CellScape platform has advanced the field of spatial proteomics with differentiated quantitative performance enabled by a unique combination of best-in-class resolution and high dynamic range (HDR) imaging. CellScape captures the entire continuum of protein expression in a biological sample—from least to most abundant—while capturing fine morphological details. CellScape utilizes directly-labeled primary antibodies, enabling a robust and modular chemistry that allows researchers to build assays by combining panels and/or individual markers, even after the conclusion of an experimental run. With this new technology, Bruker has further advanced the CellScape chemistry with EpicIF (Enhanced photobleaching in cyclic immunofluorescence), which expands the range of compatible commercially available fluorophore conjugated antibodies by nearly 10-fold, simplifies assay development, and increases throughput by up to 2-fold. EpicIF enhances photobleaching efficacy combining a proprietary reagent with visible light to gently erase fluorescence signal from nearly any fluorophore and, like the prior version, the epitopes are preserved while maintaining tissue integrity.

Human FFPE tonsil, 48-plex proteomics assay captured on the CellScape Spatial Proteomics Instrument (inset) using EpicIF technology (Photo: Business Wire)

EpicIF is supported by the concurrent release of a new version of the software. The new software, CellScape™ Navigator, also introduces a more intuitive user interface and easy experiment setup. Both EpicIF and CellScape Navigator will be available as upgrades to current CellScape instruments. “This breakthrough

gives scientists an unmatched level of flexibility in their highly multiplexed IF experiments," said Ranga Partha, PhD, Senior Vice President of Product Management and Marketing at Bruker Spatial Biology. "This new advancement builds on the best-in-class performance of the CellScape, which already offers differentiated quantitative performance, reliability, and modularity at any time. Now, by enabling the erasure of previously photostable fluorophore signals, researchers can choose a wider selection of antibody conjugates than ever before. In addition, EpicIF enables compatibility of the CellScape platform with additional fluorescent readouts, such as RNA-ISH. It's a leap forward in versatility for high-throughput spatial proteomics and we're thrilled to offer this transformative technology to our customers."

Oliver Braubach, PhD, Director of R&D Assays at Bruker Spatial Biology, added, "We have developed a solution that overcomes the limitations of traditional multiplexing. The ability to erase signal from a wide range of organic fluorescent dyes without damaging tissues not only simplifies workflows, but also allows scientists to use antibodies validated in other workflows, providing cost and time savings on assay optimization. The use of directly-labeled primary antibodies also eliminates the cross-reactivity observed in other spatial proteomic techniques that rely on secondary antibodies." Bruker Spatial Biology will be sharing more about this new advancement at the Society for Immunotherapy of Cancer (SITC) 2024 Annual Meeting from Nov 8-10 in Houston, Texas at booth #419. For additional information, visit **www.brukerspatialbiology.com/EpicIF**.

About Bruker Spatial Biology

Bruker Spatial Biology, a division of Bruker Corporation, provides advanced spatial solutions, including instruments, assays, software, and services to support life sciences research from discovery to translation. Best-in-class technologies include the CosMx® SMI with data analysis by the AtoMx™ SIP, GeoMx® DSP, CellScape™ platform, and nCounter® system. Canopy Multiomic Services provides access to these technologies for biopharmaceutical research, custom assay development, and clinical sample testing. Learn more at **www.brukerspatialbiology.com**.

About Bruker Corporation – Leader of the Post-Genomic Era (Nasdaq: BRKR)

Bruker is enabling scientists and engineers to make breakthrough post-genomic discoveries and develop new applications that improve the quality of human life. Bruker's high performance scientific instruments and high value analytical and diagnostic solutions enable scientists to explore life and materials at molecular, cellular, and microscopic levels. In close cooperation with our customers, Bruker is enabling innovation, improved productivity, and customer success in post-genomic life science molecular and cell biology research, in applied and biopharma applications, in microscopy and nanoanalysis, as well as in industrial and cleantech research, and next-gen semiconductor metrology in support of AI. Bruker offers differentiated, high value life science and diagnostics systems and solutions in preclinical imaging, clinical phenomics research, proteomics and multiomics, spatial and single-cell biology, functional structural and condensate biology, as well as in clinical microbiology and molecular

diagnostics. For more information, please visit **www.bruker.com**.

Investor Contact :

Joe Kostka
Director, Investor Relations
Bruker Corporation
T: +1 (978) 313-5800
E: **Investor.Relations@bruker.com**

Media Contact:

Kevin Gamber
Vice President, Downstream Marketing
Bruker Spatial Biology
E: **kevin.gamber@bruker.com**

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