Analytical Instrumentation, Methods & Materials

MICROFLUIDIC DEVICE FOR PROFILING BIOCHEMICAL SAMPLES

View U.S. Patent Application Publication No. US-2025-0353002 in PDF format.

WARF: P240110US01

Inventors: Jose Ayuso, Rithvik Turaga, Catherine Reed McBain, Seth Zima

The Invention

UW-Madison Researchers have developed a microfluidic device for profiling cell types, evaluating multiple functional read-outs in an efficient, user-friendly high-throughput manner. The device allows a user to evaluate multiple functional readouts using smaller volumes of blood than prior devices/methods and leverages the traditional 384 well plate design making it compatible with a wide range of instruments such as microscopes and plate readers. It is comprised of an interconnected network of microchannels connecting adjacent wells that contain reaction-specific buffers to monitor multiple aspects of cell response. The system does not require specialized pumping equipment and is highly compatible with many common laboratory instruments.

Tech Fields

- Analytical Instrumentation, Methods & Materials : Microfluidics
- Medical Devices : Diagnostics & monitoring tools

For current licensing status, please contact Jeanine Burmania at jeanine@warf.org or 608-960-9846