

Japan-based Fujifilm introduces first-of-its-kind human iPSC-derived blood-brain barrier isogenic kit

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To provide biologically relevant information about the ability of drugs to cross the blood-brain barrier



Fujifilm Cellular Dynamics, a leading global developer and manufacturer of human induced pluripotent stem cells (iPSC), has announced the global commercial launch of its human iPSC-derived iCell Blood-Brain Barrier Isogenic Kit for scientists engaged in neuroscience research and drug discovery for neuroactive drugs.

The first-of-its-kind kit models the human blood-brain barrier and can advance drug discovery, drug development and medical research for central nervous system (CNS) disorders.

The iCell Blood-Brain Barrier Isogenic Kit is an off-the-shelf, ready to use, human iPSC-derived cell model that has barrier integrity and functionality consistent with in vivo physiological properties.

The kit consists of human iPSC-derived iCell Brain Microvascular Endothelial Cells, iCell Pericytes, and iCell Astrocytes, as well as the critical culture media, which was jointly optimised through Fujifilm Irvine Scientific Inc.'s media optimisation programme and is manufactured by Fujifilm Irvine Scientific, Inc., and protocols necessary to provide a complete solution for creating a complex, 3D cellular model.

US-based arm of the Japanese firm, Fujifilm Cellular Dynamics currently provides over 20 iPSC-derived cell models for drug discovery globally, including human iPS cell-derived cardiomyocytes and microglia.