



iCell® Macrophages 2.0

FUJIFILM Cellular Dynamics, Inc. offers iCell Macrophages 2.0, which are derived from human induced pluripotent stem (iPS) cells. iCell Macrophages 2.0 are fully functional human macrophages with consistent, uniform function and unlimited cells from a single donor. These cells are ready-to-use at thaw for rapid results. iCell Macrophages 2.0 are an easy-to-use, scalable source of human macrophages providing dependable, repeatable results.

Macrophages are phagocytic cells of the innate immune system. These cells are involved in degradation of cellular debris and pathogens, antigen presentation, and cytokine

and chemokine release. Macrophages occur in almost all tissue types and function in the maintenance of tissue homeostasis and injury response and repair.

Macrophages have key roles in numerous disorders and disease states. From chronic inflammation and fibrosis, to supporting the tumor microenvironment and aiding in immune evasion, macrophages are a potent target for therapeutic development efforts. iCell Macrophages 2.0 are a full spectrum, biologically relevant tool for interrogating macrophage function.

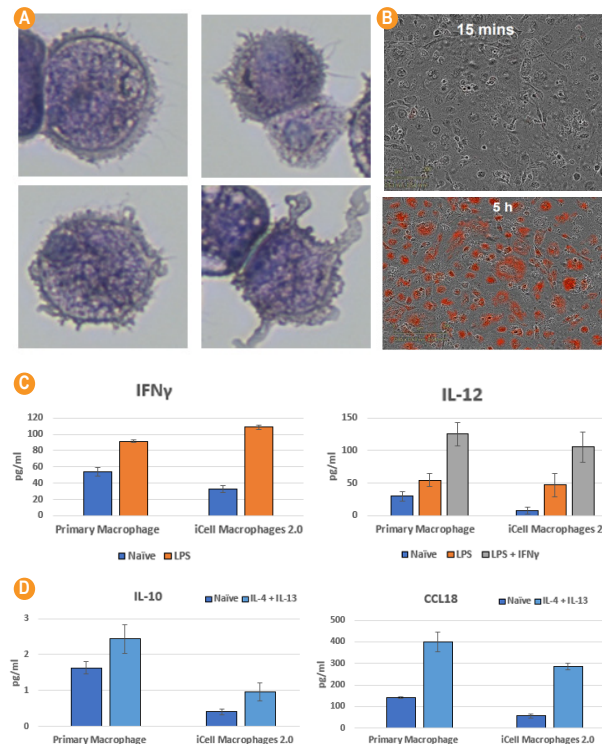


Figure 1: iCell Macrophages 2.0 are fully functional, naïve state macrophages.

iCell Macrophages 2.0 (A) exhibit a classic macrophage morphology with positive Wright Stain and (B) readily undergo phagocytosis of labeled SA bioparticles. iCell Macrophages 2.0 can be stimulated toward (C) a proinflammatory state by LPS and IFN γ or (D) an anti-inflammatory state by IL-4 and IL-13 with cytokine release equivalent to human primary monocyte-derived macrophages.

Advantages

- **Human Cells:** iCell Macrophages 2.0 are differentiated from human iPS cells and exhibit functional characteristics equivalent to human monocyte-derived macrophages.
- **Reproducible Results:** iCell Macrophages 2.0 are produced by a Quality Controlled manufacturing process for consistent, uniform macrophage function.
- **Rapid results:** iCell Macrophages 2.0 are cryopreserved for a ready-to-use workflow solution.
- **Workflow Compatible:** iCell Macrophages 2.0 offer scalable, adaptable, and robust macrophage function.
- **Isogenic Co-Culture:** iCell Macrophages 2.0 are isogenic with many other FCDI products.

Applications

iCell Macrophages 2.0 can be used to study a number of biological processes including:

- Immune Response
- Macrophage Polarization
- Cytokine Release
- Phagocytosis
- Immune Component Co-Culture

Specifications

Cell Type	Macrophage
Organism	Human
Source	Differentiated from an FCDI reprogrammed human iPS cell line
Quantity	≥1.0 x 10 ⁶ viable cells per vial
Shipped	Frozen
Donor ID	01279

Ordering Information

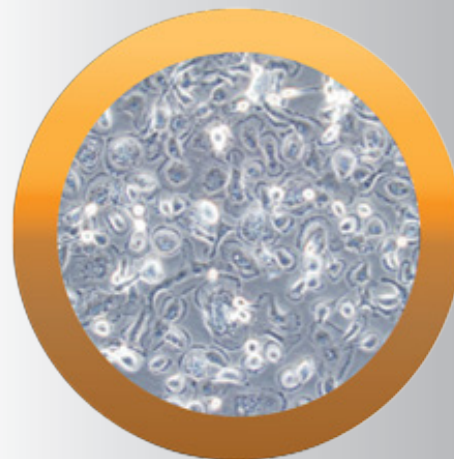
Item	Component(s)*	Catalog Number
iCell Macrophages 2.0 Kit, 01279	≥1.0 x 10 ⁶ viable cells	R1186

* A User's Guide is provided in each iCell Macrophages 2.0 Kit.

iCell Products

Provide access to biologically relevant, human iPS cells for disease modeling, drug discovery, toxicity testing, and regenerative medicine. FCDI's rapidly growing portfolio of iCell products includes human cardiomyocytes, cardiac fibroblasts, cardiac progenitor cells, GABAergic, glutamatergic, dopaminergic, motor, and induced excitatory neurons, hepatocytes, endothelial cells, astrocytes, hematopoietic progenitor cells, macrophages, blood-brain barrier models and others.

Visit the [FCDI website](#) for the most current list of supported cell types.



FUJIFILM Cellular Dynamics, Inc.
525 Science Drive
Madison, WI 53711 USA
(608) 310-5100 | Toll-free US (877) 310-6688
fcdi-sales@fujifilm.com
www.fujifilmcdi.com