



iCell[®] Astrocytes

Uncover the Complex Role of Astrocytes in Health and Disease

Astrocytes are specialized glial cells and the **most abundant cell type in the central nervous system (CNS)**, outnumbering neurons five-to-one. Astrocytes have historically been regarded as support cells for neural tissue, with reactive astrocytes serving as markers for damaged or diseased tissue. However, new studies reveal that astrocytes play an essential and complex role in the maintenance of a healthy CNS and in the onset and development of CNS disease.

CDI's iCell[®] Astrocytes are human iPS cell-derived astrocytes. They provide a readily accessible, consistent, and biologically relevant source of astrocytes for the study of synaptic transmission and plasticity in normal CNS function and disease progression. Benefits include:

- >95% pure population of human astrocytes
- Expression of relevant astrocyte markers (e.g. S100 β and GFAP)
- Exhibition of cytokine-mediated inflammatory responses
- Limited proliferative capacity and long-term viability
- Ability to co-culture with human neurons

Enhance the Relevance of Your Neuroscience Models

Assayed as a pure culture of astrocytes or as a co-culture with other iCell neural cell types, iCell Astrocytes provide multiple layers of biologic complexity to enable the interrogation of the following:

NORMAL CNS FUNCTIONS

- Synaptic remodeling and pruning
- Neurotransmitter homeostasis
- Neural network communication
- Blood-brain barrier support
- Regulation of CNS blood flow
- CNS metabolism

DISEASE CNS FUNCTIONS

- Reactive astrogliosis and CNS inflammation
- Alexander disease and leukodystrophies

- Neurodegenerative disease

- Multiple sclerosis and autoimmune inflammatory disorders

Ordering Information

Catalog #	Description	Quantity	
ASC-100-020-001-PT	iCell Astrocytes Cryopreserved iCell Astrocytes * Currently available as a prototype product	>1 x 10 ⁶ Viable Cells/Vial	REQUEST QUOTE