

Discover ioCells™

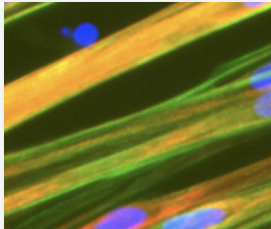
Defined, functional
human iPSC-derived cells

Powered by opti-ox™

Consistent. Defined. Scalable.

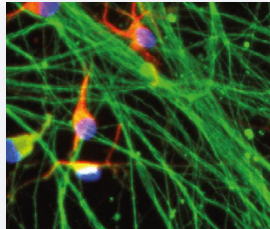
What could you do with human cells
offering speed and consistency at scale?

ioCells portfolio



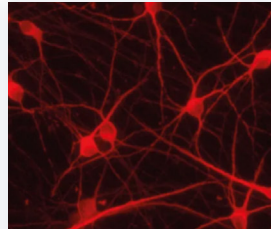
ioWild Type Cells

Defined, easy-to-use, functional iPSC-derived human cells with a healthy donor background.



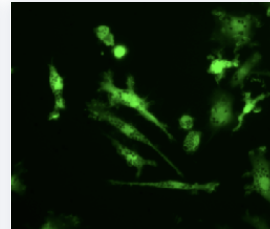
ioDisease Model Cells

ioDisease Model Cells are ioWild Type Cells engineered to carry disease-relevant mutations.



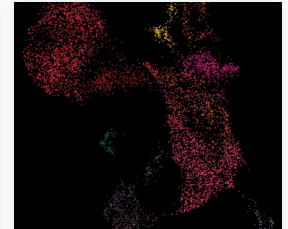
CRISPR-Ready ioCells

ioCells stably expressing Cas9 or dCas9 variants for gene knockout, activation and interference experiments, and CRISPR screens.



ioTracker Cells

ioTracker Cells are ioWild Type Cells engineered to constitutively express a reporter protein.



digiCells™

A range of easily accessible digital products designed to enable scientists to query ioCells transcriptomics data.

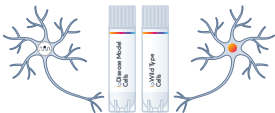
Coming soon

Start effortlessly with our library of applications

Disease modelling

Use disease models paired with genetically matched wild-type controls to make true comparisons in your data.

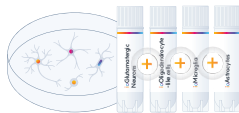
Assess disease-relevant phenotypes. Analyse gene expression. Monitor changes in function.



Multi-cell cultures

Combine ioCells to establish models of inflammation and neurodegeneration.

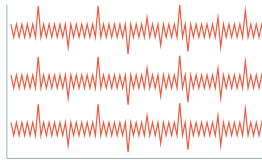
Investigate cellular communication and disease mechanisms in the human context.



Neurotoxicity testing

Effortlessly develop co-cultures for quick and physiologically relevant results on neuronal health.

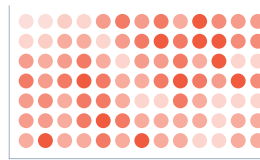
Use assays like calcium imaging or MEA to assess neuronal activity under different conditions.



Drug discovery

Simplify multi-cell cultures to screen compounds that affect specific pathways like synaptic function.

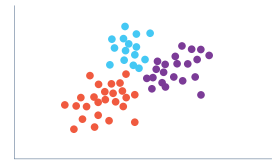
Perform high-throughput screening in 384-well plates & MEA for activity monitoring.



CRISPR screens

Generate gene knockouts in human iPSC-derived cells within days.

Run large-scale perturbations screens and analyse genetic interactions.



Benchtop benefits



Defined

Every ioCell has its identity characterised by ICC, RT-qPCR and RNA-Seq at minimum.



Easy-to-use

ioCells are delivered cryopreserved and ready to use with a simple protocol and an open-source medium.



Scalable

With opti-ox technology we can make billions of consistently programmed cells, surpassing the demands of industrial workflows.



Quick

Deterministically programmed cells mature rapidly, meaning cells are ready for experimentation and data gathering within days post-revival.



Consistent

opti-ox ensures consistency between every batch of cells, overcoming the challenge of data reproducibility.

Human cells, now more accessible

Move forward with
consistent ioCells for
translational results

From \$999 for 3 vials



Access a broad range of ioCells™

Neurons

- ioGlutamatergic Neurons
- ioGABAergic Neurons
- ioMotor Neurons
- ioSensory Neurons

Glial Cells

- ioAstrocytes
- ioOligodendrocyte-like cells
- ioOPC-like cells
- ioMicroglia | Female
- ioMicroglia | Male

Muscle Cells

- ioSkeletal Myocytes

Liver Cells

- ioHepatocytes

ioDisease Model Cells

- ALS/FTD
- Alzheimer's
- Parkinson's
- Huntington's
- Duchenne muscular dystrophy
- Gaucher

CRISPR-Ready ioCells

CRISPRko-Ready

- ioGlutamatergic Neurons
- ioMicroglia
- ioOligodendrocyte-like cells
- ioMotor Neurons

CRISPRa-Ready

- ioGlutamatergic Neurons
- ioMicroglia

CRISPRi-Ready

- ioGlutamatergic Neurons
- ioMicroglia

ioTracker Cells™

- GFP ioMicroglia
- GFP ioGlutamatergic Neurons
- GFP ioMotor Neurons

Experts in programmed human cells

At bit.bio, we do things a little differently. Our human iPSC-derived ioCells are powered by opti-ox, deterministic cell programming technology. opti-ox ensures unmatched and proven batch-to-batch consistency, which empowers scientists with confidence in experimental reproducibility.

Explore how ioCells powered by opti-ox are enabling scientists to publish faster, improve physiological relevance and generate reliable and reproducible results.