

# isolight<sup>®</sup>

A single-cell cytokine detection system

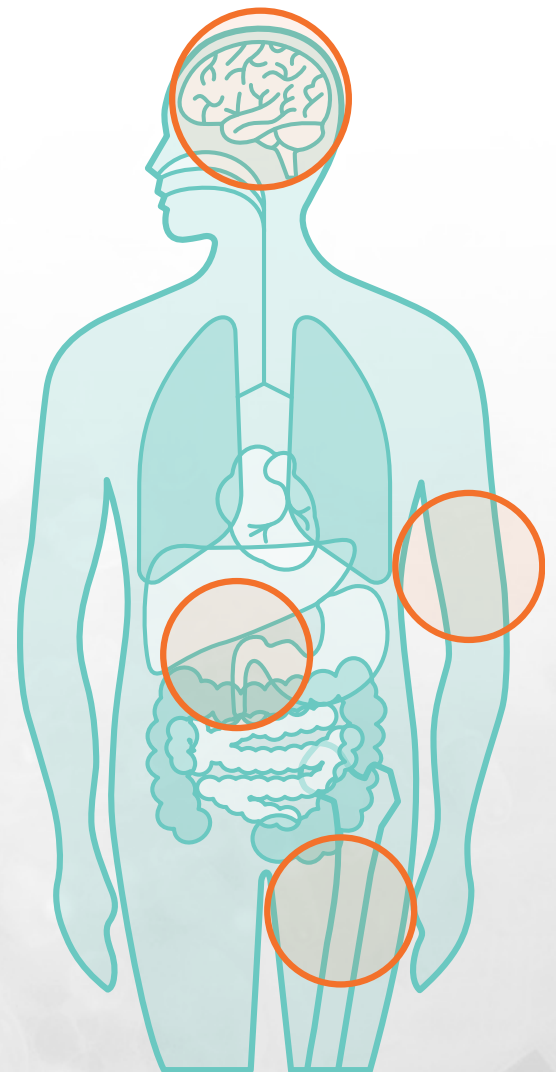


## Predictive Single Cell Response

The **IsoLight**<sup>®</sup> is a versatile, precision engineering platform designed to understand and characterize immune function, fitness, and potency. The **IsoLight**<sup>®</sup> maps thousands of cells per sample to reveal full functional profiles and polyfunctionality among cell subsets to reveal correlative insights into true functional immune biology.

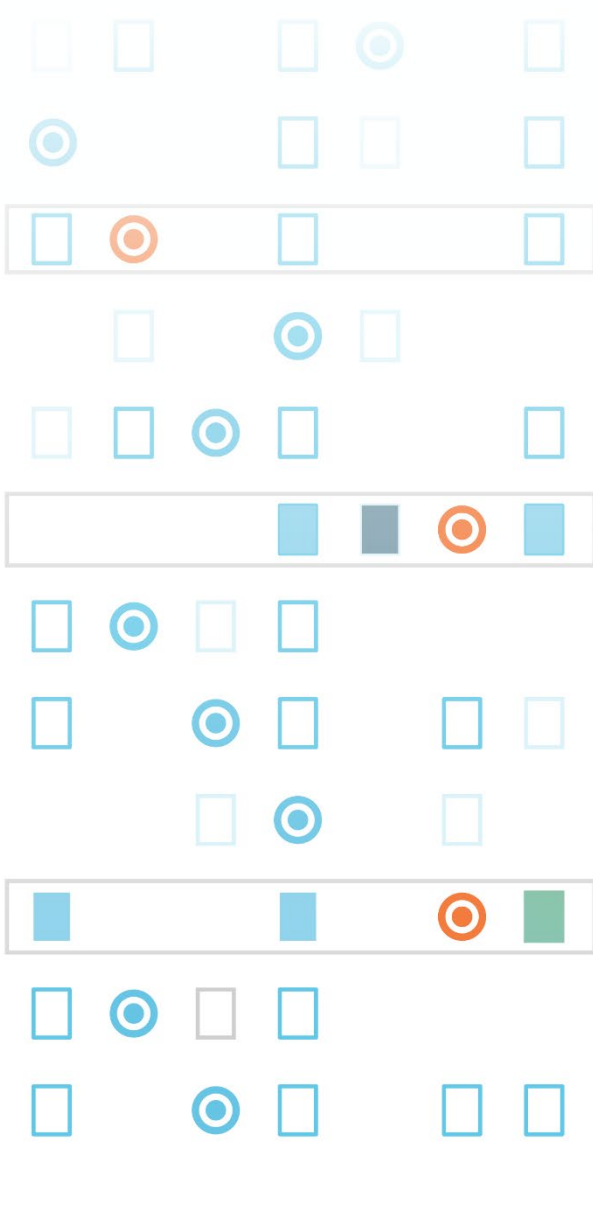
Running the patented consumable **IsoCode**<sup>®</sup> Chip, the **IsoLight**<sup>®</sup> system captures single-cell, functional cytokine profiles from thousands of single cells in parallel to better understand complex immunotherapy patient response.

Our **IsoSpeak**<sup>®</sup> bioinformatics platform helps discover new patient relationships among heterogeneous cells and clearly defines subsets of powerful, polyfunctional cells, secreting 2+ cytokines simultaneously, that can help predict patient outcome and determine disease progression.

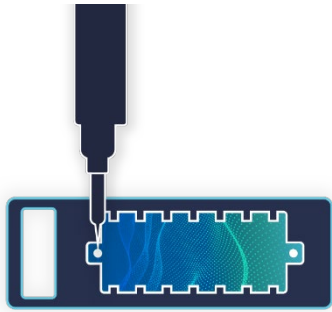


## Discover the Benefits of Single Cell Cytokine Profiling with the **IsoLight**<sup>®</sup>

The first and only system designed to functionally profile immunotherapy products at the single cell level, including CAR-T and TCR-T product characterization, clinical biomarker discovery, patient monitoring, and biomarkers for checkpoint inhibitor and combination therapies.



# IsoPlexis' Single-Cell Functional Technology

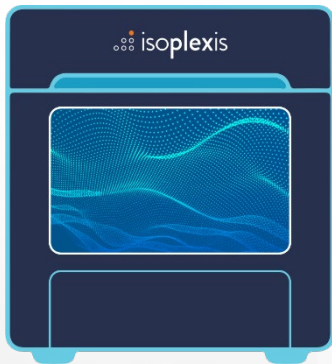


## IsoCode®

### 1. Sample Preparation

#### Simple and Easy to Use

- Less than 10 minutes of hands-on time
- Immune cells of interest are isolated and stimulated following IsoPlexis' proven and published sample preparation protocols
- One pipette action per sample
- Automated sample tracking barcode scanner
- Built-in bioinformatics for intuitive data analysis



## IsoLight®

### 2. Automated Assay Workflow

#### Highly Versatile

- A benchtop instrument that fits into every lab
- Completely automated and hands-off workflow
- With advanced fluidics and precision imaging, live single cells are automatically detected within an onboard incubator
- 1 to 8 chips per run with a throughput of 1k to 8k single cells
- Over 30-plex functional secreted cytokines are automatically analyzed per single cell to identify the unique polyfunctional cell subsets that are unable to be detected by traditional technologies



## IsoSpeak®

### 3. Automated Data Processing and Interactive Analysis

#### Impactful Data\*

- Cell detection and cytokine analysis are performed automatically within the IsoSpeak software suite
- Easily create advanced bioinformatics visualizations for comparison between samples and generation of data reports
- Captured unique T cell biology has been correlative in many data sets\*
- Highly specific and sensitive results
- Enhances discovery of clinically relevant biomarkers
- Enables improved targeting and monitoring of complex treatments
- Ensures consistent and improved cellular product manufacturing

\*based on validated data in 50+ publications: [isoplexis.com/publications](https://isoplexis.com/publications)

## System Specifications

### Working Environment

For indoor use only  
Operating temperature: 65 – 77°F (18 – 25°C)  
Humidity: 40 – 60%, non-condensing  
Altitude: < 6,500 ft (2,000 m)

### Dimensions

Width: 28.5 in (72.5 cm)  
Height: 30.5 in (77.5 cm)  
Depth: 28 in (71 cm)

### Weight

Crated for shipping: 338 lb (154 kg)  
Free standing: 255 lb (116 kg)

### Bench Size

Width: > 36 in (91 cm)  
Depth: > 24 in (61 cm)

### Clearance

Front: > 36 in (91 cm) aisle for operator access  
Rear: > 4 in (10 cm)  
Left: > 4 in (10 cm)  
Right: > 4 in (10 cm)

### Power Supply

Voltage: 100 V (min) to 240 V (max)  
Current: 6.3 A (max)  
Frequency: 50/60 Hz

### Gas Supply

Connection: 0.25 in or 4 mm OD push to connect tubing  
Pressure: 30-70 PSI  
Composition: Carbon dioxide (CO<sub>2</sub>) at > 99% purity

### User Interface

24 in IPS 10-point multi-touch screen  
RGB LED status indicator

### Connection

Ethernet: 1xGigE  
USB: 2x USB 3.0

### Contact Us

info@isoplexis.com  
203-500-9350

Visit us at [isoplexis.com](http://isoplexis.com)  
for more information

## Performance Specifications

### Consumables

Up to 8 disposable **IsoCode**<sup>®</sup> Chips per run with barcode tracking

### Reagents

Disposable one-time use reagents

### Cell Counts

> 1,000 isolated single cells per chip  
> 8,000 isolated cells per run with 8 chips

### Throughput

Over 30-plex functional cytokines per isolated single cell  
Over 300,000 single cell, secreted protein data points per run

### Hands-On Time

< 3 min per sample (cell preparation time not included)

### Run Time

< 24 hours from sample loading to results

### On-Board Incubator

Temperature: 37 ± 2°C  
CO<sub>2</sub> concentration: 5 ± 1%

### Laser Wavelengths

405 nm, 473 nm, 638 nm

### Software Solutions

**IsoSpeak**<sup>®</sup> data analysis software

For research use only.  
Not for use in diagnostic procedures.  
Individual components cannot be sold or used separately.



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