

**Elabscience®**

**Distributed by CliniSciences**

# Metabolism Assay Kits

- ◇ Ferroptosis
- ◇ Energy Metabolism
- ◇ Cuproptosis
- ◇ Inhibitor Screening



*A Reliable Research Partner in Life Science and Medicine*

**Distributed by**  
**CliniSciences Group**

Elabsience® has developed a series of featured products related to key metabolic indicators following the latest research trends. Our products cover cell death (ferroptosis, cuproptosis, disulfidptosis), mitochondrial function, and energy metabolism.

### Premium Products

#### ⌘ Ferroptosis Assay Kits

Complete indicators, providing holistic solutions for researchers

#### 📄 Fluorometric Assay Kits

Enhanced sensitivity, improved specificity, and reduced sample volume requirements

#### 📄 Energy Metabolism Assay Kits

Covers all metabolic pathways

#### 🧪 Cell Component Extraction

Metabolic detection simplified with no homogenization required and easy cell lysis

### Product Features

#### 📄 Applicable Sample Types

Serum, plasma, cultured cells, and tissue across multiple species

#### 📄 Technical Support

We offer comprehensive technical support and guidance for your research needs

#### 📄 External Validation

Utilized in studies published in renowned journals, including *Nature, Cell, and Advanced Materials*

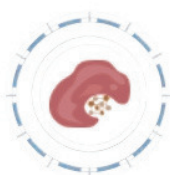
## Research Field Specific



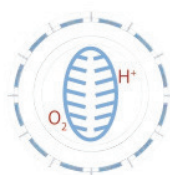
Ferroptosis



Cuproptosis



Disulfidptosis



Energy Metabolism



Oxidative Stress



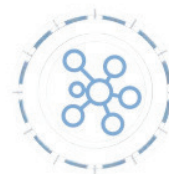
Mitochondrion



Tricarboxylic Acid (TCA) Cycle



Glycolysis and Lipid Metabolism



Inorganic Ions



Plant Physiology



Amino Acids and Proteins



Liver and Renal



Metabolic Diseases

Distributed by

**CliniSciences Group**

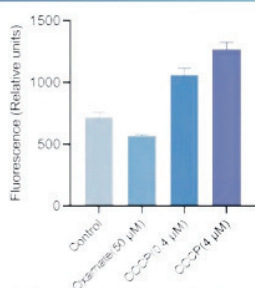
# Selected Product Lines

## Energy Metabolism

Energy metabolism is a fundamental cellular process involving key pathways such as glycolysis, lipid metabolism, the tricarboxylic acid (TCA) cycle, and oxidative phosphorylation. It serves as a critical indicator of cellular health and function.

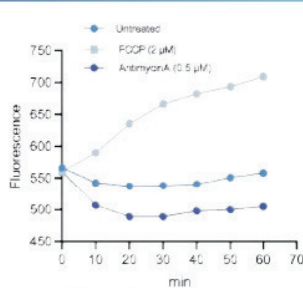
Cat. No.	Product Name	Size
E-BC-K652-M	Acetyl-CoA Colorimetric Assay Kit	48 T/96 T
E-BC-F009	Adenosine Diphosphate (ADP) Fluorometric Assay Kit	48 T/96 T
E-BC-F065	Adipogenesis Fluorometric Assay Kit	96 T
E-BC-F002	ATP Chemiluminescence Assay Kit	48 T/96 T
E-BC-F004	ATP/ADP Ratio Chemiluminescence Assay kit	48 T/96 T
E-BC-K178-M	Citrate Synthase (CS) Activity Assay Kit Extracellular Acidification Rate (ECAR)	48 T/96 T
E-BC-F069	Fluorometric Assay Kit	48 T/96 T
E-BC-F067	Fatty Acid Uptake Fluorometric Assay Kit	96 T
E-BC-F041	Glucose Uptake Fluorometric Assay Kit	96 T/500 Assays
E-BC-K044-M	L-Lactic Acid (LA) Colorimetric Assay Kit	48 T/96 T
E-BC-F068	Oxygen Consumption Rate (OCR) Fluorometric Assay Kit	48 T/96 T

## Featured Products



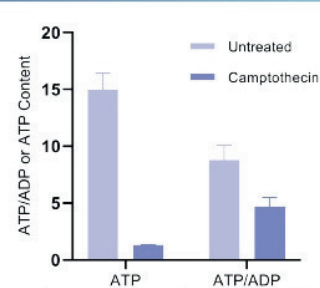
Extracellular Acidification Rate (ECAR) Fluorometric Assay Kit (E-BC-F069)

Fluorescence microplate reader compatibility for seamless detection



Oxygen Consumption Rate (OCR) Fluorometric Assay Kit (E-BC-F068)

Stable fluorescence signal ensures reliable kinetic measurements



ATP/ADP Ratio Chemiluminescence Assay Kit (E-BC-F004)

High sensitivity and accuracy

Distributed by

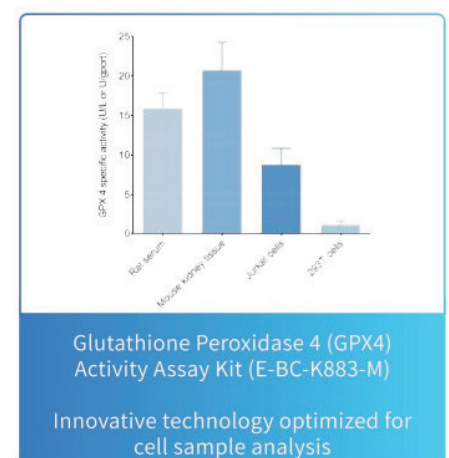
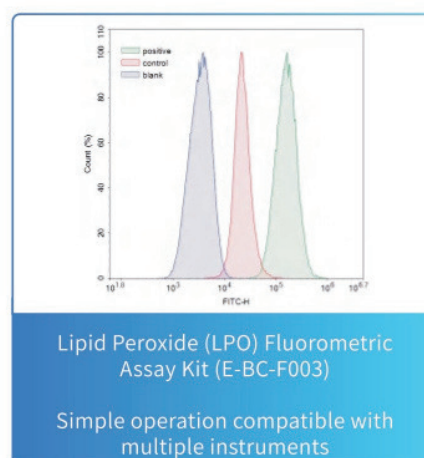
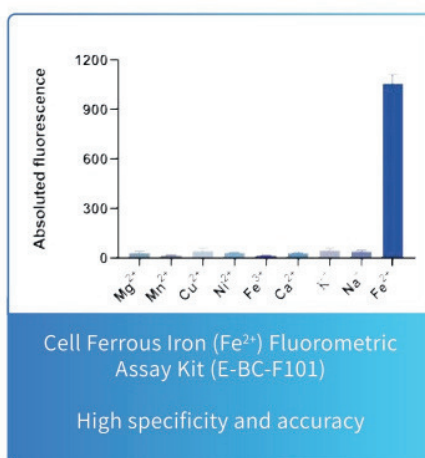
**CliniSciences Group**

## ■ Ferroptosis

Ferroptosis is an iron-dependent form of regulated cell death driven by the accumulation of lipid peroxides and elevated intracellular ferrous iron levels. It results from an imbalance in the production and degradation of lipid reactive oxygen species, making it a critical area of research in oxidative stress and cell death mechanisms.

Cat. No.	Product Name	Size
E-BC-K881-M	Cell Ferrous Iron Colorimetric Assay Kit	48 T/ 96 T
E-BC-F101	Cell Ferrous Iron (Fe <sup>2+</sup> ) Fluorometric Assay Kit	96 T
E-BC-F066	Cystine Uptake Fluorometric Assay Kit	96 T
E-BC-F022	Ferroptosis Suppressor Protein-1 (FSP-1) Activity Fluorometric Assay Kit	96 T
E-BC-K883-M	Glutathione Peroxidase 4 (GPX4) Activity Assay Kit	48 T/96 T
E-BC-K771-M	Lactate Dehydrogenase (LDH) Cytotoxicity Colorimetric Assay Kit	96 T/ 500 Assays
E-BC-F003	Lipid Peroxide (LPO) Fluorometric Assay Kit	96 T
E-BC-K776-M	Selenium Colorimetric Assay Kit	48 T/ 96 T
E-BC-K794-M	Squalene Synthase (SQS) Activity Colorimetric Assay Kit	48 T/ 96 T

## Featured Products



## ■ Cuproptosis

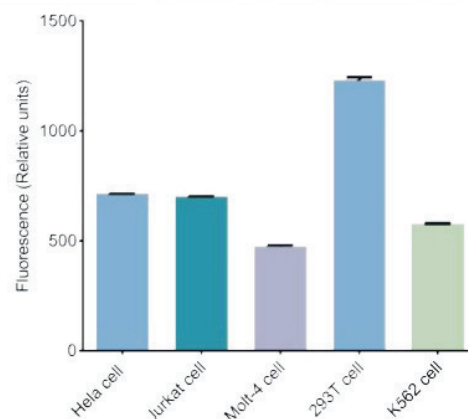
Cuproptosis, identified in March 2022, is a novel mechanism of regulated cell death. It is copper-dependent and occurs through copper binding to lipoylated components of the TCA cycle, leading to protein aggregation, iron-sulfur cluster protein loss, proteotoxic stress, and ultimately cell death.

Cat. No.	Product Name	Size
E-BC-F047	$\alpha$ -Ketoglutarate ( $\alpha$ -KG) Fluorometric Assay Kit	48 T/96 T
E-BC-K775-M	Cell Copper ( $\text{Cu}^{2+}$ ) Colorimetric Assay Kit (Complexing Method)	48 T/96 T
E-BC-F102	Cellular Cuprous Fluorometric Assay Kit	48 T/96 T
E-BC-K834-M	Cell Mitochondrial Complex I (NADH-CoQ Reductase) Activity Assay Kit	48 T/96 T
E-BC-K836-M	Cell Mitochondrial Complex III (Coenzyme Q-Cytochrome C Reductase) Activity Assay Kit	48 T/96 T
E-BC-K650-M	Pyruvate Dehydrogenase (PDH) Activity Assay Kit	96 T
E-BC-F058	Pyruvate Fluorometric Assay Kit	48 T/96 T

## Featured Products

### Cellular Cuprous Fluorometric Assay Kit (E-BC-F102)

- ① **Reliable:** Extensively validated with multiple cell types
- ② **Efficient:** Streamline your workflow with a 15-minute rapid detection process
- ③ **Accurate:** Highly specific, with no interference from other ions



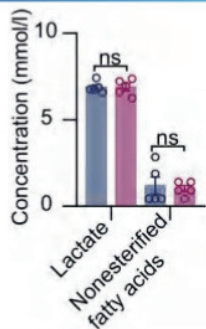
## ■ Inhibitor Screening

Enzymes are key targets in drug discovery. Elabscience has developed a range of advanced assay kits tailored for inhibitor screening, providing valuable tools to facilitate drug research and screening applications.

Cat. No.	Product Name	Size
E-BC-D011	3-Hydroxy-3-methylglutaryl-CoA Reductase (HMGR) Inhibitor Screening Kit	48 T/96 T
E-BC-D001	Angiotensin I Converting Enzyme 2 (ACE2) Inhibitor Screening Kit	96 T

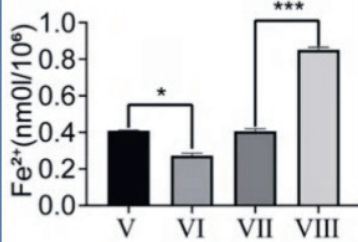
Cat. No.	Product Name	Size
E-BC-D007	Dipeptidyl Peptidase IV (DPP4) Inhibitor Screening Assay Kit	96 T
E-BC-D019	Xanthine Oxidase (XOD) Inhibitor Screening Kit	96 T

## Featured Publications



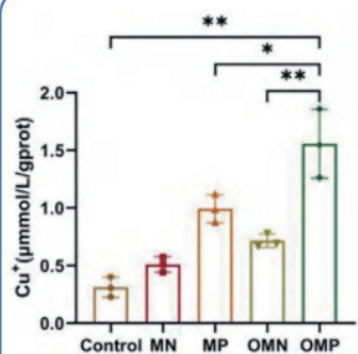
### Energy Metabolism Series

- Light modulates glucose metabolism by a retina-hypothalamus-brown adipose tissue axis. *Cell*, 2023.
- The lactate level in mouse serum was detected by **L-Lactic Acid (LA) Colorimetric Assay Kit (E-BC-K044-M)**



### Ferroptosis Series

- Exosome-mediated miR-144-3p Promotes Ferroptosis to Inhibit Osteosarcoma Proliferation, Migration, and Invasion through Regulating ZEB1. *Molecular Cancer*, 2023.
- The Fe<sup>2+</sup> level in H143B cells was detected by **Cell Ferrous Iron Colorimetric Assay Kit (E-BC-K881-M)**



### Cuproptosis Series

- Inhalable metal-organic framework-mediated cuproptosis combined with PD-L1 checkpoint blockade for lung metastasis synergistic immunotherapy. *Acta Pharmaceutica Sinica B*, 2024.
- The Cu<sup>2+</sup> level in B16-F10 cells was detected by **Cell Copper (Cu<sup>2+</sup>) Colorimetric Assay Kit (Complexing Method) (E-BC-K775-M)**

Distributed by

**CliniSciences Group**



# CliniSciences Group

## Austria



Company: CliniSciences GmbH  
Address: Sternwartestrasse 76, A-1180  
Wien - Austria  
Telephone: +43 720 115 580  
Fax: +43 720 115 577  
Email: [oesterreich@clinisciences.com](mailto:oesterreich@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Belgium



Company: CliniSciences S.R.L  
Address: Avenue Stalingrad 52, 1000  
Brussels - Belgium  
Telephone: +32 2 31 50 800  
Fax: +32 2 31 50 801  
Email: [belgium@clinisciences.com](mailto:belgium@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Denmark



Company: CliniSciences ApS  
Address: Oesterbrogade 226, st. 1,  
Copenhagen, 2100 - Denmark  
Telephone: +45 89 888 349  
Fax: +45 89 884 064  
Email: [denmark@clinisciences.com](mailto:denmark@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Finland



Company: CliniSciences ApS  
Address: Oesterbrogade 226, st. 1,  
Copenhagen, 2100 - Denmark  
Telephone: +45 89 888 349  
Fax: +45 89 884 064  
Email: [suomi@clinisciences.com](mailto:suomi@clinisciences.com)  
Web: <https://www.clinisciences.com>

## France



Company: CliniSciences S.A.S  
Address: 74 Rue des Suisses, 92000  
Nanterre- France  
Telephone: +33 9 77 40 09 09  
Fax: +33 9 77 40 10 11  
Email: [info@clinisciences.com](mailto:info@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Germany



Company: Biotrend Chemikalien GmbH  
Address: Wilhelm-Mausier-Str. 41-43,  
50827 Köln - Germany  
Telephone: +49 221 9498 320  
Fax: +49 221 9498 325  
Email: [info@biotrend.com](mailto:info@biotrend.com)  
Web: <https://www.biotrend.com>

## Iceland



Company: CliniSciences ApS  
Address: Oesterbrogade 226, st. 1,  
Copenhagen, 2100 - Denmark  
Telephone: +45 89 888 349  
Fax: +45 89 884 064  
Email: [island@clinisciences.com](mailto:island@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Ireland



Company: CliniSciences Limited  
Address: Ground Floor, 71 lower Baggot street  
Dublin D02 P593 - Ireland  
Telephone: +353 1 6971 146  
Fax: +353 1 6971 147  
Email: [ireland@clinisciences.com](mailto:ireland@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Italy



Company: CliniSciences S.r.l  
Address: Via Maremmana inferiore 378  
Roma 00012 Guidonia Montecelio - Italy  
Telephone: +39 06 94 80 56 71  
Fax: +39 06 94 80 00 21  
Email: [italia@clinisciences.com](mailto:italia@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Netherlands



Company: CliniSciences B.V.  
Address: Kraaijenhoffstraat 137A,  
1018RG Amsterdam, - Netherlands  
Telephone: +31 85 2082 351  
Fax: +31 85 2082 353  
Email: [nederland@clinisciences.com](mailto:nederland@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Norway



Company: CliniSciences AS  
Address: c/o MerVerdi Munkerudtunet 10  
1164 Oslo - Norway  
Telephone: +47 21 988 882  
Email: [norge@clinisciences.com](mailto:norge@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Poland



Company: CliniSciences sp.Z.o.o.  
Address: ul. Rotmistrza Witolda Pileckiego 67  
lok. 200 - 02-781 Warszawa -Poland  
Telephone: +48 22 307 0535  
Fax: +48 22 307 0532  
Email: [polska@clinisciences.com](mailto:polska@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Portugal



Company: Quimigen Unipessoal LDA  
Address: Rua Almada Negreiros, Lote 5, Loja 14,  
2615-275 Alverca Do Ribatejo - Portugal  
Telephone: +351 30 8808 050  
Fax: +351 30 8808 052  
Email: [info@quimigen.com](mailto:info@quimigen.com)  
Web: <https://www.quimigen.pt>

## Spain



Company: CliniSciences Lab Solutions  
Address: C/ Hermanos del Moral 13  
(Bajo E), 28019, Madrid - Spain  
Telephone: +34 916 750 700  
Fax: +34 91 269 40 74  
Email: [espana@clinisciences.com](mailto:espana@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Sweden



Company: CliniSciences ApS  
Address: Oesterbrogade 226, st. 1,  
Copenhagen, 2100 - Denmark  
Telephone: +45 89 888 349  
Fax: +45 89 884 064  
Email: [sverige@clinisciences.com](mailto:sverige@clinisciences.com)  
Web: <https://www.clinisciences.com>

## Switzerland



Company: CliniSciences AG  
Address: Fracht Ost Flughafen Kloten  
CH-8058 Zürich - Switzerland  
Telephone: +41 (044) 805 76 81  
Fax: +41 (044) 805 76 75  
Email: [switzerland@clinisciences.com](mailto:switzerland@clinisciences.com)  
Web: <https://www.clinisciences.com>

## UK



Company: CliniSciences Limited  
Address: 11 Progress Business center, Whittle  
Parkway, SL1 6DQ Slough- United Kingdom  
Telephone: +44 (0)1753 866 511  
or +44 (0) 330 684 0982  
Fax: +44 (0)1753 208 899  
Email: [uk@clinisciences.com](mailto:uk@clinisciences.com)  
Web: <https://www.clinisciences.com>

## USA



Company: Biotrend Chemicals LLC  
Address: c/o Carr Riggs Ingram,  
500 Grand Boulevard, Suite 210 Miramar  
Beach, FL 32550- USA  
Telephone: +1 850 650 7790  
Fax: +1 850 650 4383  
Email: [info@biotrend-usa.com](mailto:info@biotrend-usa.com)  
Web: <https://www.biotrend-usa.com>