

# Providing Industry-Leading Research, Discovery and Manufacturing Tools



# We Are Closer Than You Think

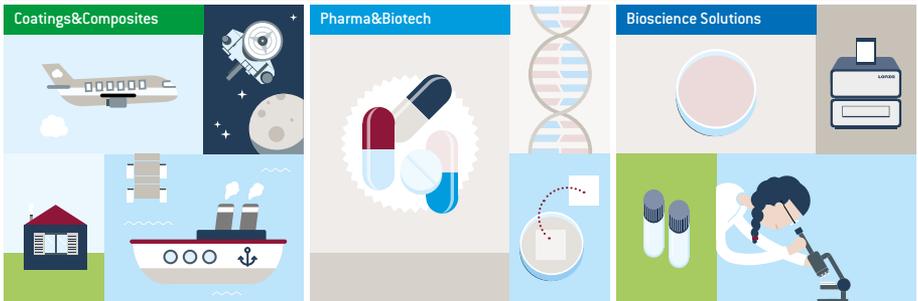
## A commitment to life-science and to the importance of your project.

Lonza is one of the world's leading and most trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets. We serve more than 60,000 clients worldwide in more than 100 countries across all continents. We harness science and technology to create products and services that contribute to health and well-being and that enhance the overall quality of life.

By continuously developing our technologies, we enable our customers to meet some of the world's greatest challenges, such as the vital need for advanced research, disease prevention and treatment, clean water, abundant food, and enhanced hygiene and wellness.



# Lonza Market Offerings



Lonza has the unique ability to connect our biotech expertise with fine chemical know-how. With such a broad reach globally, Lonza is always closer than you think.

## We Are Committed To Your Success

Lonza's Bioscience Solutions business provides tools for the discovery, development, production and release of therapeutics. We offer unique advantage through our high value expertise and solutions, such as:

- Primary cells and stem cells with specialized media and reagents
- Transfection platforms for demanding applications
- Innovative cell culture and analysis tools
- Culture media for therapeutics production
- Endotoxin assays to help assure the safety of injectable drugs

<< We use advanced technologies to transform life science into new possibilities for our customers. >>



# Offerings

## Pluripotent Stem Cells

Human pluripotent stem cells [hPSCs] have the ability to generate any of the 220+ cell types in the human body. The L7™ System provides a simple workflow to generate and expand hPSCs. With every-other-day feeding capabilities in a xeno-free and fully defined environment, the L7™ System is suitable for downstream research and clinical discoveries.

- L7™ hiPSC Reprogramming Bundle including the L7™ PBMC Priming-Recovery Kit
- L7™ hPSC Culture System

## Primary Cells and Adult Stem Cells

More than 150 types of primary cells, including diseased cells, ready to use. We also have your immunology and hematology research covered from start to finish from fresh normal human bone marrow to purified hematopoietic progenitors, all the way to fully committed immune cells.

- Clonetics™ Human and Animal Primary Cells
- Poietics™ Adult Stem Cells, Progenitors and Immune Cells

## Cell Culture Reagents

Cell and media reagents for ease of use in a variety of applications. An extensive selection of classical and serum-free media, including protein-free, chemically defined and non-animal derived formulas. Many of our serum-free media are also available as therapeutic grade, for an easy transition from research to clinical applications.

- BioWhittaker™ Classical media and cell culture reagents
- BioWhittaker™ Serum-free Media
- BioWhittaker™ Antibiotics and buffers

## Mycoplasma Detection and Prevention

Complete portfolio for managing mycoplasma contamination in your cell culture: from detection using luminescence technique to prevention and elimination.

- MycoAlert™ Mycoplasma Detection Kit
- MycoZap™ Mycoplasma Elimination Reagent
- MycoZap™ Antibiotics
- Lucetta™ Luminometer

## Transfection

The Nucleofector™ Technology is a non-viral transfection technology, ideal for primary cells, stem cells and hard-to-transfect cell lines. It can achieve transfection efficiencies of up to 95% and more than 700 different cell types have already been tested.

- 4D-Nucleofector™ System as most flexible platform
- 96-well Shuttle™ Add-On for higher throughput
- HT Nucleofector™ System for 384-well transfection
- Nucleofector™ 2b Device as basic system

## FlashGel™ System

The FlashGel™ System provides nearly instant results for both separation and recovery of DNA and RNA

- FlashGel™ Dock
- FlashGel™ Camera
- FlashGel™ DNA/RNA Cassettes
- FlashGel™ Loading Dye
- FlashGel™ DNA Marker

## Electrophoresis of Nucleic Acids and Proteins

Systems and reagents for fast reliable separation and analysis of nucleic acids and proteins

- SeaKem® / NuSieve™ / MetaPhor™ Agarose
- ProSieve™ / AccuGENE™ Buffers
- PAGEr™ / Reliant™ / Latitude™ Precast Gels
- GelBond® Gel Support Film

Clinical  
Development

Clinical  
Development

Manufacturing

## Endotoxin Detection

Endotoxin impacts over 30 biological activities and can lead to cell death by initiating complement activation. Therefore, it is important that endotoxin levels in cell culture media and supplements be controlled. Lonza's liquid media products are pre-tested for endotoxin using the Kinetic-QCL™ Assay. Quantitative results can be achieved in 16 minutes using the QCL-1000™ Endpoint Chromogenic Assay.

- Endotoxin Detection Assays
  - PYROGENT™ Gel Clot Assay
  - PYROGENT™-5000 Turbidimetric Assay
  - Kinetic -QCL™ Kinetic Chromogenic Assay
  - QCL-1000™ Endpoint Chromogenic Assay
  - PyroGene™ Recombinant Factor C Endpoint Fluorescent Assay
- Control Standard Endotoxin
- Accessories
- Instruments and Software



## RAFT™ 3D Cell Culture Kits

### Elevate Your Cells to the Next Generation

Create 3D cell layers in less than an hour using simple protocols and standard labware! RAFT™ Kits use a patented absorber method to create cell layers in high-density collagen that mimic an in vivo environment. RAFT™ Kits are available in a 24-well, insert-well and 96-well formats.

Contact your local sales representative to learn how RAFT™ Kits can support your experiments.

## Other Assays

- Cell Health Assays
  - Cytotoxicity / Proliferation
- HTS Assays
  - cAMP / Inorganic Pyrophosphate
- Cell Assays
  - Lipolysis / Adipogenesis / bone Reabsorption / Mineralization / Protein Interactions



## Experience the Innovation of CytoSMART™ System

### Your Personal Live Cell Monitoring Device

The system consists of a mini-microscope, the CytoSMART™ Device (roughly the size of a cell culture plate), and an accompanying tablet, which is linked to the device and can be fixed outside the incubator. With the CytoSMART™ Connect Cloud Service, you can view your images and create time-lapse movies of your cell culture.

As a cloud-based system, it enables you to access and download your cell culture data from any browser-capable system, whether it is your computer, laptop, smartphone or your personal tablet device. With the CytoSMART™ System, your cells can remain in their defined conditions in the incubator while you monitor the culture remotely. In addition, you can set automatic alerts – meaning you only need to physically tend to your cells once they have reached a certain confluency.



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