

# Flowcytometer



Flow cytometry is used to analyze and sort cells based on their physical and chemical characteristics, often involving fluorescent labeling and laser detection. It's a powerful tool for research, diagnostics, and cell-based therapies.

# RT-PCR



Real-time PCR, also known as quantitative PCR (qPCR), is a laboratory technique that monitors the amplification of a specific DNA sequence during the polymerase chain reaction (PCR) process, allowing for both detection and quantification of nucleic acids in real-time. Unlike traditional PCR, which analyzes the final PCR product, real-time PCR measures the accumulation of amplicon during the reaction, providing more precise and quantitative data.

# ELISA Reader & Washer

An ELISA reader, or microplate reader, is used to measure the intensity of light signals from samples in an ELISA test, helping to quantify specific molecules like antibodies or antigens in a solution. It's employed in various applications, including disease diagnosis (like HIV, Lyme disease, or COVID-19), drug discovery, and food safety testing.



# -80°C Deep Freezer



For storing Blood Samples and Medical samples – The Ultra-Low Deep Freezers are widely used in medical laboratories and for industrial purposes to store chemicals, blood samples, tissue cultures, and other medical samples that can only be stored and preserved in low temperature range.

# Semi-automatic Biochemistry Analyzer



A biochemistry autoanalyzer is a device that automatically measures the levels of various biochemical parameters in biological samples like blood or urine, aiding in disease diagnosis and health monitoring. It automates the analysis process, providing faster and more accurate results than manual methods.

# Nano-spectrophotometer



A Nano-spectrophotometer is used to quickly measure the concentration and purity of DNA, RNA, and protein samples using a small (1-2  $\mu\text{L}$ ) drop of solution.

# Refrigerated Centrifuge



A refrigerated centrifuge is used to separate substances by density at controlled low temperatures, preserving temperature-sensitive samples during separation. This is particularly useful in research and clinical settings where maintaining sample integrity is crucial.



# Inverted Microscope



An inverted microscope is used in medical labs to observe living cells and tissues in culture vessels from below, allowing for observation of dynamic processes and maintaining sample sterility.

# CO<sub>2</sub> Incubator



A CO<sub>2</sub> incubator is a specialized piece of laboratory equipment that is used to cultivate cells and microorganisms under controlled environmental conditions. It provides a stable and regulated environment, particularly in terms of temperature, humidity, and CO<sub>2</sub> levels, which are crucial for the growth and maintenance of various cell types, including stem cells, cancer cells, and tissues.

# Biosafety Cabinet

A biosafety cabinet in a medical lab provides a contained environment to protect personnel, samples, and the environment from hazardous biological agents during procedures.



# Laboratory Fridge



A laboratory refrigerator for medical lab use is a specialized refrigeration unit designed to store temperature-sensitive medical supplies, vaccines, and biological samples at precise, controlled temperatures.

# Laboratory Autoclave



An autoclave sterilizes medical and laboratory equipment using high-pressure steam, ensuring items are free of microorganisms. Autoclaves are essential for preventing contamination in various settings, including research and healthcare.