

Mass spectrometer

What it is

A mass spectrometer is an instrument that measures the weight of chemicals. It can tell us what the chemical is and also how much is present.

What it is used for

Mass spectrometers are widely used in real world applications such as to detect chemical contaminants in food, the measurement of pharmaceutical drugs and identifying banned substances in urine.



Real-time PCR instrument

What it is

Real-time polymerase chain reaction (PCR) is an invaluable technology used for molecular biology research. The instrument monitors the amplification of a targeted deoxyribonucleic acid (DNA) molecule, which carries genetic instructions, during the PCR in real-time.

What it is used for

It is used daily in laboratories around the world in a wide array of applications such as cloning, gene expression analysis, genotyping, sequencing, and mutagenesis.



DNA microarray

What it is

DNA microarray is a chip containing thousands of DNA sequences used in the field of genetic testing, which allows scientists to perform an experiment on thousands of genes at the same time.

What it is used for

It is used to determine whether a DNA molecule contains a mutation in genes and also to determine which certain genes are turned on and off. It is used to investigate everything from cancer to pest control.

