

Flow cytometer

Flow cytometer is a instrument used to detect and measure physical and chemical characteristics of a population of cells or particles. The sample is focused to ideally flow one cell at a time through a laser beam and the light scattered is characteristic to the cells and their components. Cells are often labelled with fluorescent markers so that light is first absorbed and then emitted in a band of wavelengths. Tens of thousands of cells can be quickly examined and the data gathered are processed by a software.

Examples of uses:

- cell counting and sorting
- determining cell characteristics and function
- detecting microorganisms
- biomarker detection
- protein engineering detection
- diagnosis of health disorders

