

FLOW CYTOMETRY (FACS-Flourescent Activated Cell Sorter)



Intended Use of the Instrument: It is used to measure the characteristics of cells or particles through a flowing fluid.

Instrument Brand/Model: BD Biosciences BD LSRFORTESSA

AGU CRF Thematic Laboratory: Cell Biology Laboratory

Location of the Instrument: AGU-CRF LAB7

Academic Director(s) of the Instrument:

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Flow cytometry technique can be defined as examining the physical or chemical properties of cells or biological particles in a flowing liquid.

Basic approach of flow cytometry is based on the evaluation of cells in terms of size, shape, DNA and RNA content, and cytoplasmic granularity.

For this purpose, the targeted structure or cell is first labeled using a fluorescent-labeled antibody or a special dye. By using flow cytometry technique, structural

intrinsic properties such as cell size, cell shape, cytoplasmic granule content, pigment content, functional intrinsic properties such as redox state, vitality, surface antigens, lectin binding, total protein, sulfhydryl groups, chromatin structure, structural extrinsic properties such as membrane Functional extrinsic properties such as continuity, surface electrical face, intracellular pH, membrane potential, membrane viscosity can be analyzed.