

FLOW CYTOMETRY CORE FACILITY

FLOW CYTOMETRY UNLEASHED

MDQuest provides high quality pre-clinical research services covering a full project cycle ranging from project planning to result interpretation, data presentation and data application. Upon request, we provide training and expert consultation on experimental design and cell analysis results.

At MDQuest, clients are served by a fully equipped, state-of-the-art research facility, capable of detecting particles as small as 50 nanometers, up to 16 parameters measured simultaneously on 96 or 120 well plates. An ISO 9001 compatible quality management environment is in place at MDQuest, and the company is ISO 13485:2012 certified.

SERVICES OFFERED

- **Immunophenotyping and characterization:**

Cell type and multiple biomarker expression identification using antibodies.

- **Cell activation:**

Logical gating of the activated cells either from animal samples, or from cultured cells. Activation levels can be determined to quantitate the effects of agonists and antagonists, by generating IC50 and EC50 values from dose curves.

- **Cell proliferation:**

Determination of cellular proliferation levels in cultures and identification of dividing cells with fluorescent dyes.

- **Cytotoxicity:**

Quantification of the cytotoxic potential of a population of cells.

- **Cell cycle/death analysis:**

Arrest points and apoptosis identification with the use of DNA binding dyes.

- **Intracellular cytokine detection:**

Measurement of stained cytokines/chemokines and growth factors production.

- **Kinetic measurements:**

Kinetics of enzyme activities and cell-stain interactions are studied.

- **Telomere length:**

Telomere length analysis as aging and disease indicator.

Equipment

Sysmex CyFlow Space (375 nm, 488 nm, 638 nm)

Partec CyFlow Cube 8 with HTS Autoloading Station (375 nm, 488 nm, 638 nm)

FlowJo 10 data analysis software

FCS Express 5 data analysis software

