

Take advantage of ImQuest Biosciences' flow cytometry services and our state-of-art, 8-color FACSCanto II flow cytometer.

- **Run your own samples** – If you are trained to operate a flow cytometer, just schedule a time with us and we will make sure the flow cytometer is ready for you when you arrive at our facility. Once you have completed your run, analyze your data with FlowJo, software for flow analysis.
- **Have us run your samples** – Send us your samples. We will run them, analyze the data, and interpret the results to meet your requirements.
- **Get trained** – Our expert staff is available for training if you would like to learn how to run a flow cytometer or get up to speed on specific applications.
- **Develop and validate a method** – Leave development and validation to our scientists. We will meet with you to discuss your objective, then develop and validate a protocol to help you achieve it. GLP-compliant assays are also available.

Services are offered at either an hourly or daily rate.

**Contact us to learn more.**

### About ImQuest BioSciences

ImQuest BioSciences is a preclinical contract research and development company that evaluates the potential of new and novel pharmaceutical products. We specialize in the development of drugs, vaccines and biologic products for the treatment and prevention of infectious disease, cancer and inflammatory disease.



Our FACSCanto II flow cytometer laboratory is equipped with a centrifuge, BSL-2 tissue culture hoods, 37°C incubators, refrigerator and -20°C freezer.

### Research Applications of Flow Cytometry Include:

- Immunophenotyping
- Cell Activation & Exhaustion Marker Analysis
- Cell Cycle Analysis
- Chromosomal Abnormalities
- Cell Viability
- Apoptosis vs Necrosis
- Cell Proliferation
- Intracellular Calcium Flux
- Intracellular Cytokines

In **drug discovery**, flow cytometry can be used to screen novel drug candidates by examining changes in immunophenotype or cell function following *in vitro/in vivo/ex vivo* studies.

In **preclinical development**, flow cytometry may be used for immunotoxicology studies using fluorescent probes and more specific markers. In addition, flow cytometry is used to evaluate receptor binding and to assess pharmacodynamics markers.

### Molecular Biology

- Virus production and genotypic characterization
- Sequencing & identification of antimicrobial target genes
- Quantitative real time PCR
- Single Nucleotide Polymorphism (SNP) detection
- Cloning and sequencing of recombinant plasmids
- Gene expression analysis
- Recombinant protein expression and purification
- Protein-protein and protein-nucleic acid interactions
- Microbial resistance characterization
- Novel target identification and assay development
- Analysis of pathogen-host interactions

### Tissue Culture

- Preparation and maintenance of cell lines or primary cell cultures
- Virus stock production
- Virus propagation
- Bacteria stock production
- Cell and virus repository
- Baculovirus expression systems
- Prokaryotic expression systems

### Immunology

- Antigen-specific ELISpot assays
- Tissue cross-reactivity assays and immunohistochemistry
- ELISAs:
  - Antigen specific ELISAs
  - ELISA method development, GLP validation and transfer
  - ELISA kit validation
- Neutralizing antibody and other cell based assays
- Flow cytometric assays
- Biomarker discovery and validation
- PBMC isolation and immunogenicity screening
- Analysis of clinical samples to determine the immune response evoked by the treatment

**Contact us for more information.**

### Drug Evaluation Services

Our pharmaceutical properties and pre-formulation services help to ensure that a new compound is not derailed by an inability to formulate an otherwise promising product.

We offer the services shown below to evaluate the pre-formulation characteristics, requirements, and potential of a drug candidate.

#### Analytical

- HPLC analytical development
- Drug degradation profile & characteristics
- Drug-excipient compatibility

#### Solubility

- *In vitro* drug dissolution
- Drug solubility

#### Stability

- ICH environmental stability protocols
- Stability indicating evaluations

#### Drug Delivery

- Drug permeability in tissue & cells
- *In vitro/ex vivo* drug release testing

#### Formulation Identity

- API physical characteristics
- Moisture content
- Rheological evaluation