



ALTASCIENCES
BIOANALYSIS & RESEARCH SERVICES

Bioanalytical Services

We have state-of-the-art, purpose-built laboratories at our locations in the U.S. and Canada, with designated containment Level 2 areas for work with Risk Group 2 pathogens. Staffed by highly-skilled analysts, and shifts running 24/7 (as needed), we can process over 60,000 study samples per month. Responsive and flexible, our team of over 100 bioanalytical subject matter experts is there for you, throughout all stages of your drug development pathway. Following clear processes, in accordance with GLP and current FDA/EMA guidelines, and supported by our unique array of platforms and large list of validated assays, our team ensures the most effective methods for your individual programs.

BIOANALYSIS

From Discovery to Preclinical to Phase IV — Method Development, Validation, and Sample Analysis

Experience with a wide spectrum of biological matrices in both animal species and humans, including serum, plasma, blood, urine, feces, tissues, cerebrospinal fluid, and vitreous humor.

Small Molecules

- Extensive in-house database of over 620 assays covering 600 molecules
- Customized, unique solutions in derivatization, chiral separation, drug stabilization, and multiple metabolite quantitation
- State-of-the-art instrumentation to achieve low quantitation with limited sample volume
- Certain small molecules are suitable for our state-of-the-art ligand binding platforms

Large Molecules

- We evaluate each request and provide customized workflows to allow accurate platform selection by hybrid LC-MS or ligand binding.
- Our experienced and dedicated research and development scientists develop validation-ready assays, customized to your needs, using advanced instrumentation.

Small and Large Molecule Program Support

LC-MS/MS, LBA OR HYBRID LBA/LC-MS/MS ASSAY PLATFORMS

- Peptides
- Proteins
- Antibody-Drug Conjugates (ADC)
- Monoclonal Antibodies (mAb)
- Immunogenicity
- Anti-drug antibody
- Neutralizing assays
- Vaccines
- Biomarkers – single or packages
- Oligonucleotides



LC-MS/MS

Capabilities supported by:

- Over 34 LC-MS/MS instruments, including Sciex 5000, 5500, 6500+, and Selexion with Nexera UHPLCs
- HRMS including the Sciex 6600, and ThermoFisher Q-Exactive
- Micro-flow and nano-flow capabilities for the front end of our HRMS systems

Ligand Binding

Our ligand binding group is equipped with:

- Mesoscale S600 Electrochemiluminescence sector imager
- BioTek Synergy H4 Multimode Plate Reader using absorbance, fluorescence, or luminescence
- Luminex 200 system
- Simoa HD-1 analyzer
- BioTek EL406 microplate washer/dispenser
- BD Biosciences FACSCanto™ II cytometer
- SpeedVac for tissue extraction
- Percellys® Evolution homogenizer
- Droplet Digital PCR and qPCR analysis

Quantitative analysis using LC-MS/MS

- Experience with monoclonal antibodies, antibody-drug conjugates, and proteins (intact and peptide quantification)
- Automated immunoaffinity sample preparation producing high-throughput assays with impressive sensitivity
- Biomarkers and endogenous analytes
- Labile metabolite quantitation
- Industry experts supporting Microsampling (Mitra® VAMS and dried blood spots) for preclinical and clinical programs

Our ligand binding assay types:

- Immunogenicity
 - ADA (screening, confirmatory, and titration)
 - nAb by non-cell based and cell-based assays
- Quantification methods using various platforms
- Hybridization ELISA/ECLIA of various types (ligation, dual hybridization)
- Functional cell-based assays
- Antibody response (TDAR)
- Biomarkers
- Cell lineage and functional immunophenotyping by flow cytometry
- PCR analysis