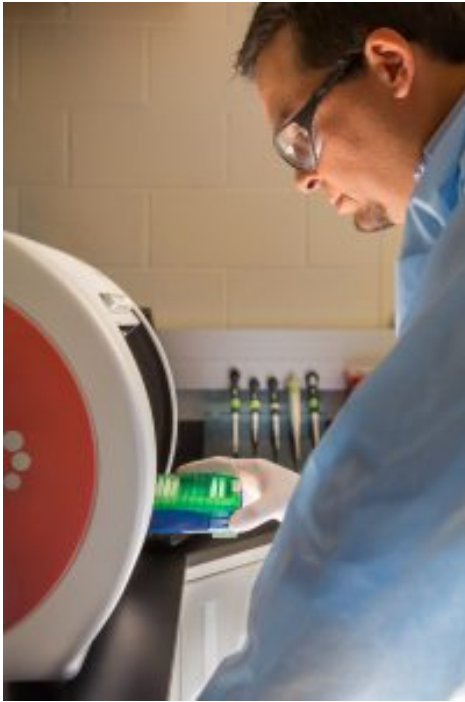


PRECLINICAL SOLUTIONS

Minimize risk. Trust your results.

Expertise in integration of in vitro and in vivo analyses for efficient candidate development



ABL has decades of experience performing preclinical evaluations in large and small animal models for government and industry clients. Our goal in providing a wide range of testing capabilities is to ensure the right tests are available and the data is accurate to help our clients remove the risk associated with product development.

Depending on your project goals, our scientists work with you to design effective in vivo studies. In the event that you do not know what endpoints are best, we have various platform options and will work with you to design an effective program analyzing appropriate targets. ABL can offer immunological assessments that range from a comprehensive characterization of the immune response to a targeted effort on one readout.

In fact, our scientific staff specializes in developing assays for hard-to-detect endpoints for both in vitro and in vivo studies. Our scientists have applied their training and expertise to assess the immunogenicity and efficacy of numerous vaccines and therapeutics in several tissue types and species with a variety of assay platforms.

Some of the solutions we have developed include:

- Flow cytometry-based assays to measure immune responses to vaccines and therapeutics in mucosal compartments (rectal, vaginal and bronchoalveolar lavage (BAL)), as well as whole blood
- Evaluation of immune exhaustion markers and checkpoint inhibitors in a NHP disease model

- Molecular determination of viral load, viral reservoirs and biodistribution of biotherapeutics
- Assessment of inflammation and autoimmune disease regulation by biotherapeutics

ABL has laboratories located in both the U.S. and Europe to carry out your preclinical study. Here are some study types we have performed:

- Proof-of-concept studies
- Challenge studies
- Efficacy
- Potency
- Immunogenicity
- PK/PD and toxicology
- Biodistribution
- Optimization of delivery methods
- R&D cell line development and protein expression

The following are examples of product types ABL has tested in preclinical models:

- Live virus and attenuated vaccines
- DNA/RNA/Oligonucleotides
- Recombinant proteins
- Antibodies
- Gene therapies
- Small molecules
- Combination strategies

ABL scientists have focused on the standardization and optimization of protocols for the analysis of systemic and mucosal immune responses. We know it is critical for sample processing to be performed in a timely and skilled manner to ensure the data obtained are reliable, as missing a timepoint could be devastating to the study. Our scientists have a wealth of experience processing many different types of samples (**fluids**: blood, saliva, secretions, etc.; **tissue**: spleen, lymph nodes, bone marrow, lung, intestine, etc.) and conducting assays immediately, as needed. ABL is also skilled with viable cryopreservation of cells for batch testing at a later date or for external shipment. Transport of study samples may require formal authorization by a governing agency or compliance with established regulations. Our knowledgeable staff is fluent in navigating the documentation and permitting processes to ship animal samples or study articles to and from the U.S. and Europe if clients need assays performed at other locations.

As the importance of eliciting mucosal immunity increases in some vaccine fields, ABL has established the capabilities to detect and monitor mucosal immunity in various secretions and tissues of NHPs and mice. The foundation for this work is ABL's extensive experience isolating mucosal lymphocytes and optimizing a series of our established assays to address cellular and humoral responses in the mucosa. For instance, ABL has optimized the isolation of delicate NHP intraepithelial lymphocytes and mucosal lamina propria

lymphocytes from the mucosa of the small intestine, rectum, and vagina from either mucosal pinch biopsies or necropsy surgeries. These cells have been used successfully in downstream analyses, including intracellular cytokine staining and Luminex.

Put ABL's preclinical experience to work for you. Please contact us to discuss your specific needs.

Contact Us Today



IMMUNOBIOLOGY BROCHURE

Download ABL's brochure describing immunology services.

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CRMP AWARD

ABL was awarded the contract for the "Comprehensive Resources for HIV Microbicides and Biomedical Prevention" (CRMP) by the Division of AIDS (DAIDS) in the National Institute of Allergy and Infectious Disease (NIAID).

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