



ANIMAL & HUMAN BLOOD PRODUCTS • PURIFIED PROTEINS & REAGENTS • CUSTOM ANTIBODIES • BSA • CELL CULTURE MEDIA • OMNI C3® CELL CULTURE BAGS



LAMPIRE
BIOLOGICAL LABORATORIES

2022

Introduction to LAMPIRE



LAMPIRE is a privately held, international, life science company that produces biological reagents and raw materials that are shipped worldwide and used across many applications.

- Diagnostics
- Pharmaceuticals
- Biotechnology
- Cosmetics

President, Gregory F. Krug, and his family of employees, have built LAMPIRE into the company it is today. LAMPIRE is comprised of multiple farming campuses and three state-of-the-art laboratory facilities, strategically located across the state of Pennsylvania.

Encompassing over 600 acres, LAMPIRE houses over 5,000 animals, representing over 20 unique species. LAMPIRE has over 140 experienced technical and animal husbandry technicians manufacturing our products and services under the guidelines of ISO13485:2016 and AAALAC.

Positively impacting human and animal health around the world for 45 years!



Gregory F. Krug, President

What Does LAMPIRE Do?

Blood & Biological Products

- Donor, abattoir and dedicated sources of animal products
- Animal whole blood, serum, plasma and purified serum proteins
- Human whole blood, serum, plasma and purified serum proteins
- Full range of secondary antibody serums and purified proteins

Custom Vivarium Services

- Custom project, immunogen and protocol design
- Polyclonal and monoclonal antibody development and production
- In vivo drug discovery support services
- Full range of pharmacokinetic study design, specializing in rat and rabbit but availability in over 20 species

Contract Manufacturing

- Contract breeding; rodents, rabbits, sheep, goats, cows
- Custom buffer preparation; cell culture media, PCR controls
- Raw material manufacturing for injectables

Specialty Products

- Cell culture bag; standard and custom variations
- Lobster Hemocyanin (LLH)
- Culture media; VTM, DMEM, DPBS, RPMI, etc.
- Naïve Animal PBMC Isolation (Llama, Rabbit, Goat, Sheep, Bovine)



World Class Specialized Facilities



The map shows the state of Pennsylvania with county boundaries and names. Red arrows point from specific locations on the map to callout boxes for the following facilities:

- Everett Bioprocessing Lab**
 - 18,000 sq. ft. state-of-the-art laboratory
 - Customized Immunochemistry services
 - Tissue processing, blood products
- Coopersburg Laboratory**
 - 5,000 sq. ft. facility
 - Processing of blood products
 - Specialty organ/tissue processing
- Ottsville 40 Acre Pharm Facility & Corporate Headquarters**
 - Small & Large animal facilities and processing labs
 - Customer service, technical support and client services
- Everett 600 Acre Pharm Facility**
 - Over 32 unique animal vivariums and housing structures
 - Featuring over 20 different species of animals available for production and project needs
 - Custom antisera, donor sera, and red cell production programs
- Biotech Research & Resource Center**
 - 18,000 sq. ft. facility
 - Certified class 2, 5 and 7 rooms/hoods, cell banking plus tissue culture and purification labs
 - Monoclonal Antibody Production
 - Hybridoma Development
 - Customized Immunochemistry services
 - Contract Manufacturing
 - High-Tech Full Service Vivarium



We have the capabilities to increase housing for our more than 20 different species of animals including donkeys, llamas, etc. These capabilities allow for continuity of supply and adaptability to our clients' forecasts.



Customer Focused: Technical Experts

Project Management & Technical Support Team

Immunologists
Biologists

Microbiologists
Chemists

Molecular Biologists

Veterinarians

The foundation of our growth and our client's success is our expert personnel. Comprised of over 140 professionals with a wide array of backgrounds. Our experienced and customer service-oriented teams are what sets LAMPIRE apart from others. As experts in their respective fields, they effectively allow LAMPIRE to exceed all needs and expectations of our clients.

Veterinarian and Animal Care Team



Manufacturing and Production Team



Quality Assurance Team



Customer Service/Project Management



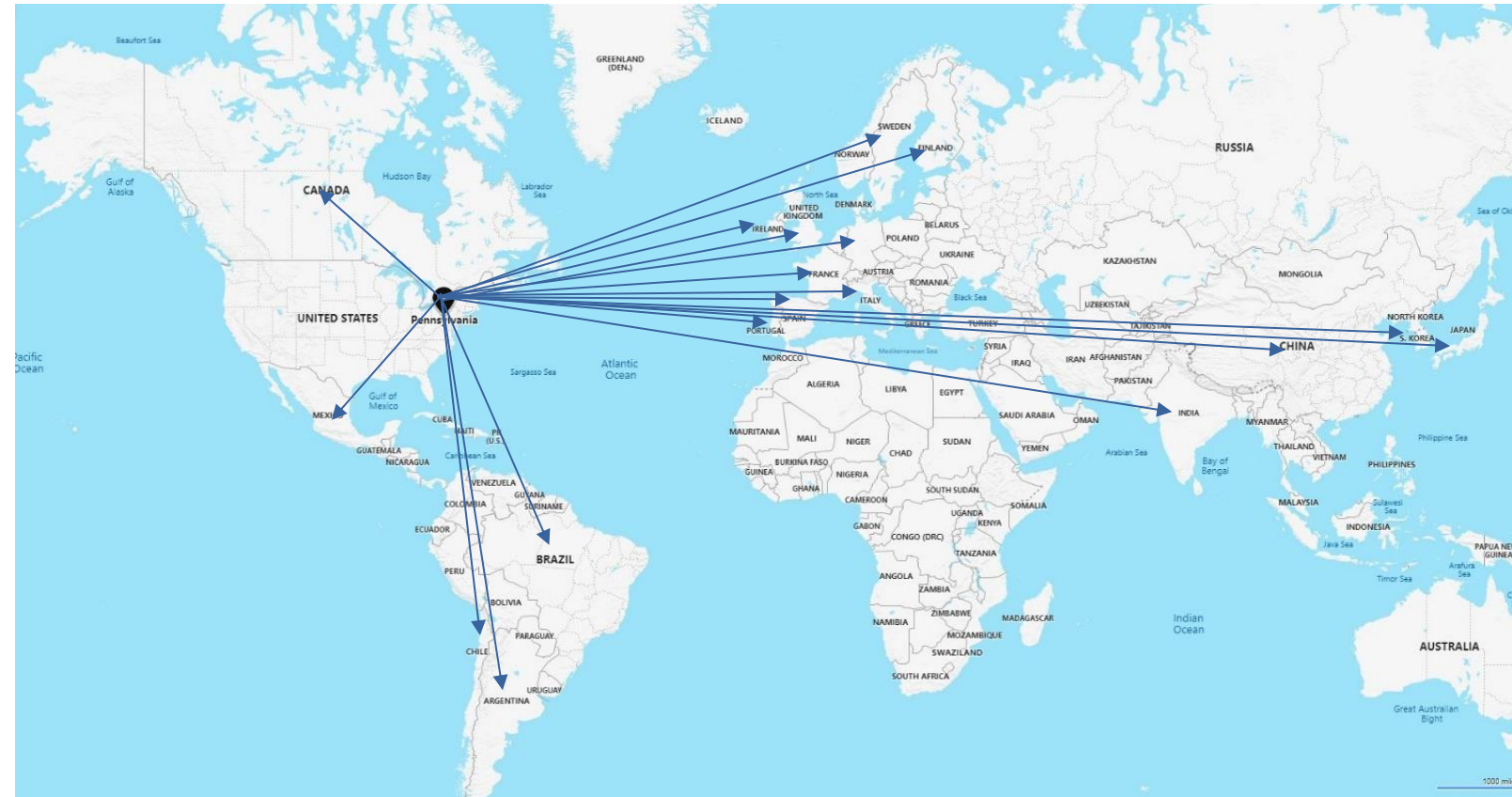
- Custom specification pros
- Rapid turnaround of deliverables
- Small pilot to large production
- Diverse project experience
- Conscientious and approachable
- Tech savvy cross-trained team
- Resolution driven
- Real-time troubleshooting



Global Partner

Helping to determine the correct paperwork for your product; research sample or production material

Timely delivery of your biological raw material needs is our primary focus!



- Orders@lampire.com
- Lampire.com
- (215) 795-2838

- Picking Slip
- Commercial Invoice
- Health Certificate

- Package with Label
- International Paperwork
- ITN (If necessary)
- Product

- Pre-Alert
- Release Cargo

- From customs to your site



Quality is LAMPIRE's First Priority

Our Quality Policy

To provide consistently and competitively, high quality reliable products and services in conformity with our customer's requirements, specifications and standards.

ISO • ISO 13485:2016



• 001032



• 2550014 (Medical Device & Blood Establishment)



• 23-R-0122, 23-B-0020



• A3997-01

• PA-TEC 0001

• PA-INT-0004

• PA-TEC 0002

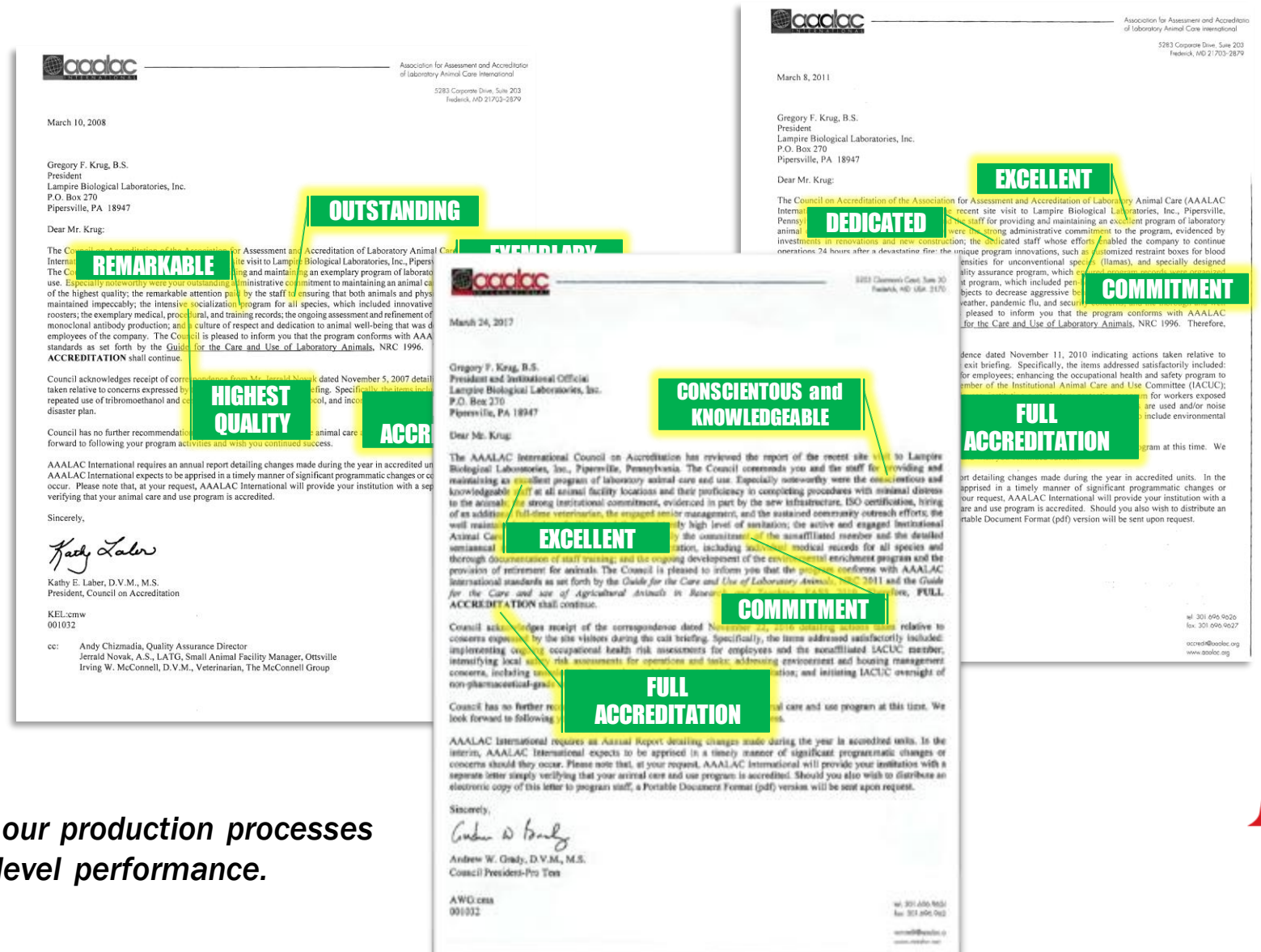
• PA-TEC-0005

• PA-TEC-0003



• Certified Technicians

Our cGMP compliant Quality Management System drives our production processes and customer services to ensure consistent, high-level performance.

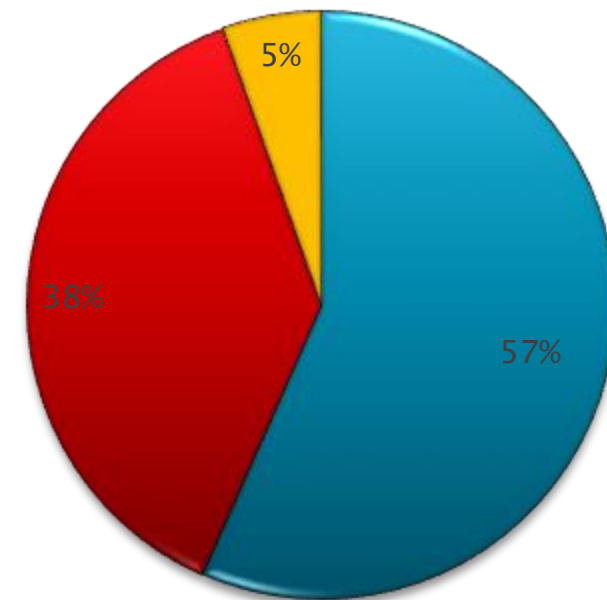


What's Trending @ LAMPIRE

FAST FACT

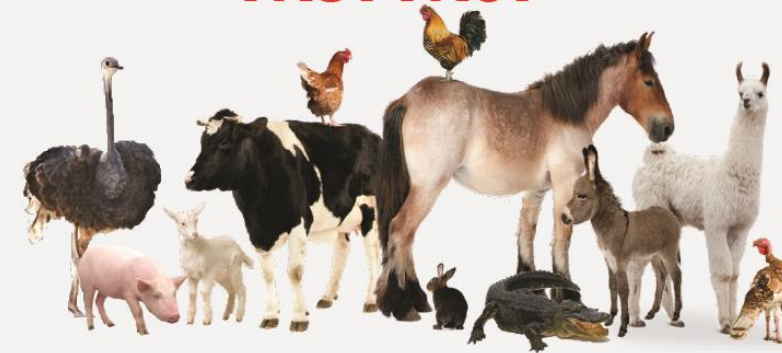
**Over 75% of orders
are customized to meet
client specifications**

Products vs Services



■ Products ■ Services ■ Other

FAST FACT



>20 Unique Species

Animal Whole Blood, Serum & Plasma

FAST FACT

**>99% Quality
& On-Time
Delivery Rating***

*Based on scorecards from top
500 life science companies



LAMPIRE Products

Blood & Biological Products

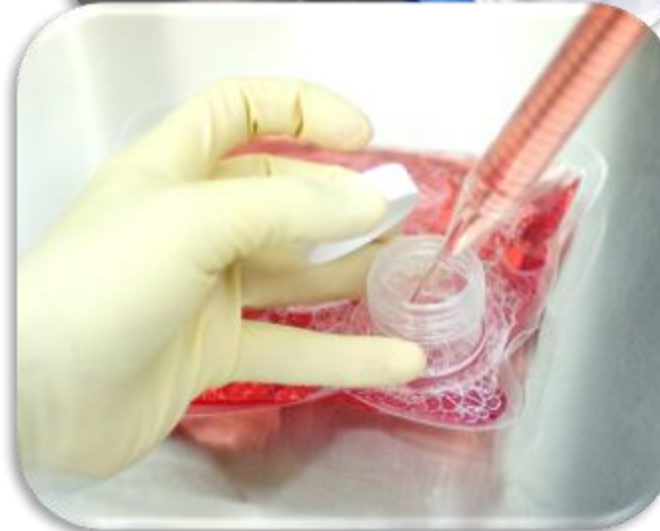
- Donor Animal Blood Products and Purified Serum Proteins
- Human Blood Products and Purified Serum Proteins
- Abattoir Blood Products, Organs, and Tissues

Purified Proteins & Related Reagents

- BSA; Domestic and New Zealand Sourced
- Primary Antibodies
- Secondary Antibodies
- Purified Immunoglobulins and Conjugates
- LLH Production
- Stroma, Glycoproteins

Specialty Products

- OMNI C3[®] Cell Culture Bags
- Custom Cell Culture Media
- VTM; CDC, Amies, Veal Infusion
- PBMC Isolation from Naïve Animals



Animal Serum & Plasma @ LAMPIRE



LAMPIRE.COM / LAMP@LAMPIRE.COM / (215) 795-2838

Animal: Serum & Plasma Biological Products



September 2021

Animal: Serum & Plasma Biological Products



Domestic Serum

Domestic Serum is manufactured from animal whole animal blood aseptically drawn into a bottle or tube without anticoagulant. This material is allowed to clot. The blood is then centrifuged to remove the clot, red blood cells and buffy coat, then frozen. Product is tested for pH and total protein (via refractometer). Available as "unfiltered" (as described above), or "filtered". The filtered product is run through a 0.2µm membrane, and undergoes a 48 hour microbial content screening process prior to shipment.

Domestic Plasma

Domestic Plasma is manufactured from animal whole blood aseptically drawn into a specified anticoagulant. The blood is then centrifuged to remove the red blood cells and buffy coat, then frozen on the same day as collection. Product is tested for pH and total protein (via refractometer). Available as "unfiltered" (as described above), or "filtered". The filtered product is run through a 0.2µm membrane, and undergoes a 48 hour microbial content screening process prior to shipment. Plasma is sold as a frozen liquid. It is recommended that this product be aliquoted in single use volumes, as multiple freeze-thaw cycles could impact the product's performance. LAMPIRE offers multiple anticoagulants, see below.

Anticoagulants:

Acid Citrate Dextrose (ACD/ACD-A), Alsevers, Citrate Phosphate Dextrose (CPD), Citrate Phosphate Dextrose Adenine-1 (CPDA-1), Na-Citrate, K2-EDTA, K3-EDTA, Na-EDTA, Li-Heparin, Na-Heparin, Potassium Oxalate*, Potassium Oxalate Na-Fluoride*, Sodium Fluoride*, Custom Anticoagulants*

* Some anticoagulants may have additional lead time, surcharge, please inquire.

Applications:

- Study of Cells for Hematology Research
- Assay & Diagnostics Research
- Hematology & Coagulation Controls
- ELISA, Immuno-precipitation & Western Blot

Domestic Serum Processing Options

- Heat Inactivation

Serum is heated to a temperature of 56°C for 30 mins, then immediately placed in an ice bath to prevent over heating. The serum is then centrifuged to remove precipitates. The intent is to inactivate complement and/or destroy mycoplasma.

- Charcoal Stripping

Activated charcoal is added to the serum, which binds to non-polar molecules such as lipids and hormones. The charcoal is then removed via centrifugation and run through a 0.2µm filter to clarify. Suggested for research where lipids or hormones can interfere with the results of an assay.

- Delipidation

Silica is added to the serum, which binds to the lipids, both of which are then removed via centrifugation. Suggested in certain species such as mouse or porcine, where serum is innately turbid.



THE LAMPIRE ADVANTAGE!

- ✓ Experienced technical partner with over 44 years servicing the life science industry
- ✓ Knowledgeable and responsive sales / customer service staff
- ✓ Competitive pricing, from research sized to bulk quantities
- ✓ Customizable products available to meet your specifications

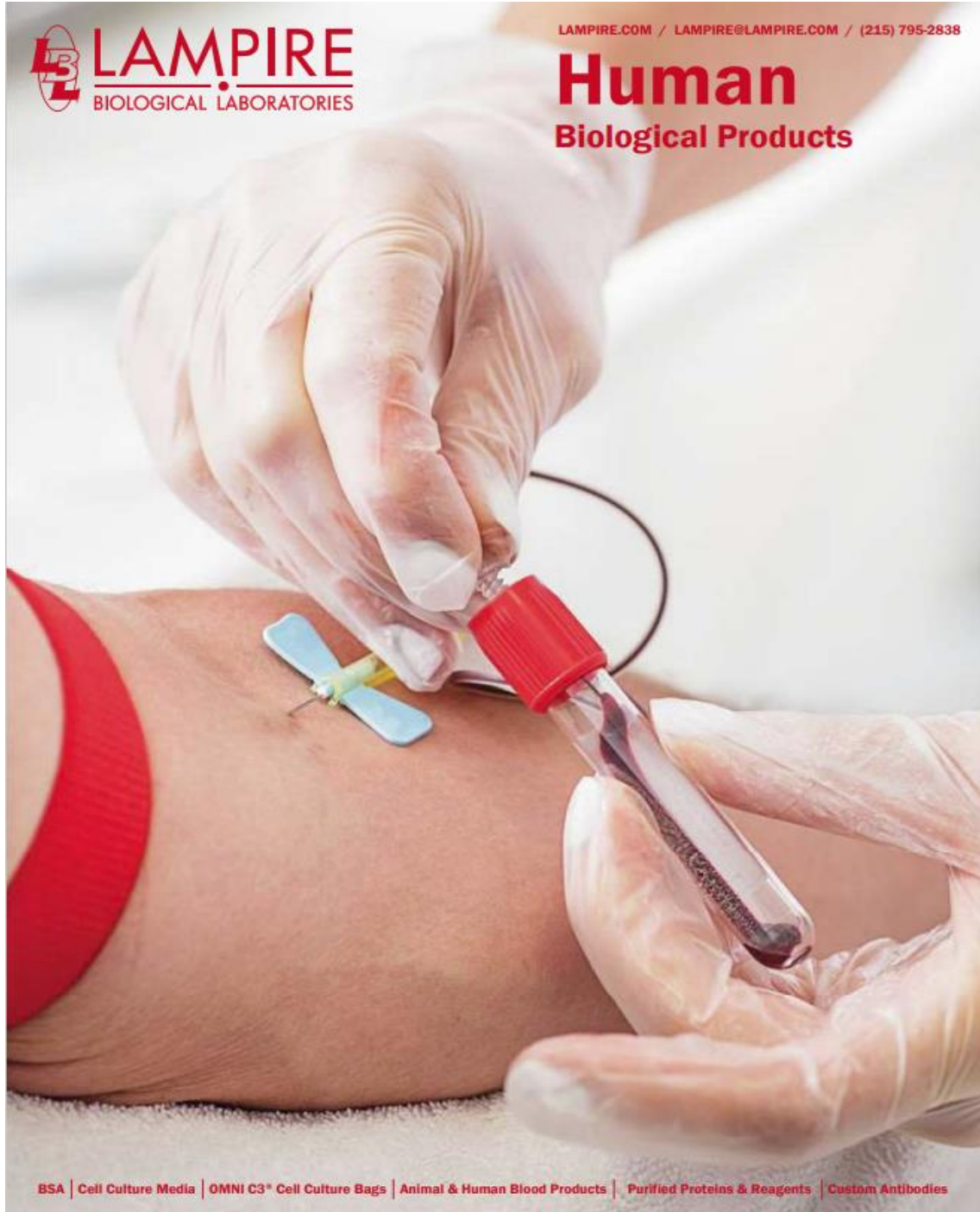


Human Biological Products @ LAMPIRE



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Human Biological Products



JULY 2021

Human Biological Products



- Whole Blood
- Normal Plasma
- Defibrinated Plasma

- Sera
- Blood Components
- Specialty Products

LAMPiRE offers a wide variety of human blood and biological products to fulfill your research and diagnostic needs. Human Whole Blood and Human Blood Cell products from LAMPiRE are collected from donors in FDA-licensed collection centers located in the United States. A wide network of collection centers allows us to collect from nearly any donor type, and we are able to accommodate demographic requests across various genders, races and ages. We are also often able to work with custom collection requests and protocols, ensuring that we are delivering a final product that fits with your exact research needs. See our product listing or contact Customer Service for more information.

Applications:

- Research to Determine Drug Targets
- Assay Development & Biological Controls
- Hematology Research
- Analysis of Immune Response
- Biomarker Identification & Validation
- Calibration & Demonstration of Medical Devices
- Cell Separation for Biomedical Research (PBMC, Platelets, Erythrocytes)
- Excess Bleeding & Clotting Therapies
- Matrix for Drug Therapy Studies

Customization Options:

- Gender
- Race
- Age
- Drug-Free
- Specific Blood Type
- Non-Smoker/Smoker
- QC testing Available
- Clinical Samples
- Contract Donors

Anticoagulants:

- Acid Citrate Dextrose (ACD/ACD-A)
- Alsevers
- Citrate Phosphate Dextrose (CPD)
- Citrate Phosphate Dextrose Adenine-1 (CPDA-1)
- Na-Citrate
- K2-EDTA
- K3-EDTA
- Na-EDTA
- Li-Heparin
- Na-Heparin
- Potassium Oxalate*
- Potassium Oxalate Na-Fluoride*
- Sodium Fluoride*
- Custom Anticoagulants*

* Anticoagulants may have additional lead time, surcharge, please inquire.

Contact LAMPiRE today

Ph: (215) 795-2838
Email: lampire@lampire.com
Website: lampire.com



THE LAMPiRE ADVANTAGE!

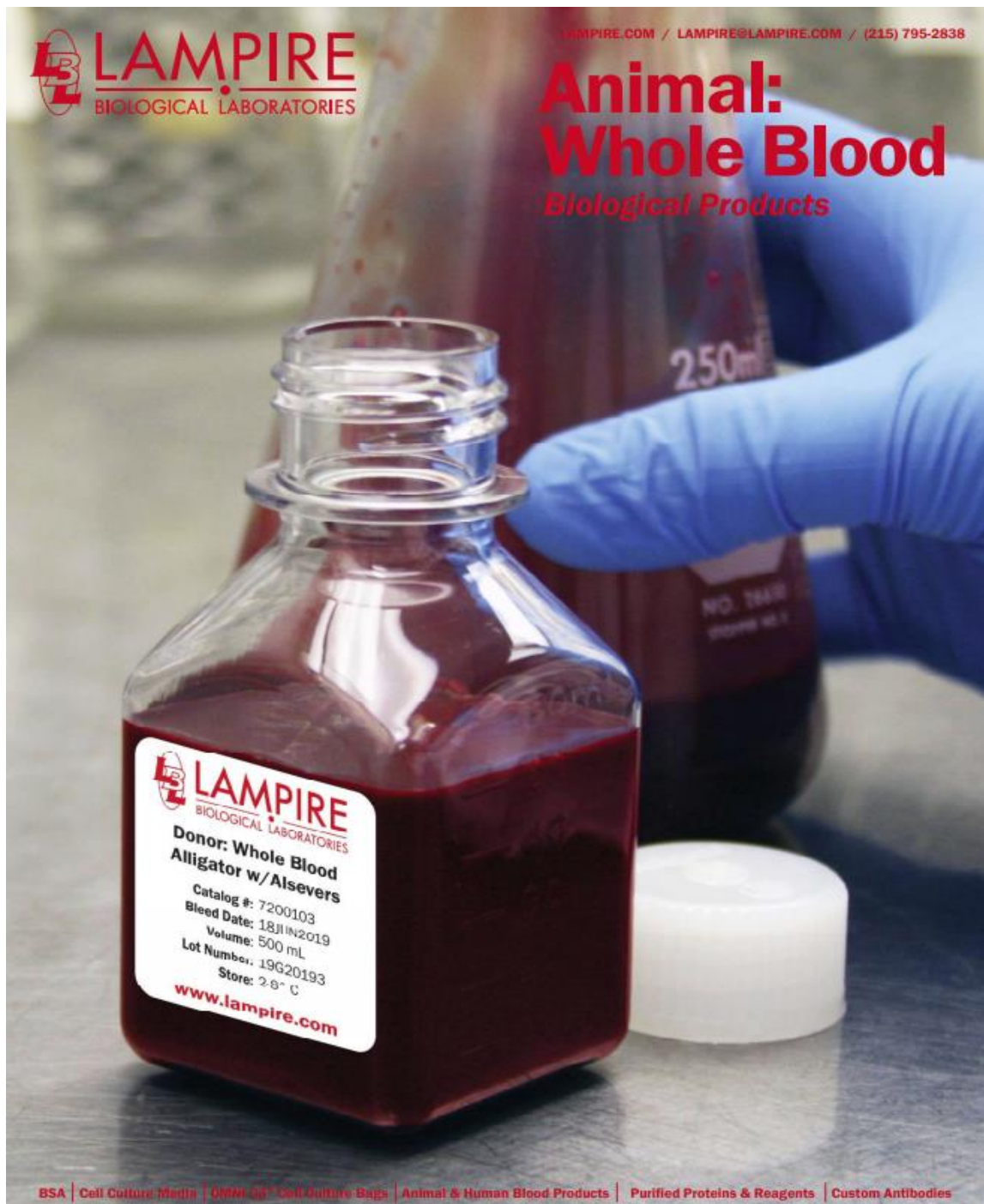
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Animal Donor Whole Blood @ LAMPIRE



LAMPIRE
BIOLOGICAL LABORATORIES

LAMPIRE.COM / LAMPIRE@LAMPIRE.COM / (215) 795-2838

Animal: Whole Blood

Biological Products

**Donor: Whole Blood
Alligator w/Alsevers**

Catalog #: 7200103
Bleed Date: 18JUN2019
Volume: 500 mL
Lot Number: 19G20193
Store: 2-8° C
www.lampire.com

BSA | Cell Culture Media | DMEM, Gibco® Cell Culture Bags | Animal & Human Blood Products | Purified Proteins & Reagents | Custom Antibodies

JULY 2021

Animal: Whole Blood

Biological Products



- Whole Blood
- Defibrinated Blood
- Lysed, Laked Blood
- Washed Red Blood Cells

LAMPIRE has been a trusted supplier of Donor Animal Blood-Derived Products for over 40 years. With products ranging from whole blood and washed red blood cells to filtered or unfiltered plasma and sera, both domestic and non-domestic, LAMPIRE is able to supply small volumes for research and/or large volumes for manufacturing. Consistent product quality, on-time delivery, competitive pricing and friendly customer support has helped LAMPIRE earn customer loyalty for over four decades. LAMPIRE Donor Animal Blood Products are shipped QC tested unless Bleed and Ship Same Day, is requested. Our whole blood products are shipped refrigerated 2-8 degrees celsius, unless otherwise specified. See our product listing or contact Customer Service for more information.

Features and Benefits

- Large Variety of Host Species
- Off-Site Collection Available
- Both Abattoir and Managed Donor Herds Available
- Custom Collection Specifications
- Numerous Anticoagulants
- Pooled and Individual Lots
- Gender Specific Lots
- Domestic and Non-Domestic
- Bleed and Ship, Same Day, Upon Request
- QC Tested Material, Standard Processing Included

Applications:

- Specific Donor & Species Material for Medical Research
- Custom Managed Herds for Specific Research Applications
- Application Specific Engineering for Medical Device
- Study of Cells for Hematology Research
- Medical Device/Equipment Testing
- Assay & Diagnostics Research
- Hematology & Coagulation Controls
- ELISA, Immuno-Precipitation & Western Blot

Anticoagulants:

Acid Citrate Dextrose (ACD/ACD-A), Alsevers, Citrate Phosphate Dextrose (CPD), Citrate Phosphate Dextrose Adenine-1 (CPDA-1), Na-Citrate, K2-EDTA, K3-EDTA, Na-EDTA, Li-Heparin, Na-Heparin, Potassium Oxalate*, Potassium Oxalate Na-Fluoride*, Sodium Fluoride*, Custom Anticoagulants*

* Some anticoagulants may have additional lead time, surcharge, please inquire.

Species Available:

- Alligator
 - Bovine
 - Calf
 - Chicken
 - Donkey
 - Emu
 - Goat
 - Goose
 - Guinea Pig
 - Hamster
 - Horse
 - Llama
 - Mouse
 - Primate
 - Porcine
 - Rabbit
 - Rat
 - Rooster
 - Sheep
 - Trout
 - Turkey
- (Other Species Available, Please Inquire)



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L3 LAMPIRE
BIOLOGICAL LABORATORIES

Animal: Abattoir

Animal: Abattoir



- THE
LAMPIRE
ADVANTAGE!**

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BSA @ LAMPIRE



LAMPIRE.COM / LAMPIRE@LAMPIRE.COM / (215) 795-2838

BSA Bovine Serum Albumin

JULY 2021

BSA Bovine Serum Albumin



WHY USE LAMPIRE BSA?

BSA with the highest level of consistency, traceability, and quality. These BSA line of products include material that is protease-free, IgG-free, and virtually free of contaminants that can result in background interference. Contains no detectable IgG, endotoxin, enzyme or protease activity, ensuring assay integrity, component stability and cell culture suitability. The Reagent Grade products are free of lipids and fatty acids. The manufacturing system used for BSA ensures that the total process, from raw material collection to finished packaging, results in a highly purified product that is virtually contaminant free, with superior solubility and filterability characteristics. Available in multiple package sizes. All products listed below are lyophilized. Inquire about our liquid product offerings and customizable concentration levels.

Features and Benefits

- High purity, low interference, low background
- Low SPC bioburden minimizes introduction of bacterial enzymatic or endotoxin contamination
- Low IgG - must be absent from both pharmaceutical end products and diagnostic assays
- Protease Free - no damage to proteins, diagnostics or cells
- Excellent clarity & filterability - reduces processing problems and cost
- Low endotoxin - can be toxic to cells, critical for pharmaceutical end-products
- Traceable to source animals, easing regulatory approval and export documentation
- TSE Certificate of Suitability/Validation Study
- Virus (9CFR) and mycoplasma testing available upon request



**Domestic
Lyophilized**

Reagent Grade (Fatty Acid Free BSA)

- Ideal use: Isolation of lipids and fatty acids, such as hormone and cholesterol assays, providing maximum binding sites for the addition of specific fatty acids for cell culture
- Applications: Nucleic Acid-Based Assays, Immunoassays (EIA, RIA, etc.), Immunohematology & Serology

Standard Grade pH 7.0

- Ideal use: General diagnostics & research
- Applications: Immunoassays (EIA, RIA, etc.), Serology & Mammalian Cell Culture

Standard Grade pH 5.2

- Ideal use: Lower pH buffer formulations
- Applications: Immunoassays (EIA, RIA, etc.) & Immunohematology



**New Zealand
Lyophilized**

- Ideal use: Sensitive cell culture & diagnostic systems, isolation of lipids and fatty acids, such as hormone & cholesterol assays, providing maximum binding sites for the addition of specific fatty acids for cell culture

Precision Grade - (Fatty Acid Free BSA)

- Applications: Protease-sensitive Immunoassays (RIA, EIA, etc.), cell culture systems & nucleic acid-based assays

Standard Grade - pH 7.0

- Applications: Immunoassays (RIA, EIA, etc.), Hybridization, Protein Standard, Diluent, Conjugate or Enzyme Stabilizer

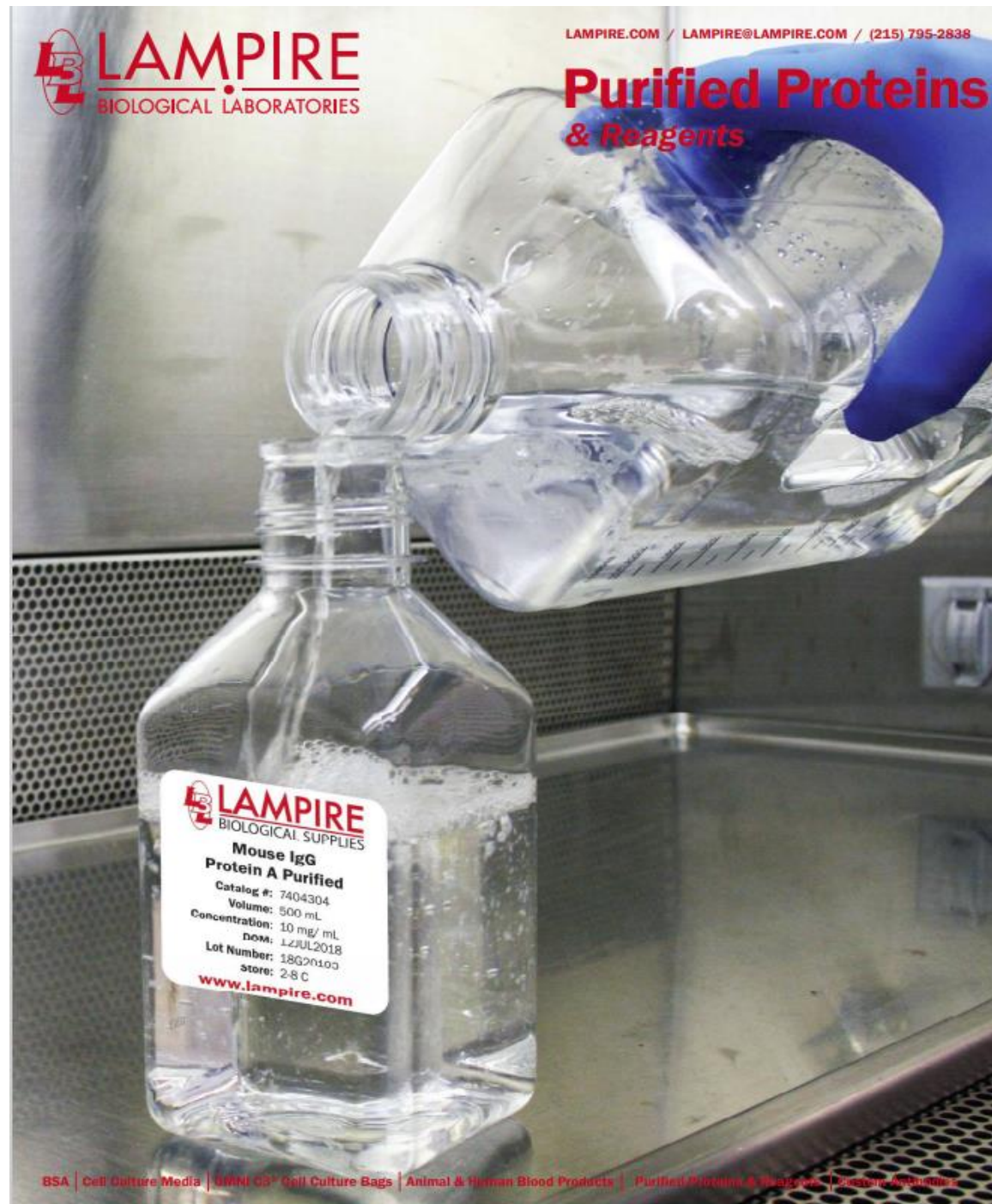


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Mouse IgG Protein A Purified @ LAMPIRE



September 2021

Purified Proteins & Reagents



LAMPIRE has been developing and manufacturing a diverse line of high-quality secondary antibodies since 1979. Manufactured in-house, LAMPIRE experienced technicians can purify to custom specifications to fit your needs, at a competitive price. LAMPIRE secondaries are high in purity and specificity, whether you need small research sizes or bulk production.

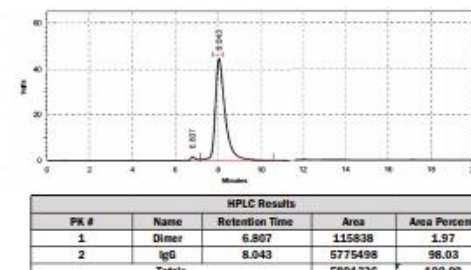
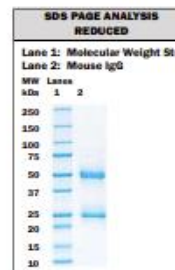
Purified products and reagents are provided at 10 mg/ml in phosphate buffered saline (PBS) with sodium azide, unless otherwise specified. Lyophilization and other custom formulations are available upon request. Products are shipped refrigerated in liquid form, but may be shipped frozen. Additional charges for dry ice and custom formulations may apply. See our product listing or contact Customer Service for more information.

Features & Benefits:

- High purity
- Low cross-reactivity
- Customizable
- Manufactured in the USA
- Consistent quality standards
- Wide range of species
- Designated donor animals
- Lot-to-lot consistency
- Custom conjugates & fragments
- Research & bulk packaging

Applications:

- Passive Heterophilic Blocker Controlling False Positives
- HAMA (Human Anti-Mouse Antibody) Blocker in Assays with Mouse Derived Antibodies
- Prepare Conjugates for Immunoassays
- Immunogen to Prepare Anti-Mouse IgG Secondary Antibodies & Secondary Antibody Conjugates
- Negative Control for Flow Cytometry, Western Blot, IHC & Immunoprecipitation Applications
- Standard in Assays to Quantitate Monoclonal Production by ELISA
- Bead Coatings to Sort & Separate Cells
- All Isotypes Present IgG1, IgG2a, IgG2b and IgG3 in the Purified Product



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Mouse IgG Protein A Purified @ LAMPIRE



LAMPIRE
BIOLOGICAL LABORATORIES

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Mouse IgG
Affinity Purified

September 2021

Mouse IgG *Affinity Purified*

Your Source for High Quality Bulk IgG and Secondaries Antibodies

Mouse IgG is purified by trained technicians in Lampire's Pennsylvania based State-of-the-Art Bioprocessing facility. Our Quality approved raw materials are purified and then extensively tested to ensure the highest quality end product. In-house manufacturing and testing ensure lot-to-lot consistency at an affordable price. LAMPIRE can analyze batches to determine isotype distribution (IgG1, IgG2a, IgG2b and IgG3) to meet your isotype needs. Batches are available in both research and bulk volumes. LAMPIRE products ship to the EU and around the world.



Customization

We can provide customized buffer, concentration and/or bottling to meet your specialized needs.



Safety Stock

Everyone needs a Safety net!! Running out of critical components can halt Production and be devastating to a project. Lampire is here to provide custom safety stock for your most urgently needed raw materials.



Standing Order

Do you have a large project coming up and need a reliable source of material on a regular schedule? Set up a free no obligation standing order and have the items you need when you need them.



Bulk Reagents

LAMPIRE likes to reward our customers. If you have large scale production needs, not only can LAMPIRE accommodate, but we will provide you with a discount. The more you buy, the more you save.

Applications:

- Passive heterophilic blocker controlling false positives and negatives
- HAMA (human anti-mouse antibody) blocker in assays with mouse derived antibodies
- Prepare conjugates for immunoassays
- Immunogen to prepare anti-mouse IgG secondary antibodies and secondary antibody conjugates
- Negative control for flow cytometry, Western blotting, IHC, and immunoprecipitation applications
- Standard in assays to quantitate monoclonal production by ELISA
- Bead coatings to sort and separate cells



THE LAMPIRE ADVANTAGE!



Experienced technical partner
with over 43 years servicing
the life science industry



Knowledgeable and responsive
sales / customer service staff



Competitive pricing, from
research sized to bulk quantities



Customizable products available
to meet your specifications

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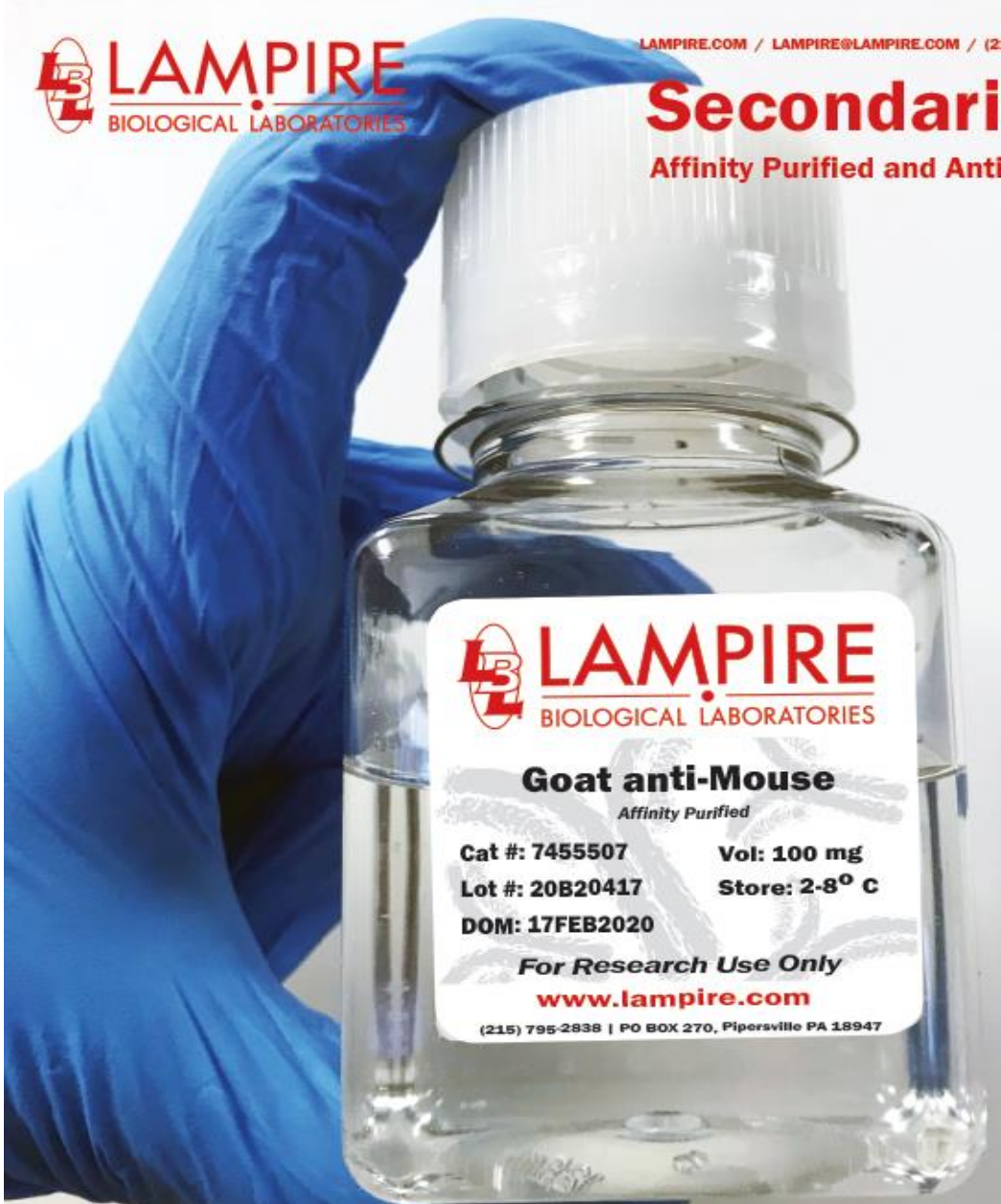
Secondary Antibodies @ LAMPIRE



LAMPIRE.COM / LAMPIRE@LAMPIRE.COM / (215) 795-2838

Secondaries

Affinity Purified and Antiserum



Goat anti-Mouse
Affinity Purified

Cat #: 7455507 Vol: 100 mg
Lot #: 20B20417 Store: 2-8° C
DOM: 17FEB2020

For Research Use Only
www.lampire.com
(215) 795-2838 | PO BOX 270, Pipersville PA 18947

BSA | Cell Culture Media | OMNI C3® Cell Culture Bags | Animal & Human Blood Products | Purified Proteins & Reagents | Custom Antibodies

September 2021

Secondaries

Affinity Purified and Antiserum



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Features & Benefits:

- High purity
- Low cross-reactivity
- Customizable
- Manufactured in the USA
- Consistent quality standards
- Wide range of species
- Designated donor animals
- Lot-to-lot consistency
- Custom conjugates & fragments
- Research & bulk packaging

Applications:

- Lateral Flow Tests
- Immunoassays
- Flow Cytometry
- Assay Controls
- Western Blot
- ELISA

Format:

- Antisera
- Affinity Purified



High
Purity



Low
Cross-Reactivity



Bulk
Sizes



Lot-to-Lot
Consistency

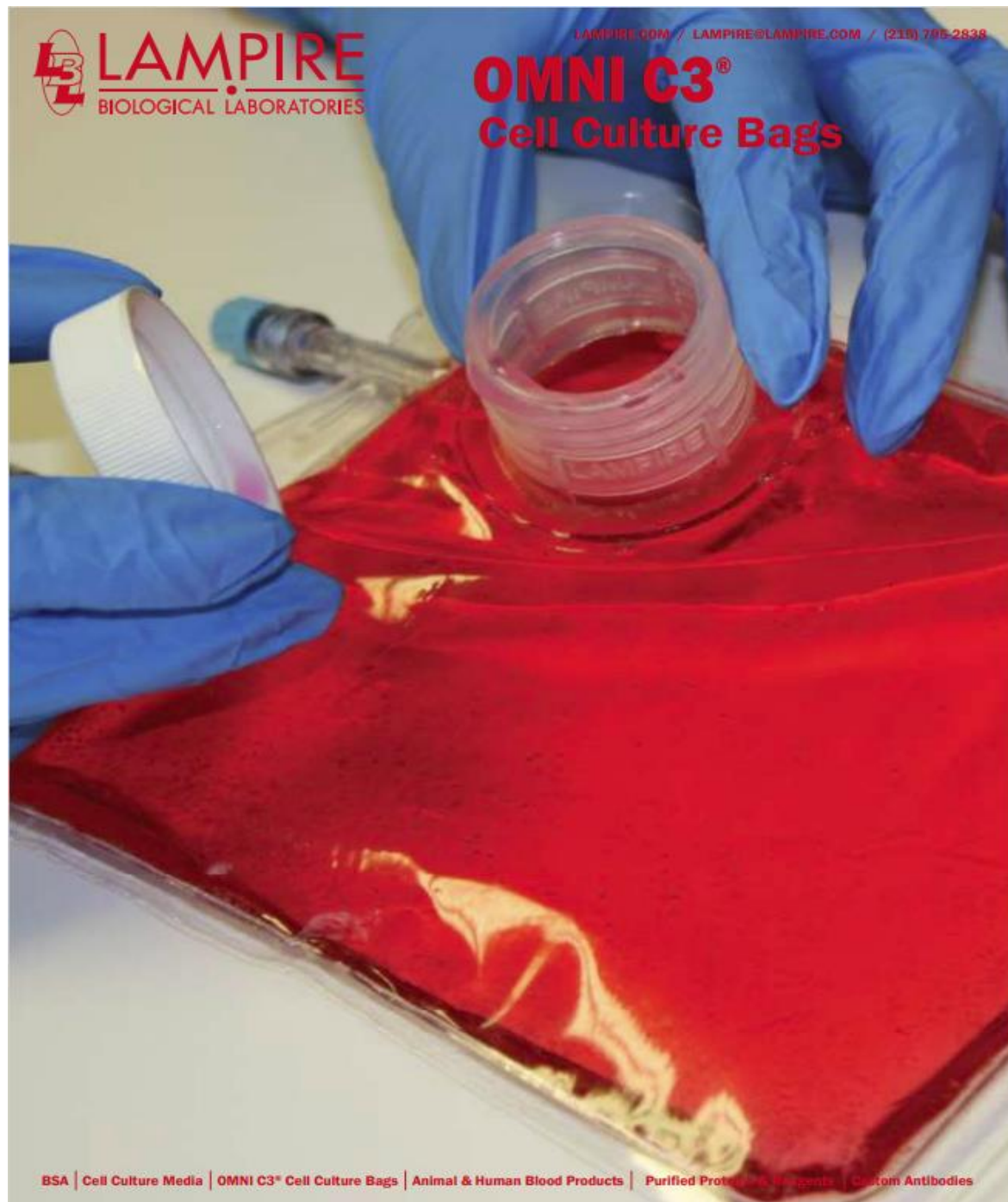
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Omni C3 Cell Culture Bags @ LAMPIRE



September 2021

OMNI C3[®] Cell Culture Bags



- Cell Culture & Harvest
- Cryo-Storage
- Centrifugation
- Leak Tested
- Aseptic Inoculation
- Electron Beam Sterilized
- Efficient Transfer of Gases
- Customizable Configurations & Volumes
- Reduced Biological Waste
- Connect for Production Scale-Up

LAMPIRE OMNI C3[®] Cell Culture Bags are a simple, single-use bag, manufactured for the culture, harvest and storage of cells. Gas permeable, the OMNI C3[®] Cell Culture Bag allows for the efficient transfer of gases, making it unnecessary for gassing the cultures. In addition, or in lieu of the screw cap fitment (which facilitates cell harvesting) the bags can be fitted with Luer-lock ports and/or needle ports for aseptic inoculation and sampling. These sterile connections minimize the opportunity for culture contamination. Ports can be used to connect several bags in a series for production scale-up. OMNI C3[®] Cell Culture Bags can be customized to include the quantity, and type of ports needed for each project. Our bags support rapid cell growth and are hardy enough to be used in centrifugation and/or for long-term cryo-cell storage. Also, using collapsible bags will reduce the amount and cost of collection of biological waste in your lab.

The OMNI C3[®] Cell Culture Bag will perform well with suspension cell lines such as hybridoma, CHO and HEK293. Adherent cell lines can be grown with the addition of an artificial polyester mesh substrate. Cell scaffold material is also available as an option and can maximize the production of anchorage dependent cells. These research use only bags are available in multiple standard sizes and configurations, or can be customized for your project needs. Looking for optimal cell growth? Make sure to sample our catalog cell culture media products or reach out to our technical team to have your own custom formula manufactured. See our product listing or contact Customer Service for more information.

Applications:

- Suspension Cells
- Hybridoma, CHO, HEK293
- Customizable Configurations
- Adherent Cells
- Anchorage Dependent Cells

Benefits

- High Productivity
- High Gas Permeability
- Increased Cell Counts
- Increased Antibody Yields
- Quicker Doubling Time
- Greater Cell Viability

Volume Sizes

50 mL, 250 mL, 1 Liter, 2 Liter, 5 Liter, 10 Liter

Storage Recommendation

Store in Ambient Temperature.
Do not leave in direct sunlight.

Shelf Life

3 years

Appearance

Labeled Bag/ Test Result Label,
Clear and Colorless

Leak Test

Tested at 2 psig pressure
1-4 cc/ min leak rate,
4-10 sec cycle time

THE LAMPIRE ADVANTAGE!

- ✓ Experienced technical partner with over 44 years servicing the life science industry
- ✓ Knowledgeable and responsive sales / customer service staff
- ✓ Competitive pricing, from research sized to bulk quantities
- ✓ Customizable products available to meet your specifications



Cell Culture Media @ LAMPIRE



LAMPIRE.COM / LAMPIRE@LAMPIRE.COM / (215) 795-2838

Cell Culture Media & Reagents

September 2021

Cell Culture Media & Reagents



LAMPIRE offers custom tissue culture media, reagents, supplements, and mouse embryo culture media to the Research Use Only (RUO) market for cell culture and the culturing of embryonic stem (ES) cells, both human and animal. Our cGMP and Quality Management Systems ensure high quality and consistency. LAMPIRE cell culture media formulations are prepared using the highest quality raw materials and USP grade H2O.

• High-Performance Media & Supplements

Over two decades of experience and the highest quality raw materials ensures you will receive the best products on the market.

• Customizable Service & Solution

Formulations to meet your specialized requirements for any size packaging.

• Lot to Lot Consistency

Standardized SOPs and Quality Assurance overview to verify that each lot is made under the same quality standards each time

• Uninterrupted Supply

Redundancy & Logistic Solutions to eliminate product delays.

• Collaborative Program Management

Direct access to our scientific team.

• Ships Worldwide

For decades, LAMPIRE has been one of the leading Worldwide Biological and Reagent suppliers.

• Private Labeling

LAMPIRE has the infrastructure to produce a high-quality product that you would be happy for us to label with your company's branding.

• Standing Order

Avoid delays and save valuable time- our standing orders can be customized and cancelled any time with adequate notice without penalty.

Consider the Components in Your Media:

- Amino Acids
- Vitamins
- Carbohydrates
- Inorganic Salts
- Basic and Trace Elements
- Serum
- Hormones
- Buffering Systems
- Supplements
- Antibiotics

Here Are Just A Few Of Our Media Products:

- Custom Formulated Tissue Culture Media
- Salt Solutions
- Cell Dissociation Solutions
- Freezing Media
- Cell Culture Media
- Miscellaneous Reagents
- Embryonic Stem Cell Media



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Lobster Hemocyanin @ LAMPIRE



LAMPIRE.COM / LAMPIRE@LAMPIRE.COM / (215) 795-2838

Lobster Hemocyanin

Novel Carrier Protein

September 2021

Lobster Hemocyanin

Novel Carrier Protein



- Sustainable Source
- Proven Immunogenicity
- Simple Conjugation
- High-Quality & Consistency

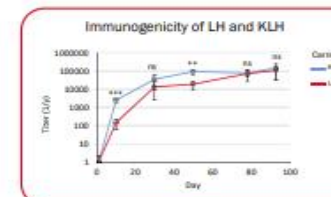
LAMPIRE has manufactured a novel carrier protein for the preparation of highly immunogenic antigens. LLH (Lobster Hemocyanin) is a protein purified from the sustainably sourced American lobster. LLH promotes the generation of rabbit polyclonal antibodies to conjugated haptens as effectively as KLH, and can be used as an alternative to or in conjunction with KLH. This product is exclusively distributed by LAMPIRE as a lyophilized powder in phosphate buffer saline and is packaged as 20 mg/vial. Other package sizes, including bulk, available upon request.

Features and Benefits

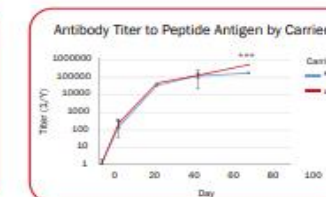
- LLH is an Effective Novel Carrier Protein
- Low Pre-Existing Immunity to LLH in Rabbits
- Comparable Antibody Titers are Elicited between LLH and KLH Conjugated Protein & Peptide Antigens
- Animals Immunized with LLH Conjugates Do Not Produce Cross-Reacting Antibodies to KLH
- Immune Response to the LLH Protein is Less than to KLH; Enhancing Response to the Hapten
- LLH Can Be Alternated in Immunization Protocols Utilizing BSA, OVA, and KLH to Reduce Immunodominance of the Carrier Molecule

Applications

- Carrier Protein in the Production of Antibodies for Research, Biotechnology & Therapeutic Applications
- Still Being Researched & Evaluated for Additional Benefits



Comparison of Antibody titer between LH and KLH. The immunogenicity of the carrier molecule was determined by screening sera from Peptide-KLH or Peptide-LH immunized rabbits against KLH or LH respectively by ELISA (N = 3). Pre-existing antibody against LH was undetectable by ELISA. It was isolated from naive rabbits. Antibody titer generated against LH were considerably less than that generated against KLH, however these differences were only significant at the day 10 and day 50 time points (** = 0.05, * = 0.01, *** = p < 0.001).



Immune response comparison between LH and KLH conjugated to a peptide antigen. Rabbits (n=3) were immunized with peptide that had been coupled with KLH or LH. Serum samples were collected immediately before immunizations, 30, 50, 50 and 70 days post-immunization and then screened in a peptide-specific, direct ELISA procedure. There were not significantly different between the two carriers, except for the day 70 repeat (2 Tailed Student's T-Test: *** p < 0.001).



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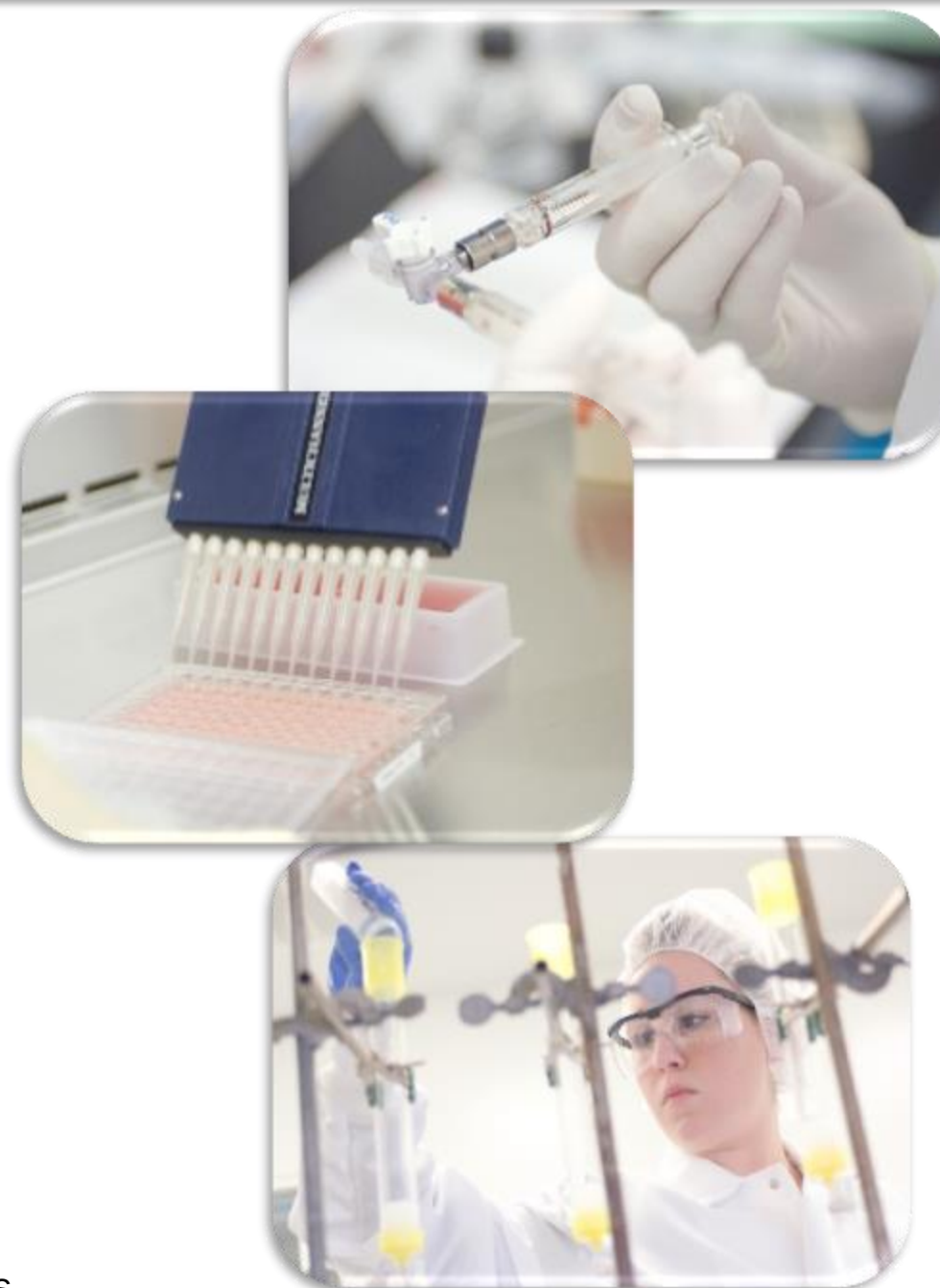
LAMPIRE Services

Custom Antibody Generation

- Polyclonal Antibody Development and Production
- Monoclonal Antibody Development and Production
- Cell Bank Production and Storage
- Experience with multiple antigen formats
 - Peptides, proteins, small molecules, nucleic acid oligos, antibody fragments, whole cells/cell lysates, and carbohydrates
 - Antigen design services
- Immunization Protocols
 - Multiple LAMPIRE standard protocols
 - Client provided protocols
 - Customized immunization protocols to match your antigen/ downstream application

Purification Optimization

- Customized Strategies
 - In house column preparation: Control orientation/presentation of antigen
 - Affinity, Protein A, Protein G, IgY Purification from Eggs, Egg Preservation
 - Design custom purification strategies in collaboration with our clients
- Unique or difficult purifications:
 - Amino acid modifications (e.g., phospho-specific), anti-idiotypic
 - Purify against carbohydrates, steroids, oligonucleotides and whole cell antigens



LAMPIRE Services

Specialized Services

- Assay Development
- Contract Manufacturing
- Collaborative Research
- Pharmacokinetic Studies

Antibody Support & Immunochemistry Services

- Antigen Conjugation
 - KLH, OVA, BSA, Biotin
 - Lampire Proprietary Lobster Hemocyanin (LLH)
- Titer and Avidity Monitoring
- QC Testing Services
 - ELISA, HPLC, QPA, IEP, Radial Immunodiffusion, SDS-Page, Western Blot, Cross-Reactivity, BCA Total Protein, Bradford Total Protein
- Protocol Services
 - PBMC/Buffy Coat isolation, Splenectomy, Bone Marrow Harvest, RNA isolation, Tattoo-Needle ID Immunizations, Popliteal Lymph Node Injections, Fab Fragmentation, Antigen Extraction from Gel Slices
- Antibody Tagging
 - Fluorescent, Gold Colloidal, BSA, BIOTIN, Alkaline Phosphatase



Pharmacokinetic Studies @ LAMPIRE

In Vivo PK Services

- In-house vascular and intestinal cannula implantations
- PK/PD Modeling
- Micro-serial Sampling
- Multi-dose/dose proportionality/drug-drug interaction studies/food consumption studies
- IV, PO, SC, IM, dermal, sublingual, osmotic pump or implant dosing

ADME Services

- Bile Duct cannulation with Duodenal return/ with or without JVC
- Tissue distribution/brain penetration
- Blood, Urine, Feces, Lymph and tissue sampling
- CSF collection in mice and rats
- Tissue perfusion and collection
- Small animal Metabolism caging

PK Support Services

- In-house surgical model development
- In-house vascular and non-vascular catheterization
- Soft tissue procedures
- Bio specimen collection/tissue perfusions
- In house formulation: including single, cassettes and vehicle preparations
- Brain region isolation
- Lymph node collection



Rabbits @ LAMPIRE



LAMPIRE
BIOLOGICAL LABORATORIES

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Rabbit

Custom Antibody Services

USA • Cell Culture Media • OMN/24® Cell Culture Media • Animal & Human Serum Products • Purified Proteins & Reagents • Custom Antibodies

September 2021

Rabbit

Custom Antibody Services



LAMPIRE has been producing high-quality custom antibodies since 1977, offering a variety of polyclonal antibody services and animal models to fit your research and production needs.

Rabbits are used for polyclonal and/or recombinant monoclonal antibody production. Rabbits have a high success rate across a broad range of immunogens, including haptens and human antigens, due to their phylogenetic distance from most animal research models. LAMPIRE has extensive experience with rabbits as an animal model, therefore our standard production protocols are well developed and documented to produce high affinity antibodies.

Without cost or obligation, LAMPIRE will schedule a technical call with our scientific staff to discuss your research goals and specific starting material as well as your animal model. If a custom protocol is recommended, we provide you with timelines and a custom quote. To begin your discussion, please contact us today by email at projman@lampire.com or call 215-795-2838

Advantages:

- Experienced Project Managers and Technicians
- AAALAC Accreditation
- Client Custom Protocols
- 20+ Unique Species Available
- Competitive Project Pricing
- Quick Turnaround Time from Initiation to Start of Project
- Prompt Communication
- FREE Antigen Design and Project Review
- Polyclonal and Monoclonal Project Expertise
- QC Testing Services
- Proven Results

Additional Services:

- Antigen Preparation
- Assays Against Target Antigens
- ELISA Testing
- Pre-Immune Screening
- Antigen Conjugation
- Titer Testing
- Antibody Purification
- Antibody Conjugation
- Buffy Coats (PBMCS)
- RNA Isolation
- Splenectomies
- Bone Marrow Collection

THE LAMPIRE ADVANTAGE!

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- ✓ Knowledgeable and responsive sales / customer service staff
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- ✓ Customizable products available to meet your specifications

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Chickens @ LAMPIRE



LAMPIRE
BIOLOGICAL LABORATORIES

LAMPIRE.COM / LAMPIRE@LAMPIRE.COM / (215) 795-2838

Chicken

Custom Antibody Services

BSA • Cell Culture Media • OMNI C3™ Cell Culture Reagents • Animal & Human Blood Handling • Antibody Purification & Conjugation • Specialty Antibodies

September 2021

Chicken

Custom Antibody Services



LAMPIRE has been producing high-quality custom antibodies since 1977, offering a variety of polyclonal antibody services and animal models to fit your research and production needs.

Chickens are used for polyclonal and/or recombinant monoclonal production. Large volumes of IgY can be non-invasively isolated from egg yolks. Chickens are excellent for highly conserved mammalian and human protein antigens. Chickens often have shorter protocols and show quick response times to immunizations, making them a cost effective animal model. LAMPIRE offers a unique injection technique as well as a range of IgY separation services. Customize how you want your material: direct shipment of eggs, yolks preserved in buffer (so you can do your own purification) or have LAMPIRE provide crude IgY or affinity purify your material for you. LAMPIRE offers cost-effective standard programs, as well as custom protocols to meet your specific needs.

Without cost or obligation, LAMPIRE will schedule a technical call with our scientific staff to discuss your research goals and specific starting material and animal model. If a custom protocol is recommended, we provide you with timelines and a custom quote. To begin your discussion, please contact us today by email at projman@lampire.com or call 215-795-2838

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- Antigen Conjugation
- Titer Testing
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- Splenectomies
- Bone Marrow Collection

THE LAMPIRE ADVANTAGE!

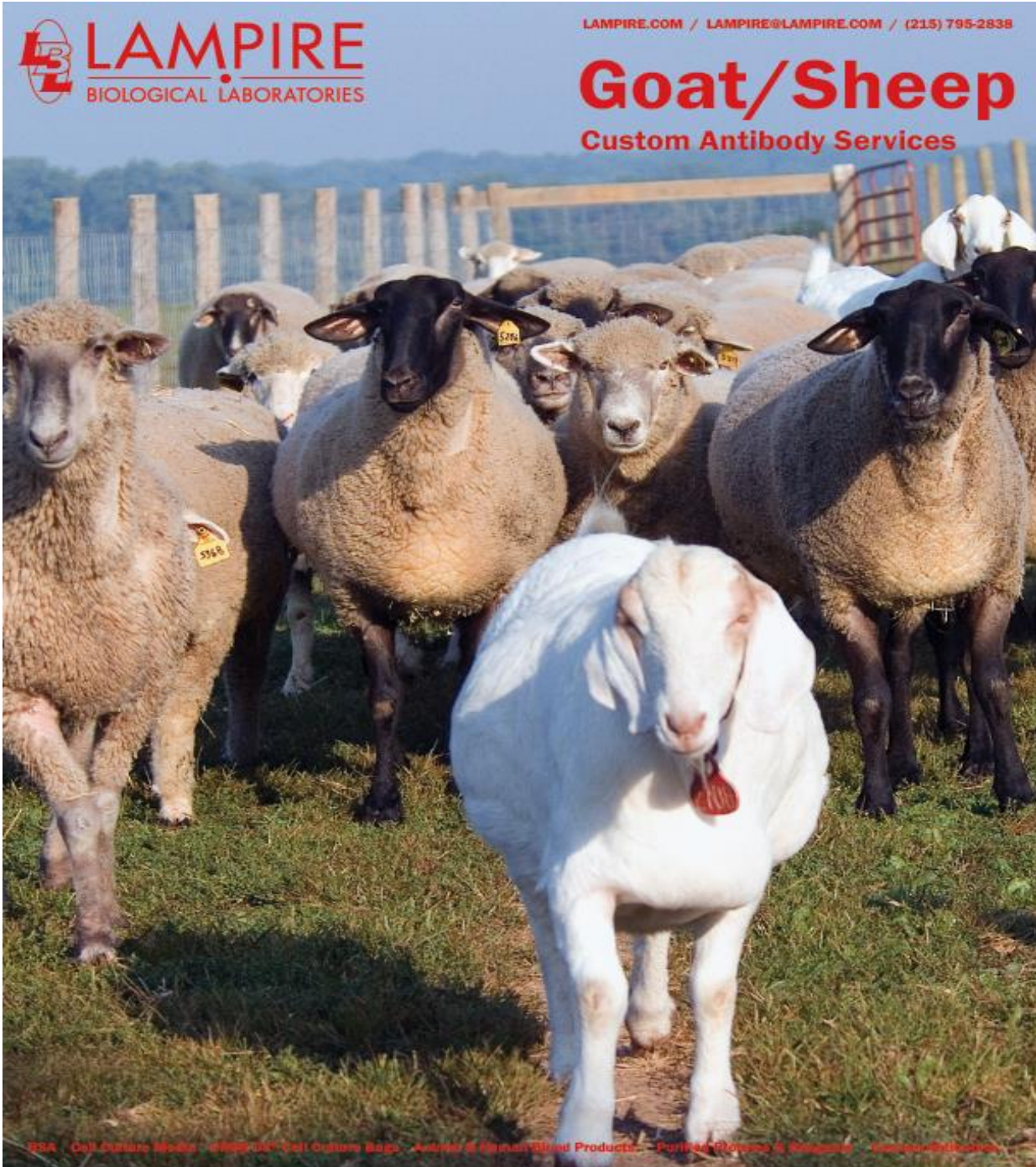
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Goat & Sheep @ LAMPIRE



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BIOLOGICAL LABORATORIES

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Goat/Sheep

Custom Antibody Services

SSA • Cell Culture Media • Microarray Cell Culture Bags • Animal & Human Blood Products • Protein Purification & Research • Vaccine Development

September 2021

Goat/Sheep

Custom Antibody Services



LAMPIRE has been producing high-quality custom antibodies since 1977, offering a variety of polyclonal antibody services and animal models to fit your research and production needs.

Goats and sheep are used for polyclonal projects requiring large volumes and often used as the host species for the generation of secondary antibodies. These more traditional animal models respond well to a broad range of antigens and have a high affinity and sensitivity. The resulting antibodies are particularly adapted to small antigens or small epitopes.

Without cost or obligation, LAMPIRE will schedule a technical call with our scientific staff to discuss your research goals and specific starting material as well as your animal model. If a custom protocol is recommended, we provide you with timelines and a custom quote. To begin your discussion, please contact us today by email at projman@lampire.com or call 215-795-2838

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- Proven Results

Additional Services:

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- Assays Against Target Antigens
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- Pre-immune Screening
- Antigen Conjugation
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- RNA Isolation
- Splenectomies
- Bone Marrow Collection

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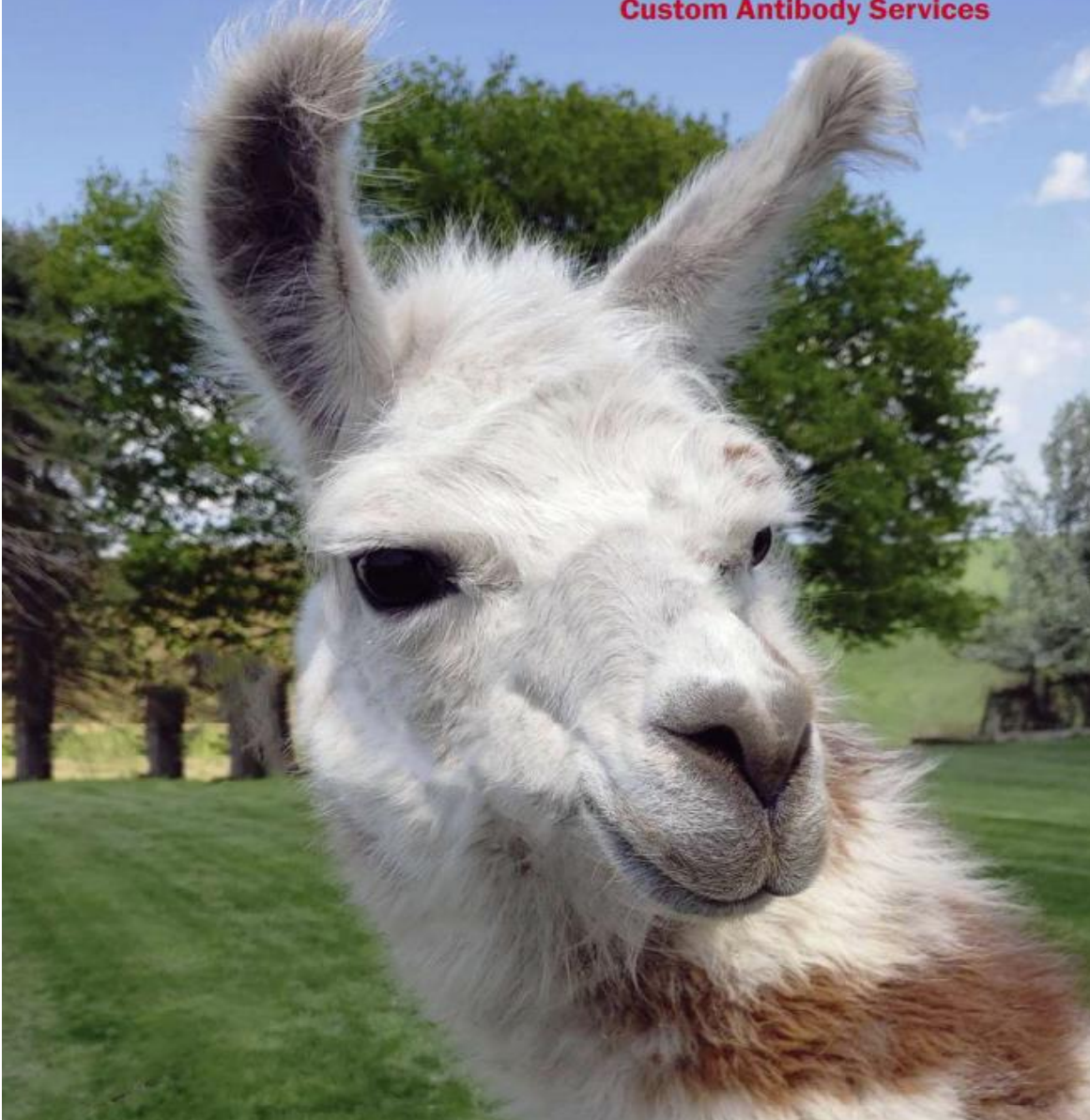
Llamas @ LAMPIRE



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Llama

Custom Antibody Services



USA | Non-Animal Media | DMEM, DMEM/F12, Cell Culture Bags | Animal & Human Blood Products | Purified Proteins & Reagents | Custom Antibodies

MAY 2021

Llama

Custom Antibody Services

- Immediate Availability
- Competitive Pricing
- Greater Stability
- Customizable

With one of the most unique immune systems, many researchers are hoping Llamas will be key to finding cures to our most common threatening diseases. LAMPIRE houses llamas at our 600-acre Pennsylvania location for your research needs, many of which are already being utilized for nanobody based Covid-19 drug development. Contact us today to reserve llamas for your upcoming project.

When using LAMPIRE for your production needs, our Technical Team and Project Management department will work with you to find the best protocol for your needs, producing results in as little as 6 weeks or creating custom protocols to meet your specific needs. Contact us today!

Why Llamas:

- Unique heavy chain only antibodies
- Antibodies bind to epitopes that are inaccessible to traditional antibodies
- Longer shelf life, higher tolerance to extreme conditions and higher pH
- Recombinant 'nanobodies', or antigen-binding single domain proteins are easily engineered from llama antibody genes

LAMPIRE Llama Services:	LAMPIRE Llama Products:
• Polyclonal Antibody Projects	• Whole Blood
• Standard Protocols	• Washed Red Blood Cells
• Custom Protocols	• Serum
• Buffy Coats (PBMCs)*	• Plasma
• RNA Isolation*	• Normal Immunoglobulins
* For Use in Downstream Antibody Production Technologies (B-Cell Sorting, Phage Display, etc...)	• Secondary Antibodies



Accredited



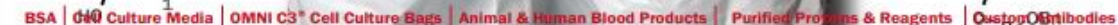
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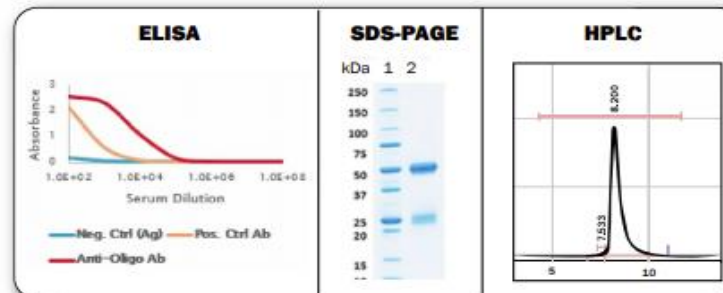




Oligonucleotide Antibody Generation



- Anti-sense therapies are a growing class of oligonucleotide-based therapeutics designed to treat a variety of diseases. Anti-oligonucleotide antibodies are frequently used to support drug development and monitor anti-sense drug levels. LAMPIRE actively supports these challenging programs by producing anti-oligonucleotide antibodies using LAMPIRE custom protocols.



- Oligo conjugation to a variety of carrier molecules
- Custom oligo immunization protocols
- Titer monitoring via ELISA
- Strict adherence to immunization strategies
- High immunogenic response in animals
- High sensitivity and specificity
- Specific to downstream use
- Affinity purification using biotinylated material with Avidin resin coupling

- Supports anti-sense RNA research and development
- Positive control reagents in ADA
- Drug development applications

Website: lampire.com
Email: lampire@lampire.com
Ph: (215) 795-2838

 Customizable products available to meet your specifications

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High-Tech Vivarium @ LAMPIRE

Vivarium

- Accreditations: AAALAC, EC No. 1069/2009 / EU No. 142/2011 , NIH-OLAW, USDA.
- 100% HEPA-filtered once-through fresh air
- “Clean-Dirty” corridor system
- Back-up generators and alarmed monitoring systems
- Monitoring of closed-circuit surveillance system on and off premises
- Use of Innovive IVC Rack System

Species Available

- Mice • Rats • Hamsters • Guinea Pigs • Rabbits

Services Offered

- Pharmacokinetic/ Drug Metabolism Studies
- Contract Breeding Development and Genotyping for GEMMs
- Xenograft Animal Models
- Monoclonal Antibody Development & Production
- Hybridoma Development
- Ascites Program
- Biorepository Storage
- Routinely Work With Immune Compromised Strains
- PBMC/Buffy Coat isolation, Splenectomy, Bone Marrow Harvest and RNA isolation



Custom Monoclonal Antibodies @ LAMPIRE



September 2021

Monoclonal Antibody Services



LAMPIRE offers a comprehensive line of monoclonal antibody services from research to bulk scale production. Our services include: hybridoma development, cell culture manufacturing (R&D Scale, Production Scale), cell line optimization, serum free adaptation, supernatant concentration, antibody purification and characterization and cell bank production, testing and storage. LAMPIRE's Biotechnology Research and Resource Center in Pipersville, PA, offers a wide array of services for the research, development and production of monoclonal antibodies, in a variety of animal models, using both in-vivo and in-vitro culture methods.

Antibody production services are conducted under cGMP guidelines. LAMPIRE is FDA Registered, USDA Licensed and AAALAC accredited. All services are kept completely confidential. Our trained staff are a valuable resource available to you throughout the process to help refine the details, scope and design of your project. To begin discussion about your project, email projman@lampire.com or call 215-795-2838.

Hybridoma Development:

- FREE Antigen Review and Animal Model Selection
- Phase I: Project Design and Immunization
- Phase II: Cell Fusion
- Phase III: Cloning

Antibody Support Services:

- Cell Line Optimization / Cell Banking
- Serum-Free Adaptation
- Cell Culture Manufacturing
- Sterility and Mycoplasma Testing

One of the biggest challenges in preclinical research is procuring high quality animal services to support your drug development mission. With a flexible and responsive approach to meeting your needs, LAMPIRE offers our clients the highest quality services backed by AAALAC accreditation, OLAW assurance and licensure by the USDA. Projects are managed by industry experts with years of experience in animal care and experimental design.

LAMPIRE's Vivarium Services Team is ready to support your in vivo R&D from housing and husbandry to high level implementation of preclinical drug development. Our experienced team can execute your experiments or assist you in performing your own. We offer a variety of animal models for drug administration, exploratory toxicology and cancer xenograft models. With a cGMP compliant Quality System, projects are completed on-time, with outstanding quality, and in conformance with your requirements, specifications, and standards.

- AAALAC Accredited
- Ventilated Cage (IVC) Rack System
- Biorepository Storage
- Models: Mice, Rats, Guinea Pigs, Hamsters, Rabbits
- Environmentally Controlled
- 100% HEPA-Filtered

- 24 hr Closed Circuit Security
- AALAS Certified Technicians
- Species Specific Segregation
- Specialized Clean Rooms
- "Clean-Dirty" Corridor System
- Back-up Generators

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Pharmacokinetic Studies @ LAMPIRE



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Pharmacokinetic Studies

September 2021

Pharmacokinetic Studies

With LAMPIRE's state of the art vivariums and expert technical staff we offer a wide variety of customized services. LAMPIRE takes great care to make your research goals are our top priority through attention to detail and communication. LAMPIRE offers our clients the highest quality services backed by AAALAC accreditation, OLAW assurance and licensure by the USDA. LAMPIRE's core value of exemplary animal care is the foundation for high quality research. Coupled with exacting attention to drug delivery protocols, sample collection and data integrity, LAMPIRE sets the standard for PK/ADME studies.

Multiple Species

- Guinea Pigs
- Mice
- Rabbit
- Min-Pigs
- Rats

In Vivo PK Services

- In-house vascular and intestinal cannula implantations
- PK/PD Modeling
- Micro-serial sampling
- Multi-dose/ dose proportionality/drug-drug interaction studies/food consumption studies
- Intravenous (IV), Oral (PO), Subcutaneous (SC), Intramuscular (IM), Intranasal, Intraocular, dermal, sublingual, osmotic pump and or implant dosing

ADME Services

- Bile duct cannulation with duodenal return/ with or without JVC
- Tissue distribution/brain penetration
- Blood, urine, feces, lymph and tissue sampling
- CSF collection in mice and rats
- Tissue perfusion and collection
- Lab animal metabolism caging

PK Support Services

- In-house surgical model development
- In-house vascular and non-vascular catheterization
- Soft tissue procedures
- Bio specimen collection/tissue perfusions
- In house formulation: including single, cassettes and vehicle preparations
- Brain region isolation
- Lymph node collection



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Hamsters @ LAMPIRE



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Hamster Custom Antibody Services



September 2021

Hamster Custom Antibody Services



LAMPIRE Is Pleased To Offer BOTH Chinese and Armenian Hamsters

Hamsters are a well-established model for viral infection studies, particularly RNA based viruses like SARS-COV-2. An excellent host for generating monoclonal antibodies to murine antigens, hamsters are an excellent alternative in instances where mouse and rat may not be a suitable option. Differentiation of the strains is an important consideration prior to undertaking any pre-clinical or development service. Both Chinese and Armenian hamster models are excellent for generation of monoclonal antibodies.

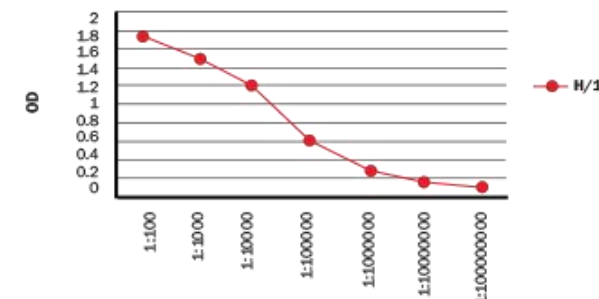
Chinese Hamsters

- Historically used to create CHO cell lines, approximately 70% of recombinant proteins are produced in Chinese hamster ovary (CHO) cells.
- Useful for monoclonal antibody generation against transmembrane protein antigens expressed in CHO cells.
- Pharmacokinetic: this model has again emerged as an ideal candidate for PK studies of SARS-COV-2 infection.
- Production: Lampire also can assist in adapting your CHO Cell line to serum free media.

Armenian Hamsters

- Development: Armenian Hamsters elicit antibody responses to a broad repertoire of antigens, which are demonstratively different to those generated in mouse or rat.
- Stability: Hamster monoclonals are easily purified by Protein A affinity chromatography and have been successfully used in multiple applications, including development of high affinity neutralizing reagents to murine antibodies, cytokines, receptors, and transcription factors.
- Fast Protocols! Fusion candidate is identified in as little as 30 Days.

Day 30 ELISA Data



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Antibody Support Services @ LAMPIRE



September 2021

Antibody Support Services



LAMPIRE began providing quality antibody support services in 1977. From antigen design and peptide synthesis to antibody purification, buffy coats (PBMCs), splenectomies, bone marrow extractions, QC testing and labeling, our expert staff is available to assist you with every phase of antibody development. The success of your antibody project is very important to us.

Antigen Design and Protocol Review

Prior to beginning any monoclonal or polyclonal development project, you have the option of meeting with LAMPIRE's scientific staff for consultation on antigen design and immunization protocol. Using computer-aided technology, LAMPIRE scientists will analyze peptide sequences relevant to your target antigen and review with you the predicted immunogenicity. This service is provided free of charge and aids us in selecting the appropriate immunization protocol for your antigen. While we cannot guarantee every peptide sequence will generate an immune response in the host animal, this service has proven very successful in maximizing the success of each antibody development project.

Antigen Conjugation Services

To improve immunogenicity, certain antigens may require coupling to a larger molecule. These antigens may be coupled to KLH, LLH, OVA, BSA, or other requested proteins. Coupling methodologies include EDC and Glutaraldehyde.

Species Specific Services

Each animal model is unique but LAMPIRE offers special services for each of our projects including buffy coats (PBMCs), Splenectomies, Splenocyte Isolations, Production Bleeds, Plasmapheresis, Egg Collections and processing and many others. Please ask your Project Manager about any species specific services you need.

Antibody Characterization/QC Testing

LAMPIRE offers several services to help evaluate the purity, concentration, and specificity of your antibody including Immunoelectrophoresis, Western Blot, HPLC, SDS-Page, BCA Total Protein Assay, Bradford Total Protein Assay as well as ELISA testing. These tests can be useful in measuring and tracking the concentration of antibody in culture supernatants, bleeds or purified materials. Note: Cost per project will vary based on the frequency of testing and type of test. Please note, additional antigen may be required.

Antibody Purification

LAMPIRE offers a variety of purification services to complement your antibody project. From salt fractionation to antigen-specific affinity chromatography, our expert staff will purify your antibody through multiple methods. Ask a technical expert which purification method is right for your project. Please specify if a dedicated column is required.

Antibody Tagging Services

Purified antibodies can be labeled for use in various applications. Consultation with our scientific staff will assist you in selecting the reporter group and coupling chemistry best suited for your applications. Including Biotin, Colloidal Gold, Fluorescein Isothiocyanate (FITC) and Horseradish Peroxidase (HRP).

Egg Yolk Processing

Chicken immunoglobulin yield quickly declines unless yolks are stored in buffer. LAMPIRE offers the additional service of separating the yolks and storing them in buffer. Yolks treated as such can then be shipped to the client for long-term storage at 2-8°C.

THE LAMPIRE ADVANTAGE!

- ✓ **Experienced** technical partner with over 44 years servicing the life science industry
- ✓ **Knowledgeable** and responsive sales / customer service staff
- ✓ **Competitive** pricing, from research sized to bulk quantities
- ✓ **Customizable** products available to meet your specifications

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PBMC Isolation: Naïve Animals @ LAMPIRE



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PBMC Isolation

from Naïve Animals



September 2021

PBMC Isolation

from Naïve Animals



Improve Your Research.. Go With A Trusted Supplier.

LAMPIRE is excited to offer our complete line of Peripheral Blood Mononuclear Cells (PBMC) from Naïve animals to researchers worldwide. LAMPIRE has a long history of supplying key research reagents to scientists. The PBMC are made to exacting standards from domestic donors. LAMPIRE offers multiple species from our controlled colonies and can supply the cells in multiple buffers and formats. Our standard line of catalog materials can be further customized for your unique research needs. LAMPIRE PBMC make an excellent companion product to your antibody discovery campaign.

Without cost or obligation, LAMPIRE will schedule a technical call with our scientific staff to discuss your research goals. Call: (215) 795-2838 or Email: lampire@lampire.com

Applications:

- Recombinant Antibody Generation
- Infections Disease Studies
- cDNA Libraries
- Immunological Assays



Catalog: # 7244170
Descriptions: PBMC Isolation from Naïve Llama
Volume: 5x10⁷ Cells
Price: \$700.00



Catalog: # 7246470
Descriptions: PBMC Isolation from Naïve Rabbit
Volume: 5x10⁷ Cells
Price: \$700.00



Catalog: #7242570
Descriptions: PBMC Isolation from Naïve Goat
Volume: 5x10⁷ Cells
Price: \$700.00



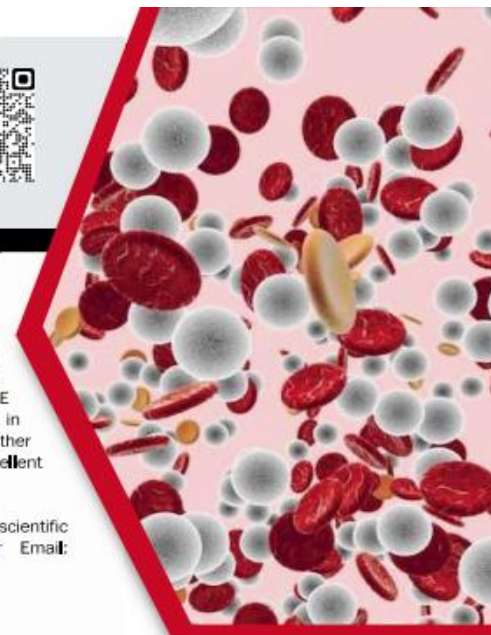
Catalog: #7249070
Descriptions: PBMC Isolation from Naïve Sheep
Volume: 5x10⁷ Cells
Price: \$700.00



Catalog: #7240870
Descriptions: PBMC Isolation from Naïve Bovine
Volume: 5x10⁷ Cells
Price: \$700.00

Is your Required Species not on this list?

No problem, LAMPIRE has over 20 different animals species available. Contact LAMPIRE today for pricing and lead time. Call: (215) 795-2838 or Email: lampire@lampire.com



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Contract Manufacturing @ LAMPIRE



LAMPIRE
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Contract Manufacturing

BSA • Cell Culture Media • LAMPIRE Cell Culture Bags • Animal & Human Based Products • Recombinant Proteins & Reagents • Custom Antibodies

September 2021

Contract Manufacturing



LAMPIRE is available for out-sourcing projects at multiple sites across Pennsylvania. Our client base currently utilizing our services range from small start-up companies to global pharmaceutical giants, and everything in between. LAMPIRE has experienced Operations and Quality team members with over 25 years of industry experience, specifically developing and implementing customized contract manufacturing opportunities with our partners around the world. All of our contract manufacturing sites are managed under a cGMP Quality System.

To find out more how you can partner with LAMPIRE, please contact our Operations Staff via email at lampire@lampire.com or call 215-795-2838.

Contract Manufacturing Services:

- Pilot Batch Through Fill, Tested, Labeled, Finished Product, All Stages
- Flexibility to Accommodate a Wide Range of Manufacturing Needs
- General Lab Environments, from Abattoir Processing to Certified Class 2, 5 and 7 Rooms/Hoods
- Testing Laboratories
- Bulk Reagent Manufacturing
- Tissue & Cell Culture Suites & Services
- Bulk Antibody Purification & Conjugation
- Antibody Characterization Services
- Impeccable Track Record of On-Time Delivery for Over 25 Years
- Contract Manufacturing, Packaging and Kitting Capabilities
- Specialized in Complicated Technical Transfer Projects
- Unique Opportunities

Applications:

- Antibody Fills for Diagnostic Controls
- PCR Controls; Master Mix, Primers, Positive Controls, Internal Controls, Buffers
- Raw Material Manufacturing for Injectables
- Full Kit Assembly
- Off Site Laboratory Space Requirement
- Supply Chain Cost Management



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Beyond the Laboratory

Sustaining the Future – Workforce Development

Leading the workforce development effort to grow interest in the Life Science Industry, turning today's students into tomorrow's experts.

2017 Bedford County Development Association Economic Development Award - Given for outstanding support of the economic development of Bedford County, Pennsylvania



Giving Back to the Community

Volunteering with multiple local organizations education and service organizations, Gregory F. Krug and LAMPIRE have a strong presence in the community.



2018 Ben Franklin iXchange Partnership Award - Given to an individual whose strong vision, dedication and commitment have helped Ben Franklin Technology Partners accomplish its goals

2019, 20, 21 Philadelphia Business Journal: Life Science Companies in the Philadelphia region – Lampire Biological Laboratories Inc. listed in the top 25 of all Life Science Companies in the Philadelphia region. Listed alongside Pfizer, Merck, Roche, etc.



The LAMPIRE Advantage

Customer Focused: Technical Knowledge and Experience

More than 40 years of collaborating with the research, diagnostic and scientific industries worldwide. We work together with you from concept-to-completion. Our Project Management, Sales Associates, Customer Service Representatives and Technical Support personnel become part of your team.



World Class Specialized Facilities

State-of-the-art facilities designed with efficiencies and redundancies already in place to provide our expert techs every opportunity to make your project a success.

Quality Management System

Complete QMS Documentation System with certification to ISO 13485:2016. In addition to AAALAC, OLAW, and continuous process improvement systems consistent with our Quality Policy.

Expansive Product and Service Offerings with Customization Available

One stop for all your research needs. Our quality products and services can be customized to meet your specifications.

Beyond the Laboratory

LAMPIRE employees are passionate. Passionate about education, family, and community.

