


Tailor-Made[®] ***autogenous vaccines***

by Phibro Animal Health



Tailor-Made[®] autogenous vaccines – an aid in protecting your herd against a wide range of bacteria and viruses. Tailor-Made vaccines have the ability to fit your herd's needs through customized formulations, combination vaccines and proprietary adjuvants. This flexibility enables protection against multiple pathogens in one convenient vaccine presentation.

The Animal Health Need

The continuing diversity within microbial populations is an important way that pathogens adapt to their environment and evade immune responses. Herd-specific vaccines may be a viable option for:

- Regional or unique strains of bacteria or viruses
- Emerging or re-emerging disease for which no vaccine is commercially available
- Unresponsive disease problems that are not controlled by currently available vaccines
- New strains or organisms for which a vaccine has not yet been developed

History

- MVP Laboratories, Inc. was founded and USDA licensed by Lysle Wilkins, DVM; Mary Lou Chapek, MT (ASCP) and F. W. Kullenberg, DVM in 1981.
- The genesis of the company was focused on addressing veterinarians' unmet diagnostic and vaccine needs along with exceptional customer service.
- The MVP Laboratories business was acquired by Phibro Animal Health Corporation in 2016. We continue to provide personalized service.

Service

Our team makes the difference. We are a customer-focused company made up of dedicated professionals who truly care about meeting the vaccine needs of veterinarians and their clientele.

- At Phibro Animal Health, you speak to a person, not a recording
- Prompt, courteous service - our customers' needs are our #1 priority
- From initial diagnosis (identification, isolation in pure culture and results discussion) to:
 - Production on a timely basis
 - Handling the necessary paperwork, including herd-profile database
 - Monitoring and communicating isolate extension dating and expiration

And now, Phibro is introducing VAC Tracker™ – a user friendly, convenient tool that helps manage your Phibro autogenous vaccine orders 24/7 from your smartphone, tablet and/or computer:

- View isolates
- Check vaccine inventories
- Complete isolate extension paperwork
- Track previous orders



Submission Forms and Other Aids

Forms available at phibrovactracker.com

- Tissue Swab Submission
- Existing Isolation Submission

Other aids & forms available by contacting our Customer Services Department:

- Request for Diagnostic and Laboratory Services
- Isolate Transfer Form for submission of microbial organisms
- Non-adjacent approval for CVB/USDA compliance

Isolate extension automated process: Users receive an email to extend the isolate if it is within 90 days of expiring.

Sampling kits and proprietary mycoplasma media are available upon request to assist you in obtaining isolates.

Solution

Diagnostics and R&D

Diagnostics are the backbone of clinical medicine. Phibro offers a well-recognized diagnostics lab and R&D capabilities for autogenous vaccine manufacturing, as well as the ability to work closely with universities and state diagnostic laboratories to meet the autogenous vaccine needs of the industry in the U.S.

Prompt, courteous and accurate diagnostic service is critical to producing a product that best meets the clients needs.

Examples of our services are:

- Precise bacterial isolation
- Serotyping of isolates
- Restriction Fragment Length Polymorphism (RFLP) - used to differentiate organism strains (DNA fingerprinting)
- Polymerase Chain Reaction (PCR) - used for identification and determination of the presence of specific virulence genes
- Protein electrophoresis
- Western blotting

Phibro Animal Health's diagnostic and R&D professionals can answer many questions with existing in-house technology or can develop specific assays.

Extensive efforts are focused on development and validation of new diagnostic tests, protein and antigen profiles, and customized growth and isolation media.

Quality Control Standards

- Seed culture checked for purity throughout the entire isolation, fermentation and final production processes.
- Isolate-specific growth media used for optimal antigen expression.
- Fermentation processes may be used for specific isolates based upon various conditions, including CO₂/O₂ ratios, optimal growth curve, nutritional additives, pH, temperature and agitation.
- Quality Control tests completed to assure safety include:
 - Purity
 - Organism inactivation assurance
 - Inactivation agent neutralization



Phibro's Proprietary Adjuvant Expertise

Tailor-Made autogenous vaccines are formulated with proprietary MVP adjuvants® products. Our team of professionals analyze the isolated antigens' features, and then, based on a deep body of research and knowledge, recommend the best adjuvant to be used in the vaccine formulation and administration.

Adjuvants play an important role in vaccines. In addition to increasing the strength and kinetics of an immune response, adjuvants also play a role in determining the type of immune response generated (cellular-mediated or humoral).

Key Antigens Used in the Production of Tailor-Made Autogenous Vaccines

Tailor-Made vaccines have the ability to fit your herd's needs through the custom formulation of combinations. This

Swine Bacterial and Viruses			
General Syndrome	Most Common Isolates		
Respiratory	<i>Actinobacillus spp</i>	<i>Glaesserella (Haemophilus) parasuis</i>	<i>Mycoplasma hyopneumoniae</i>
	<i>Pasteurella multocida</i> type A	<i>Pasteurella multocida</i> type D	<i>Swine Influenza</i>
Enteric	<i>Clostridioides difficile</i>	<i>Clostridium perfringens</i> type A	<i>Clostridium perfringens</i> type A + Beta 2
	<i>Escherichia coli</i>	Rotavirus A	<i>Salmonella</i> spp.
Systemic - CNS	<i>Glaesserella (Haemophilus) parasuis</i>	<i>Staphylococcus</i> spp.	<i>Streptococcus suis</i>
Reproductive / Other	<i>Erysipelothrix rhusiopathiae</i>	PRRS	
Atrophic rhinitis / Other	<i>Bordetella bronchiseptica</i>	<i>Pasteurella multocida</i> type A	<i>Pasteurella multocida</i> type D
Joint Involvement	<i>Mycoplasma hyorhinis</i>	<i>Mycoplasma hyosynoviae</i>	<i>Staphylococcus</i> spp.
	<i>Streptococcus suis</i>		



SWINE



BEEF



DAIRY

Beef and Dairy Cattle Bacterial

General Syndrome	Most Common Isolates		
Respiratory	<i>Escherichia coli</i>	<i>Histophilus somni</i>	<i>Mannheimia haemolytica</i>
	<i>Mycoplasma bovis</i>	<i>Pasteurella multocida</i> Type A	
Enteric	<i>Clostridium perfringens</i> Type A	<i>Clostridium perfringens</i> Type A + Beta 2	<i>Clostridium perfringens</i> Type C
	<i>Clostridium perfringens</i> Type E	<i>Escherichia coli</i>	<i>Salmonella</i> spp.
Pink Eye	<i>Moraxella bovis</i>	<i>Moraxella bovoculi</i>	
Mastitis	<i>Escherichia coli</i>	<i>Klebsiella pneumonia</i>	<i>Staphylococcus</i> spp.
	<i>Streptococcus</i> spp.		
Other	<i>Bacteroides pyogenes</i> (foot rot)	<i>Escherichia coli</i>	<i>Fusobacterium necrophorum</i> (foot rot)
	<i>Mycoplasma bovis</i>	<i>Mycoplasma bovoculi</i>	<i>Porphyromonas</i> spp. (foot rot)
	<i>Trueperella pyogenes</i>		

Small Ruminants Bacterial

General Syndrome	Most Common Isolates	
Abortions	<i>Campylobacter jejuni</i>	<i>Chlamydia</i> spp
Enteric	<i>Clostridium perfringens</i> Type A	
Systemic	<i>Escherichia coli</i>	



Tailor-Made autogenous vaccines offer additional value through:



1. A new bacterial growth procedure for Enhanced Antigen Surface Expression: “EASE™”. This laboratory technology creates nutrient restricted environments. This restrictive condition induces gram-negative bacteria to hyper-express nutrient-capturing proteins on their surface. These proteins are highly antigenic and can be utilized by the animal’s immune system to strengthen its response against the pathogenic organisms.



2. MJPRRS®, a Phibro proprietary technology, is used to categorize the PRRS virus’s genetic morphology as it is seen by the pig’s immune system and then produce a component vaccine. MJPRRS helps to protect the herd and reduce economic losses associated with this disease.



3. Tailor-Made autogenous vaccine for pinkeye are manufactured using cultures either from swabs taken directly from affected animals that are shipped to our diagnostic facility or from cultures forwarded from regional or state diagnostic laboratories. The isolates are then scientifically selected for vaccine production which uses state-of-the-art culture media to optimize antigen expression. Each isolate is grown independently and then blended with propriety adjuvants to make a BQA-friendly product.

Speak with a Phibro Expert to arrange delivery of a free sampling kit and/or get directions on how to ship samples to Phibro’s Diagnostic Laboratory:

800-856-4648 | www.PAHC.com



**Potency and efficacy of autogenous biologics have not been established.
Phibro Autogenous Vaccines are developed with MVP adjuvants.