

BEYOND THE NEB CATALOG

Over 40 years of supporting customers with customized solutions



Since 1974, NEB has proudly supported scientists with high-quality reagents to advance their molecular biology research. We have had the opportunity to support many of our customers as early as graduate school, and have been able to build relationships throughout their successful careers. We have done so with an expanding catalog portfolio that supports both existing and emerging applications and workflows, coupled with outstanding service and technical support. We recognized long ago that our customers' needs sometimes extend beyond the traditional list of products found in our catalog. For over 40 years, we have employed a collaborative approach to discover, plan, and ultimately deliver custom products that fit these customers' unique requirements. From larger quantities of existing products, to custom packaging and labeling, or even custom formulations and formats, we are here to help.

LARGE FORMATS FOR NEB PRODUCTS

The most frequent request we receive is for larger quantities of our catalog products. Over the years, we have expanded our production capabilities and can easily support these requests. In fact, this capability became even more important during the COVID-19 pandemic, during which we were able to support customers developing diagnostics and vaccines. Large volume requests can be fulfilled in a single vial, bottle or plate for high-throughput applications, or dispensed into pre-determined aliquot sizes to meet your specific need.

CUSTOM FORMULATIONS AND PRODUCT QUALITY

A common question we receive from customers is whether we can supply an alternative formulation of an enzyme or product to better meet their needs. The answer is often yes – in fact, we have extensive experience successfully modifying enzyme or product formulations. Some modifications are relatively easy to make, such as providing an enzyme at a higher concentration. Others, such as removing glycerol, detergents, or other components from a formulation can also be done, but require more time to assess stability and ensure we can provide a robust product with complete confidence. In all instances, our team will work with you to understand your needs and provide honest feedback regarding technical feasibility and timelines to develop and optimize a custom product formulation.

In addition to formulation changes, some customers have alternative quality requirements. While our products undergo extensive quality control testing, these customers require additional testing and/or documentation. In this case, we would transition you from our research products to our GMP-grade* formulations, which are discussed below.

In today's global regulatory landscape, compliance and risk tolerance are central themes for customers who source critical materials from us. For example, the ability to modify formulations to be compliant with local regulations (e.g., EU REACH Regulations) has become increasingly important. We understand the scrutiny you face and will work with you to identify alternate product formulations and/or

documentation to reduce, or mitigate risk, when using our products.

As with any product that you purchase from us, the reagents and products that we supply through our Customized Solutions Team are manufactured in compliance with our Quality Management System. Our Quality team utilizes a two-tiered approach to ensure product quality. Tier one is a focus on compliance, specifically our ISO 9001 and ISO 13485 certificates. The second tier incorporates a variety of cutting-edge quality controls which assess a product's physical attributes, performance, and purity. We are committed to achieving the highest level of product quality regardless of whether you purchase a product from our catalog or through our Customized Solutions Team.



* "GMP-grade" is a branding term NEB uses to describe products manufactured or finished at NEB's Rowley facility. The Rowley facility was designed to manufacture products under more rigorous infrastructure and process controls to achieve more stringent product specifications and customer requirements. Products manufactured at NEB's Rowley facility are manufactured in compliance with ISO 9001 and ISO 13485 quality management system standards. However, at this time, NEB does not manufacture or sell products known as Active Pharmaceutical Ingredients (APIs), nor does NEB manufacture its products in compliance with all of the Current Good Manufacturing Practice regulations.



In all of these situations, our Customized Solutions Team is ready to help, and serves as a bridge to the support and resources you need to ensure your success. We will work with you to understand your formulation and performance requirements, as well as your packaging needs. In doing so, we may put together a cross-functional team that includes our scientific staff, to work collaboratively with you and to help troubleshoot problems that may arise during development. You can be sure that we will work with you to develop a solution that fits your needs both now and in the future.

PRIVATE LABELING AND KITTING

Our Customized Solutions Team also supports customers who are looking to include our reagents as drop-in components in their own kits and solutions. In this situation, we offer private labeling and options to build custom kits, all of which would be included as part of an OEM contract. This conversation begins with a member of our Customized Solutions Team, who will assemble the appropriate cross-functional team to swiftly address your needs. As with all of our services, we will work closely with you and provide the best option that fits your requirements.

EXPANDED CAPABILITIES AND DISTRIBUTION NETWORK

Since NEB was founded 50 years ago, we have consistently invested in our capabilities to meet specific needs of our customers. This includes expansion of our Research and Applications and Product Development teams, as well as our manufacturing capabilities, quality control testing, and global distribution. In 2004, NEB moved its headquarters to Ipswich MA, USA, and built a LEED-certified, state-of-the-art research and production facility. Since then, NEB has expanded its footprint to several locations nearby its main campus. Approximately 15 minutes away, our production facility in Rowley, MA, is designed to serve the needs of

customers in regulated markets and is used for manufacture of GMP-grade products. Also in Rowley, our packaging facility is responsible for kitting and packaging a selection of NEB products. We also have two locations in Beverly, MA which are approximately 20 minutes from our main campus. Our Beverly Organic Synthesis Facility is an ISO compliant laboratory responsible for synthesis and manufacture of oligonucleotides, modified nucleotides, and affinity beads/resins. Our R&D facility, also in Beverly, houses many of our Research and Application & Product Development groups. Most recently, we have completed a state-of-the-art expansion on our headquarters in Ipswich that expands our manufacturing capabilities and quality control labs. All of these facilities are ISO 9001- and ISO 13485-certified and take into account sustainable building design.

All of these updates have been made with the end users in mind – we want to be able to support you both now and in the future, but we want to do this in a sustainable way that is best for our customers and for the environment. For our customized solutions customers, this means our level of support has improved to include expanded fermentation capabilities, improved quality control testing, faster turnaround, and more comprehensive documentation – all in an environment you can feel good about.

We have 10 subsidiaries worldwide, making shipping and warehousing product across the globe seamless. We are expanding our operational capabilities outside of the U.S. with planned 2024 openings of a new Experience Center in Suzhou, China, which has dedicated space for formulating and kitting, a QC

laboratory, and local warehousing. Additionally, we have a dedicated lyophilization development and manufacturing facility in Oxford, UK.

LYOPHILIZATION AND AMBIENT SHIPPING

More recently, the market has experienced an increase in demand for ambient-stored, lyophilized enzymes and reagents. We are excited to support these needs with our new, dedicated 30,000 sq. ft. lyophilization development and production facility in Oxford, UK. This site allows us to transition key wet enzyme and reagent formulations to ambient-stable, lyophilized products in multiple formats (beads and cakes). Ambient storage and shipping reduces shipping costs, the need for cold-chain access, and importation difficulties. We have the unique ability to match our innovative enzymology experts with our lyophilization experts, and can work with you to develop an optimized lyophilized product that meets your requirements and performance specifications. Contact our dedicated Customized Solutions Team today to discuss your project and how we can help bridge your project gaps.

For 50 years, we have researched, developed, and manufactured innovative enzymes and reagents for the scientific community and have served as a bridge that connects scientific innovations and workflows. Our Customized Solutions Team is privileged to support incredible customers like you and our mission is to equip you with products and support that will shorten your path to success. Our global network of OEM Business Development Managers are excited to meet and discuss how our custom products can support your goals.



To learn more about NEB's custom capabilities or to contact our Customized Solutions Team, visit:

www.neb.com/customized-solutions