

High-quality bottles

# Case study: laboratory bottles used in screening test kits

## Client

A large diagnostic company

## Background

The client was developing a minimally invasive test for early screening and detection of treatable cancer. A leakproof, durable bottle was needed for transportation of the preservative solution used in the kit. A detailed evaluation of off-the-shelf lab bottles available through various suppliers began. The client chose Thermo Scientific™ Nalgene™ Square Wide-Mouth HDPE Bottles over options from other suppliers because of the durable, easy-to-open, and leakproof design.

## Challenges

The client was tasked with the challenge of finding the right bottle for transporting the preservative solution. Often, low-quality bottles can contain large amounts of additives and impurities that might leach into solutions. To prevent potential leakage and contamination, the client needed a bottle made with high-quality materials that proved to be leakproof and durable. The client targets customers older in age who require an easy-to-open container and user-friendly design. In addition, the client also faced keeping up with high demand between two different kits. The client came to Thermo Fisher Scientific, a large manufacturer of bottles and components for test kits, and asked for an off-the-shelf bottle to meet specific requirements, while accommodating their high-volume supply chain needs.



## Capabilities

- Breadth of plastic bottle portfolio, including off-the-shelf and customized options to provide the best fit for design and volume
- Full applications laboratory support for chemical or leaching analysis with particular solvents or solutions
- Integrated quality systems covering supply chain, manufacturing, and quality control processes in a ISO 13485–certified facility
- It is the customer's responsibility to ensure that the performance of the product is suitable for customers' specific use or application

## Partnership

Establishing a collaborative partnership is at the core of our business in order to thoroughly understand the client's manufacturing, technical, and supply chain processes. This creates confidence in Thermo Fisher Scientific to fulfill specific requirements and overcome logistical challenges, allowing the client to focus on growing their business.

## Results

The client chose to partner with Thermo Fisher. Our manufacturing capabilities and robust supply chain process enable us to deliver a high-quality bottle within the desired time constraints.

Nalgene Square Wide-Mouth HDPE Bottles have strong design and performance characteristics that support the client's specific needs. The square design and wide mouth closure make the bottles easy to open. Made with laboratory-grade plastic materials, Nalgene bottles yield dependable lower levels of leachables and extractables to help assure complete protection of the client's solution.

With the client's high volume of supply in mind, Thermo Fisher manufacturing processes offered an adaptable supply chain and large batch production samples. The selection of an off-the-shelf bottle helped reduce time to acquire and minimize risks to delivery schedules. The production ran according to extensive quality systems with complete traceability and process controls.

## Summary

To help safeguard their valuable and sensitive samples, the client relied heavily on Thermo Fisher as a single source supplier of bottles. Through an integrative partnership, our original equipment manufacturer (OEM) team delivered the right bottle and flexible supply chain that allowed the client to successfully bring their kit to the market. Within the next five years, Thermo Fisher will continue to build additional capacity to support the client's aggressive growth projections.



## About Thermo Fisher Scientific OEM and Commercial Supply

The breadth of our product portfolio affords our partners a range of options in selecting tailored technologies to help shorten their development timelines and maximize return on investment. Our dedicated commercial supply cross-functional team understands the unique nature of OEM requirements to make the partnership process a smooth one.

Our outstanding manufacturing processes, certified cleanroom facilities, integrated quality management system, and extensive R&D experience enable us to produce high-quality products and develop innovative workflow solutions for partners in life science research, diagnostic manufacturing, and industrial markets.

A solid worldwide infrastructure helps ensure on-time delivery, long-term sustainability, and superior service and support. Our team works with you every step of the way.

Learn more at [thermofisher.com/productiondiagnostics](https://thermofisher.com/productiondiagnostics)

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