

# DESIGNED FOR BETTER EVERYTHING

Save time and avoid contamination  
with the One Shot FBS 50 mL bottle



Finally, an aliquot-free solution to minimize contamination and variability

**An open letter to the aliquot-weary:**

Over two years ago, we set out to develop a Gibco™ One Shot™ FBS 50 mL bottle that would significantly improve researchers' results, as well as day-to-day convenience in the lab. A tall order for a small bottle, we know.

To make sure we got it exactly right, we worked closely with customers from four different countries to better understand all unmet needs. From there we designed, tested, tweaked, retested, and so on, until we got to the bottle you see before you: the only aliquot-free solution.

Read through the pages ahead to discover how the many features of this new bottle will free you from your current make-do options. We think you're going to love what you see, because it truly was designed with you in mind. So try it, and let us know how we did.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Keenan". The signature is fluid and cursive, with the first name "Jim" being more prominent.

Director of Serum Business

# Take control of your results by putting an end to aliquoting

If you're one of the more than 80% of researchers who aliquots their FBS into 50 mL conical tubes, your life is about to change for the better.

Transferring your FBS takes away your control—of how you spend your time, your contamination risk, and your volume consistency. It also wastes costly material.

The redesigned One Shot FBS 50 mL bottle design eliminates the need to aliquot, and the variability that comes with it. And that improves your chances for consistent results.

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## Did you know?

It takes experienced researchers on average 35 min to aliquot three 500 mL bottles into 30 conical tubes (this time includes properly labeling each conical tube with Cat. No., Lot #, and expiration date)—time better spent on more important work. Worse, this process increases the contamination risk by exposing the FBS to contaminants in the air and pipette-to-rim contact.

“I have never thought about the lack of controls in our aliquoting process. We have no idea how robust our process is.”

—Industrial customer



# Pour and pipette with the greatest of ease

At first glance, you might not notice all of the features of the One Shot FBS 50 mL bottle that will change the way you work with your serum—in the best ways.

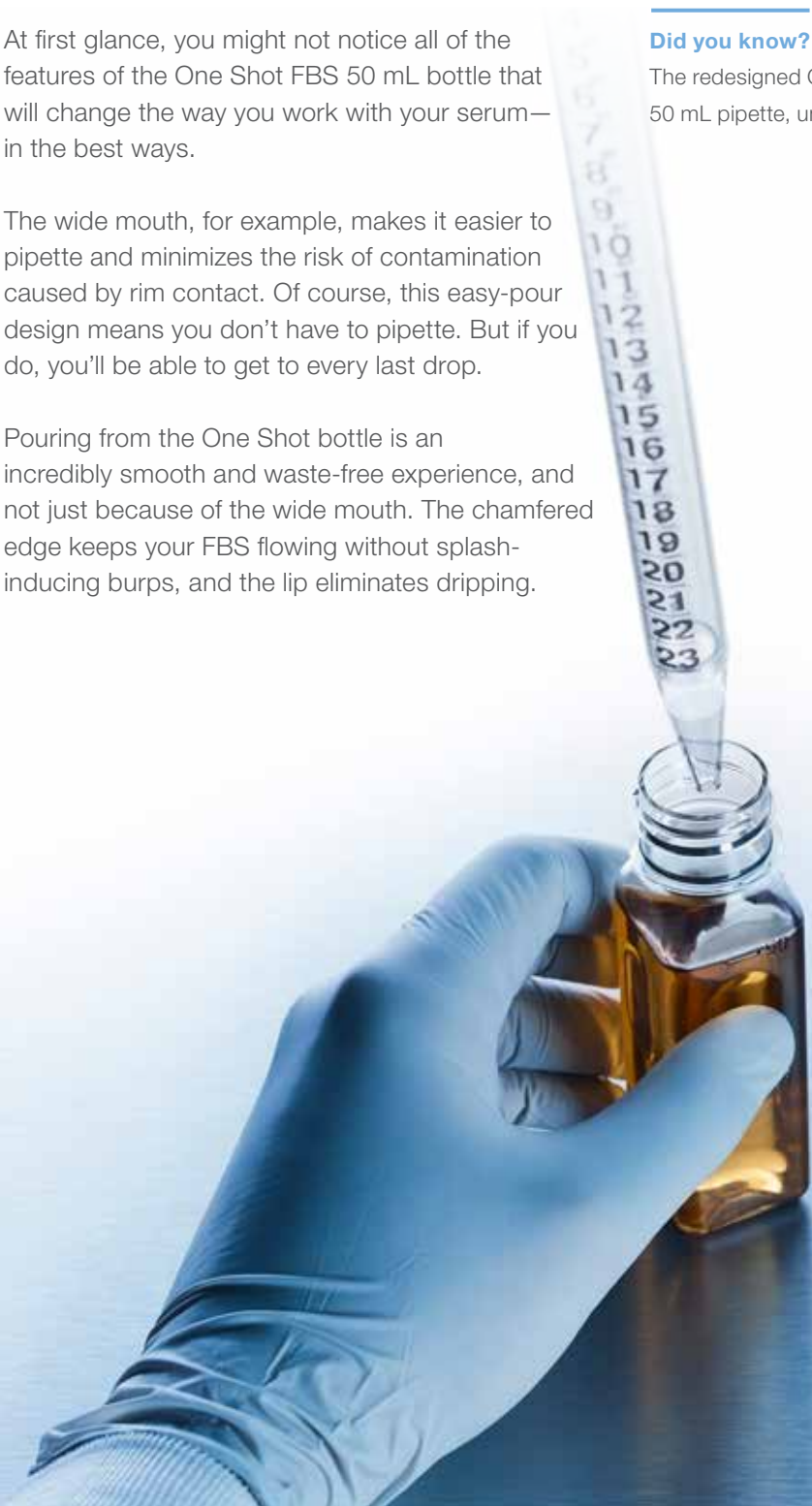
The wide mouth, for example, makes it easier to pipette and minimizes the risk of contamination caused by rim contact. Of course, this easy-pour design means you don't have to pipette. But if you do, you'll be able to get to every last drop.

Pouring from the One Shot bottle is an incredibly smooth and waste-free experience, and not just because of the wide mouth. The chamfered edge keeps your FBS flowing without splash-inducing burps, and the lip eliminates dripping.

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## Did you know?

The redesigned One Shot FBS 50 mL bottle can fit a 25 or 50 mL pipette, unlike the first-generation One Shot bottle.



# Stop the freeze-thaw-repeat cycle

Researchers who aliquot typically freeze then thaw their FBS at least twice before using it. That's a long process requiring close monitoring and unnecessary reagent handling that can compromise results.

The One Shot FBS 50 mL bottle eliminates the need to aliquot, which means you'll only freeze then thaw your FBS once. And because we've engineered the bottle specifically to withstand the freeze-thaw process, you won't have to worry about cracking or lids popping off, like with conical tubes.

The result is less risk of contamination, improved consistency, and more time to spend on what matters.

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## Did you know?

It takes on average 2 hr and 15 min to thaw a 500 mL bottle of FBS in a water bath at 37°C or 36 hr via a fridge at 4°C in comparison to 45 min and 6 hr respectively with the One Shot bottle. (We recommend the latter to reduce the risk of compromising the integrity of your FBS).

Conical tubes weren't intended to hold up against the demands of FBS usage. That's why they tend to crack or pop their lids when they freeze.





“This bottle allows for the convenience of speed while maintaining a sterile product. As we have lots of undergrads in and out of the lab, this ensures that one mishap with not-so-aged hands doesn’t ruin a whole pack of FBS.”

—Bethany C. Prudner, PhD  
Metabolomic Sarcoma Lab, Washington University in St. Louis







# End labeling mishaps

It happens to the best of us. You unknowingly grab the wrong 50 mL conical tube of FBS because of poor labeling, and a chain reaction of problems ensues. A missing Cat. No., Lot #, expiration date, or origin—or maybe the entire label—can mean the difference between success and starting over.

Problem solved. The innovatively designed One Shot bottle requires no extra labeling, eliminating a key variable that can affect your results.

Our easy-to-read package label has all the information you need, saving you the time and hassle of having to interpret handwriting on a conical tube. It also reduces the risk of contamination or shocking your cells by using the wrong reagent.

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## Did you know?

Sloppy handwriting kills 7,000 people every year, according to a July 2006 report issued by the National Academies of Science's Institute of Medicine. Imagine how many cells suffer the same fate.



## Pack the rack

You rely on your test tube racks to organize and store your numerous conical tubes. Wouldn't it be great to have a fit for your rack as well as your FBS needs?

The One Shot FBS 50 mL bottle is the only conical tube alternative designed to fit perfectly in most test tube racks. So you get the convenience of fit in an easy-pour, easy-store, no-aliquot bottle.

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### Did you know?

Our case packaging was designed to function like a test tube rack and is able to withstand FBS freezing temperatures.

Speaking of racks: Thermo Scientific™ Nalgene™ Unwire™ Racks are strong and durable, and won't float in water baths. Pair the 30 mm racks with the One Shot FBS 50 mL bottles for a perfect fit. Learn more at [thermofisher.com/unwireracks](https://www.thermofisher.com/unwireracks)

## Free up space in your freezer

As you well know, freezer space is precious. A shortage can mean delaying FBS shipments— or delivering a heartfelt plea to borrow space from your neighboring lab. Clearly, neither option is ideal.

The One Shot FBS package design is optimized to ease the burden on your freezer capacity, helping ensure there's enough space to store plenty of FBS so it's available when you need it.

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### Did you know?

The One Shot 10 x 50 mL carton allows you to store up to 35 more liters in an average 20 ft<sup>3</sup> freezer than our current 40 x 50 mL One Shot carton and 57 more liters than our 100 mL bottle.



NALGENE

# Less waste

You might think using smaller bottles instead of larger ones would be wasteful. Not true. Because One Shot FBS 50 mL bottles take the place of the 500 mL bottles, conical tubes, and serological pipette, they actually create less waste.

## Did you know?

The One Shot FBS 50 mL bottle generates 33% less waste than aliquoting from 500 mL bottles. By using less plastic, less petroleum feedstock is consumed, and fewer greenhouse gas emissions are generated. In the lab, a typical customer using 20 L of FBS per year would get back almost 7 hr and generate 7 lbs less plastic waste by choosing the One Shot FBS bottle, significantly benefiting both lab productivity and the environment.

## FBS matchup

	Redesigned Gibco One Shot FBS 50 mL bottle	First-generation Gibco One Shot FBS bottle (60 mL Nalgene bottle)	Traditional conical tube
Aliquot-free	*	*	
Maximizes storage space	*		
Reduces freeze-thaw cycles	*	*	
Easy to pipette and pour from	*		*
Fits in test tube rack	*		*
Reduces variability	*	*	

# Answers to frequently asked questions

## **What type of plastic is the One Shot bottle made from?**

It's made from polyethylene terephthalate (sometimes written poly(ethylene terephthalate)), commonly abbreviated as PET, PETE. That's the same plastic used in our other bottle configurations (i.e., 100 mL and 500 mL).

## **Can these bottles be reused?**

It's at the discretion of the customer/user to repurpose these bottles. But they cannot be autoclaved.

## **Can I heat inactivate my serum in the new One Shot FBS bottle?**

Yes. The One Shot bottle can be heat inactivated at 56°C for 30 minutes, while swirling every 10 minutes or so until thawed.

## **What is the shelf life of the One Shot bottle?**

The initial shelf life/stability for the One Shot FBS bottle is two years from the date of manufacture. Additional updates will continue to be made as data becomes available.

## **What is the best way to hold the bottle for pouring?**

For optimal, burp-free pouring, securely grip the bottle using the indents, and pour with the chamfered edge facing down.

## **Does this One Shot bottle fit into a conical tube rack?**

The One Shot bottle is not shaped to fit in a traditional conical tube rack. It does, however, fit nicely in a 30 mm test tube rack for the purposes of storage and use in a water bath and biological safety cabinet.

## **How is the redesigned One Shot bottle different from the first-generation One Shot bottle?**

The One Shot bottle has a proprietary design that we developed specifically for FBS use. This design allows you to freeze, thaw, and pour without the need to aliquot, which minimizes the amount of FBS handling and reduces the risk of contamination. Our first-generation One Shot bottle, a 60 mL Thermo Scientific™ Nalgene™ media bottle, was not designed for easy pipetting and pouring.

## **Are there any other packaging configurations available for the One Shot FBS product?**

Yes. We also offer a 10 x 50 mL package, which is equivalent to a 500 mL bottle of FBS.

## Ordering information

Name	Origin	Size	Cat. No.
Fetal Bovine Serum, Certified	United States	50 mL	A3160401
		10 x 50 mL	A3160402
Fetal Bovine Serum, Qualified	United States	50 mL	A3160501
		10 x 50 mL	A3160502
	USDA-approved regions	50 mL	A3160601
		10 x 50 mL	A3160602
	Canada	50 mL	A3160701
		10 x 50 mL	A3160702
	New Zealand	50 mL	A3160901
		10 x 50 mL	A3160902
	Australia	50 mL	A3161001
		10 x 50 mL	A3161002
South American	50 mL	A3160801	
	10 x 50 mL	A3160802	

All products may not be available in all regions due to importation regulations. Contact your local sales representative regarding product availability in your country.

Our Specialty FBS, qualified for specialty research and specific assays, is now available in the One Shot FBS 50 mL bottle:

## Ordering information

Name	Size	Cat. No.
Fetal Bovine Serum, Exosome-Depleted	50 mL	A2720803
Fetal Bovine Serum, Ultra-Low IgG	50 mL	A3381901
Fetal Bovine Serum, Dialyzed	50 mL	A3382001
Fetal Bovine Serum, Charcoal Stripped	50 mL	A3382101

Learn more about our specialty FBS products at [thermofisher.com/specialtyfbs](http://thermofisher.com/specialtyfbs)

For questions about the One Shot FBS 50 mL bottle's specifications, contact technical services at [cellculturesupport@thermofisher.com](mailto:cellculturesupport@thermofisher.com)



Maximize reproducibility by pairing your One Shot FBS with Gibco™ RPMI, DMEM, or other high-performing media.

To be aliquot-free, go to [thermofisher.com/oneshot](http://thermofisher.com/oneshot)

**ThermoFisher**  
SCIENTIFIC