

Ultra-Rapid Sterility Test Kit that can be completed in a few hours to a day

Particularly useful for sterility testing that requires speed, such as for regenerative medicine products!

Hideki Niimi, Professor at University of Toyama (Department of Clinical Laboratory and Molecular Pathology, Faculty of Medicine), and President at LABTECHS Inc.

Purpose of the ultra-rapid sterility test kit

The purpose is to contribute to the efficiency and risk reduction of pharmaceutical manufacturing processes by conducting rapid microbial testing of sterile pharmaceuticals and pharmaceutical manufacturing environment management.

Conventional sterility testing method: 14 days to prove sterility
(7 days using the current rapid method: BACT/ALERT)



This sterility testing method: 6 hours to 1 day to prove sterility
↓ Reduced risk of discarded medicines

Contributing to revitalizing pharmaceutical production!

Ultra-Rapid Sterility Test Kit

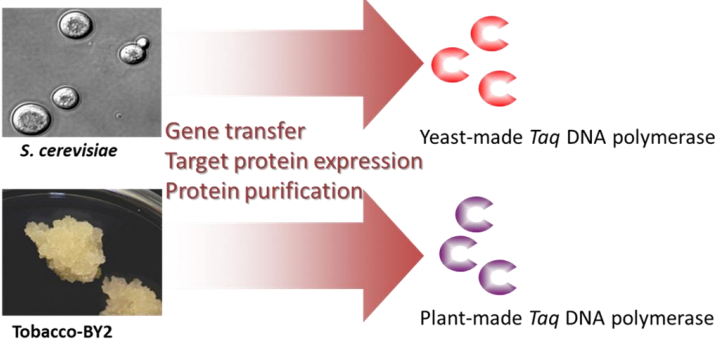
Decontami-Tech series

- ① Highly sensitive and accurate detection and quantification of bacterial and fungal DNA from all species
- ② No bacterial or fungal DNA contamination



- Kit contents: 100 tests**
- Master Mix 1 (for bacterial 1st PCR)
 - Master Mix 2 (for bacterial 2nd PCR)
 - Master Mix 3 (for fungal 1st PCR)
 - Master Mix 4 (for fungal 2nd PCR)
 - Taq polymerase 1 (for bacteria)
 - Taq polymerase 2 (for fungi)
 - DNase, RNase-free distilled water
 - Quantitative Control 1 (for bacteria)
 - Quantitative Control 2 (for fungi)

Taq DNA Polymerase is produced using eukaryotic yeast or plant cells as host cells.



DNA template	-			+		
PCR cycle No.	40	60	100	40	60	100
Yeast-made						
Plant-made						

No bacterial DNA contamination was observed even after 100 cycles of amplification

Niimi H et al., *J. Clin. Microbiol.* 2011. We have obtained domestic and international patents for this enzyme.

Microculture tube

Decontami-Tech series

- ① Highly sensitive incubation of small sample volumes (as little as 200 µl)
 - ② No bacterial or fungal DNA contamination (and sterilized)
 - ③ Prepare aerobic SCD medium (2ml, 4ml) and anaerobic TGC medium (2ml, 4ml)
 - ④ The glass tube allows for sufficient vacuum strength to be maintained
- *Especially useful for regenerative medicine products! (Testing is possible with small amounts of precious cells)



We sell aerobic and anaerobic tubes

Comparison of rapidity performance

(Conventional method vs. BACT/ALERT vs. Ultra-rapid sterility test kit)

*In this test, relative quantification was performed before and after incubation, but absolute quantification can be determined within a few hours.

standard strain	Inoculation amount (CFU/culture bottle)	Time to test positive (hours)		
		Conventional method	BACT/ALERT	Ultra-rapid sterility test kit*
<i>S. aureus</i>	39	72	18.00	24
<i>P. aeruginosa</i>	42	72	24.72	24
<i>C. sporogenes</i>	79	72	37.92	24
<i>B. subtilis</i>	60	72	36.72	24
<i>A. brasiliensis</i>	54	120	89.76	24
<i>C. albicans</i>	70	120	50.64	24

* Below detection sensitivity in D.W./PCR Tube

A novel ultra-rapid sterility test kit is superior in sensitivity and rapidity to current sterility tests (conventional method and BACT/ALERT)



LABTECHS

[LABTECHS Inc.]

The kit is manufactured and sold by LABTECHS Inc.

For purchase inquiries, please contact us via website below.

LABTECHS Inc. HP: Searchable by "LABTECHS"
<https://labtechs.co.jp/>

Founded in 2021 after being certified by Toyama University as the first start-up company from Toyama University.

[Business details, etc.]

- Manufacturing and sales of testing (clinical testing) kits, pharmaceuticals, quasi-drugs, and all related businesses
- Selected as a Toyama Prefecture T-Startup company in 2023, 2024, and 2025
- In 2025, the company was selected for the Ministry of Economy, Trade and Industry's "Go-Tech" support program.
- The company has obtained its own domestic and international patents.

We contribute to creating a healthy and vibrant society through innovation!

Contact details

"TOYAMA, the Silicon Valley of Medicine"
Creative Consortium Secretariat

1-7 Sougawa, Toyama City, Toyama Prefecture, 930-8501 Japan
TEL:076-444-3943 E-mail:ml-kusuri-toyama@pref.toyama.lg.jp

