

Mantacc Preservation Solution Cryopreservation

Presentation – Benjamin Qiu



Project Background

A customer is looking for available kits to extract or purify microbial genomic DNA from fresh and frozen human fecal samples. The extracted products can be used for microbiome analysis, metagenomic analysis, gut microbiota research, gut disease research, and more.

Li Juan

Sales Representative

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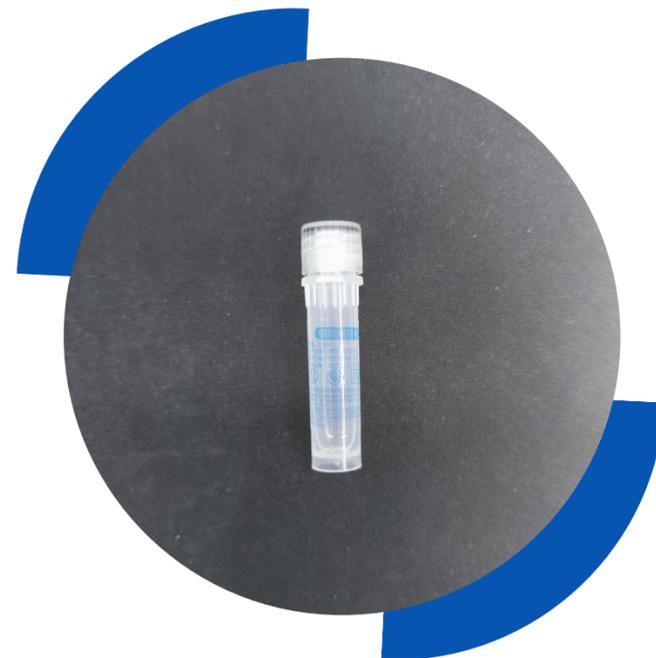


Testing Objective



Our primary objective is to test the performance of Miraclean preservation tubes under extreme temperatures, such as -80°C . We want to ensure that even under such extreme environments, the storage tubes do not deform and maintain good sealability, thus ensuring safe storage of samples.

Product Introduction



2ml
Preservation Tube



5ml
Preservation Tube



10ml
Preservation Tube

Our preservation tubes come in three sizes: 2ml, 5ml, 10ml, which can meet the needs for storing different sample volumes.

Testing Equipment



Seal Performance Tester

Brand: Aruibok

Model: GX-MF1000

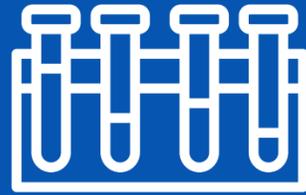


-80°C Freezer

Brand: Haier

Model: DW-86L626

Testing Process



Step 1

Take out preservation tubes of 3 specifications according to the size, and add an appropriate amount of pure water respectively.



Step 2

Place the tubes vertically in a -80°C freezer for 24 hours.



Step 3

After 24 hours, take out the tubes and thaw at room temperature.



Step 4

Invert the thawed tubes and place them in an automatic vacuum seal performance tester. Set the pressure to -70Kpa , time to 120s, and observe whether any liquid flows out.

Testing Data

Sample	2ml			5ml			10ml		
Number	1	2	3	1	2	3	1	2	3
Damage	No	No	No	No	No	No	No	No	No
Leakage	No	No	No	No	No	No	No	No	No

The test results show that after being frozen at -80°C for 24 hours, all storage tubes remain intact with no damage, and maintain good sealability without any liquid leakage.



This is a very promising result that shows the Miraclean tubes can withstand the rigors of freezing at ultra-low temperatures.

Being able to maintain sample integrity and avoid leakage or contamination is critical for tubes used in biobanking, biological research, and clinical applications where samples need to be stored frozen.

What We Can Learn



Thank You

For Your Attention

