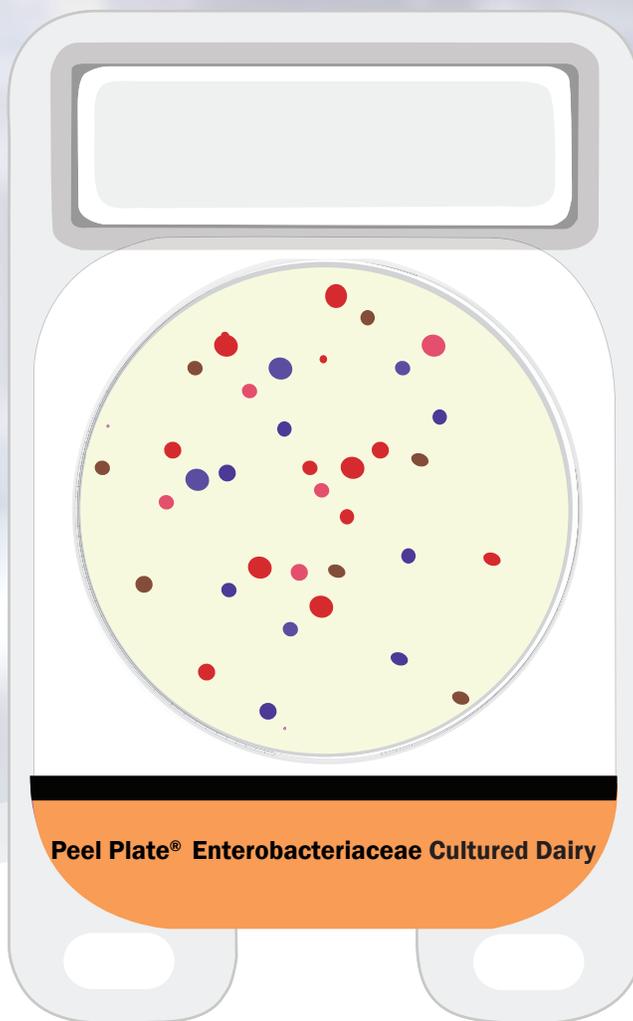




## For Cultured Dairy



## Interpretation Guide

An introduction to using and interpreting results for Peel Plate® EB Microbial Tests for Cultured Dairy.

## Introduction - Cultured Dairy

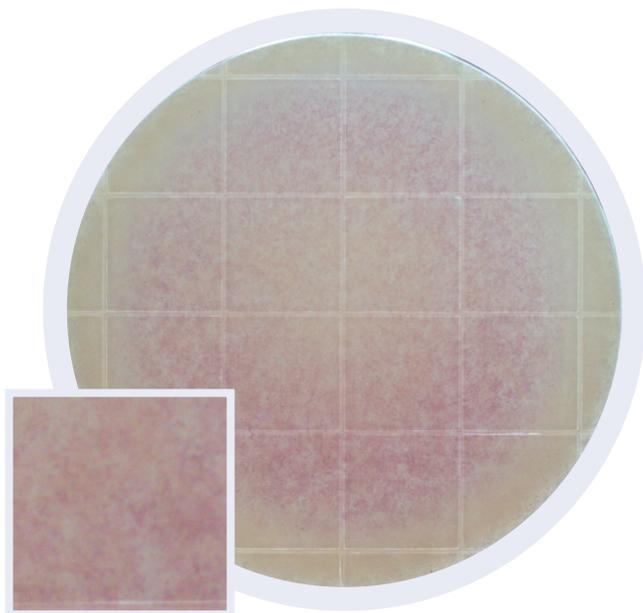
Peel Plate® EB Microbial Tests for Cultured Dairy is a prepared culture method used for the detection and enumeration of Enterobacteriaceae bacteria in fermented dairy products that give an interfering red background on a regular Peel Plate EB test.

These tests can be used for testing fermented dairy products like yogurt, cheese, sour cream and cottage cheese. The red, purple, blue, and brown colored colonies of the Peel Plate EB test are easily counted against the background of the test plate that may have pink or light red tint because of the fermentation cultures. Count all colonies regardless of color and size. These colonies can be picked, cultured, and confirmed oxidase negative or pH glucose agar positive.

- **Sensitivity:** >1 CFU/mL of test sample
- **Accurate quantitative range:** 1 to 150 CFU/mL
- **Incubation:** 24 to 48 hours at 37 °C

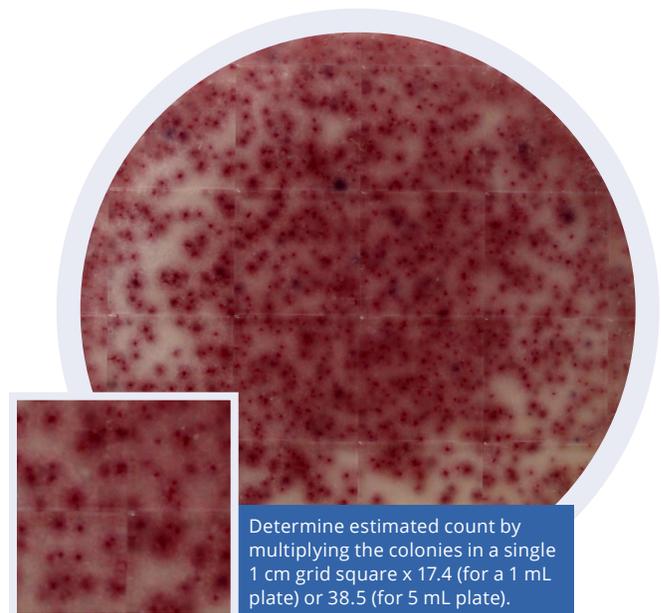
## What You Can Expect to See

Depending on the matrix and product contaminants, colonies may be expressed differently.



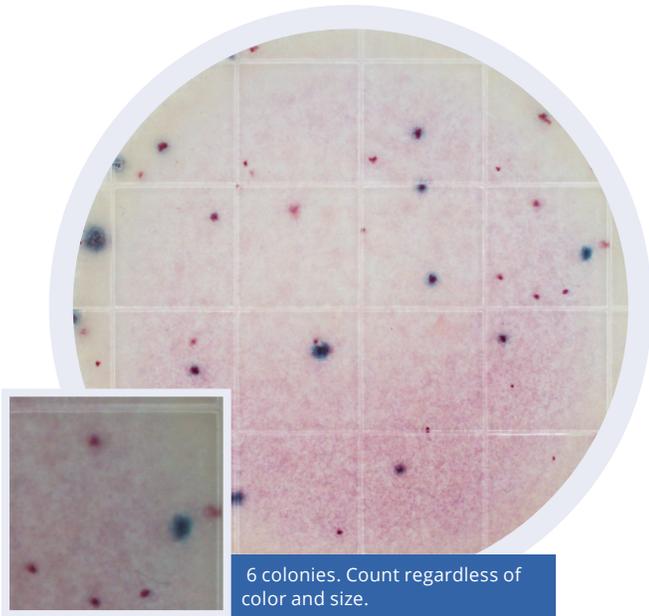
**0 Colonies (No Growth)**

**Background Color May Vary with Product**



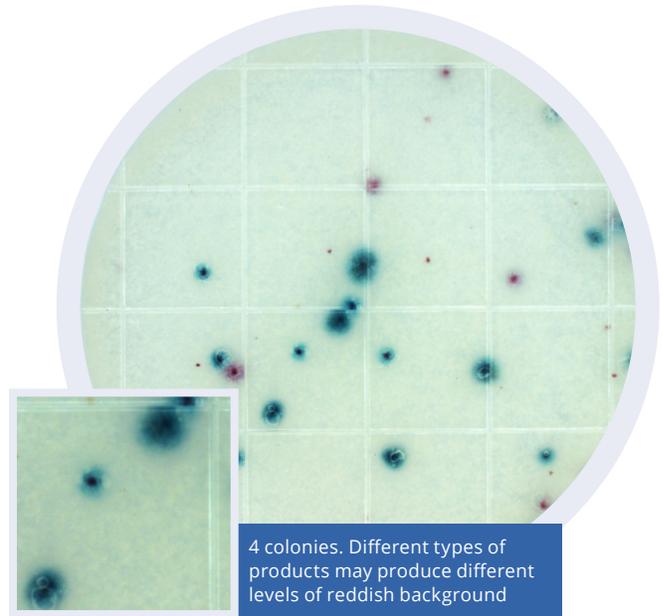
Determine estimated count by multiplying the colonies in a single 1 cm grid square x 17.4 (for a 1 mL plate) or 38.5 (for 5 mL plate).

**TNTC (Too Numerous to Count)**



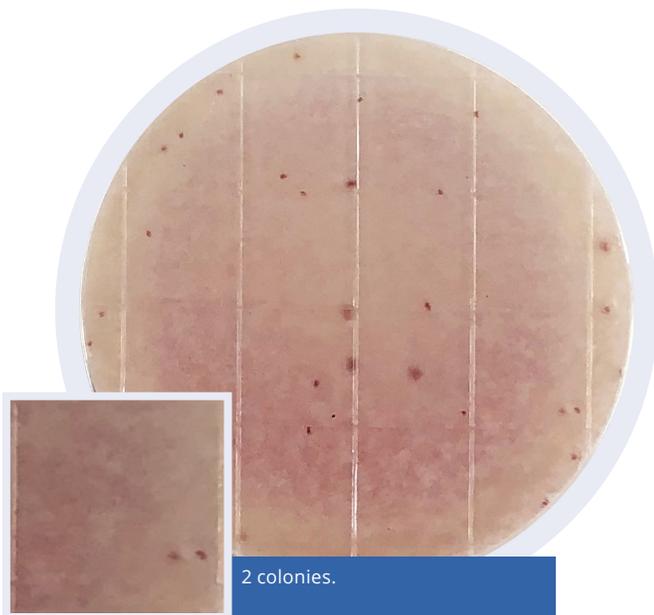
6 colonies. Count regardless of color and size.

**39 Colonies (Swiss Cheese)**



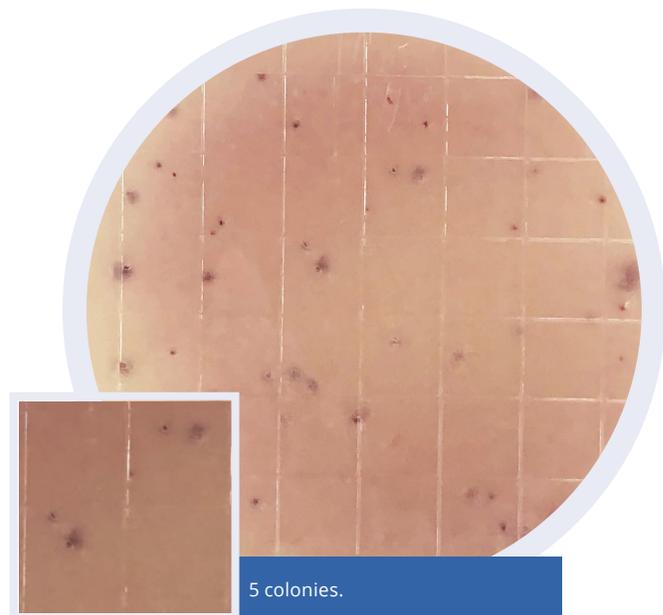
4 colonies. Different types of products may produce different levels of reddish background

**28 Colonies (Cottage Cheese)**



2 colonies.

**30 Colonies (Greek Yogurt)**



5 colonies.

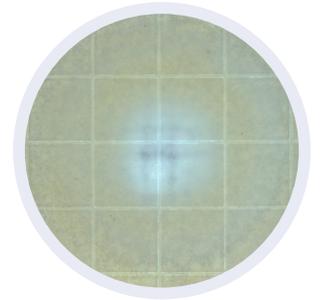
**39 Colonies (Colby Jack Cheese)**



# General Troubleshooting

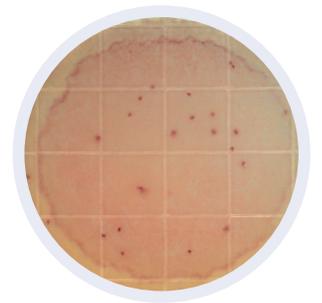
## Craters or Incomplete Wicking

Craters are formed when the sample is dispensed too slowly or the pipette is held too far away from the media. Samples should be dispensed within 2-3 seconds and the pipette should be held 1-2 cm above the media. Although incomplete wicking does not effect counts, best practice is to make sure the sample wicks evenly across the plate. If sample is too viscous to wick completely, additional dilution of the sample may be required or assist the wicking by lifting and rocking the plate. For more information on wicking, please contact Charm Technical Services.



## Matrix Edge and Non-wicking

Many homogenates of cheese are thick and may wick slowly or may not wick completely. This can cause an appearance where the top is not completely absorbed with the matrix colloids creating an inner bullseye pattern. To avoid this effect allow the prepared sample to settle for 30-60 seconds before plating. Pipet rapidly into the center of the plate and assist distribution of the sample by lifting and rocking the plate so that it comes in contact with all edges before it absorbs.



## Interference

Some matrices may produce interferences that are reddish development on edges that are not formed into round colonies or perimeter edge growth as seen in this cottage cheese, which is non-coliform interference from high non-culture bacteria.

