

PRODUCT INSERT

Instrument Compatibility: Cellometer X2, Cellometer

Spectrum 10x

ViaStain™ CFDA-AM Yeast Vitality Kit

Part number: CSK-0125-200uL

Test number: 100 tests

Storage: -20°C and RT

Description

The ViaStain™ CFDA-AM Yeast Vitality Kit enables the user to quantitatively distinguish metabolically active Lager and Ale yeast in pure cultures and in cultures containing debris such as beer slurries using the Cellometer system. The stain contains a solution of a cell-permeant esterase substrate, CFDA-AM (5-Carboxyfluorescein Diacetate, Acetoxymethyl Ester), that fluoresces green when hydrolyzed by enzymatically active Lager and Ale yeast. The percent of yeasts that are actively fermenting during production can be determined and used to optimize the fermentation process during beer brewing, for example.

Materials

Materials Supplied

- 1. CSK-0125-200µL (100 tests)
 - a. Component A: 200 µL vial of CFDA-AM solution
 - b. Component B: 25 mL bottle of PBS

Materials Required

- 1. Microcentrifuge tube
- 2. Pipette and tips
- 3. Cellometer counting chamber (Revvity, Cat # SD100 or PD100)
- 4. Cellometer Spectrum 10x or Cellometer X2

Procedure

- 1. Dilute yeast sample to 2 x 10⁷ cells/mL.
- 2. Create a working concentration of CFDA-AM (Solution A):
 - a. Mix 2 μ L of the **CFDA-AM** solution (Component A) with 198 μ L **PBS** (Component B).
 - b. Vortex for 10 sec to ensure a homogenous mixture.
 - **NOTE**: Use Solution A within 3 hrs.
- 3. Stain yeast by combining 100 μ L of yeast sample with 100 μ L of Solution A and mix by pipetting up and down at least 10 times.
- 4. Incubate yeast for 45 min at 30°C in the dark.
 - **NOTE**: After incubation, cells are ready to be imaged and no washing is necessary.
- 5. Pipette sample up and down 10 times, or vortex, to evenly distribute cells
- 6. Load 20 μL of mixed sample into a counting chamber
 - **NOTE**: If using SD100 slides, peel plastic film off both sides before loading
- 7. Place loaded slide on a Kimwipe® and wait for 1 min before inserting into the instrument, to allow the sample to settle in the chamber.
- 8. Select the appropriate assay type for yeast vitality measurement.
- 9. Select "Preview B1" to focus sample using brightfield image.
- 10. Preview brightfield and fluorescent images to confirm appropriate cell staining.
- 11. Click "Count".

Storage and Handling

Store the CFDA-AM (Component A) solution between -16°C and -24°C, protected from light and the PBS (Component B) at room temperature (RT). Please consult the Material Safety Data Sheet for more safety information, found on www.revvity.com/cellcountingreagents.

Warranty

This product is for RESEARCH USE ONLY and is not approved for diagnostic or therapeutic use. Product is warranted to meet the specifications outlined in the Certificate of Analysis when stored and used according to the manufacturer's instructions. No other warranty, expressed or implied (such as merchantability, fitness for a particular purpose, or non-infringement), is granted. Warranty is valid until the expiration date stated on the product label. If no expiration is listed, the warranty is valid for 12 months from the date of product receipt.

Warranty will be void if product is stored incorrectly, the recommended protocol is not followed, or the product is used for a different application.

Ordering Information

When ordering with a Purchase Order:

E-mail a copy of the order to **Cellc-sales@revvity.com**

For online orders, please visit:

https://www.revvity.com/cellcountingreagents

For support, e-mail **USCAN.service@revvity.com**



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