

Cellometer[®]

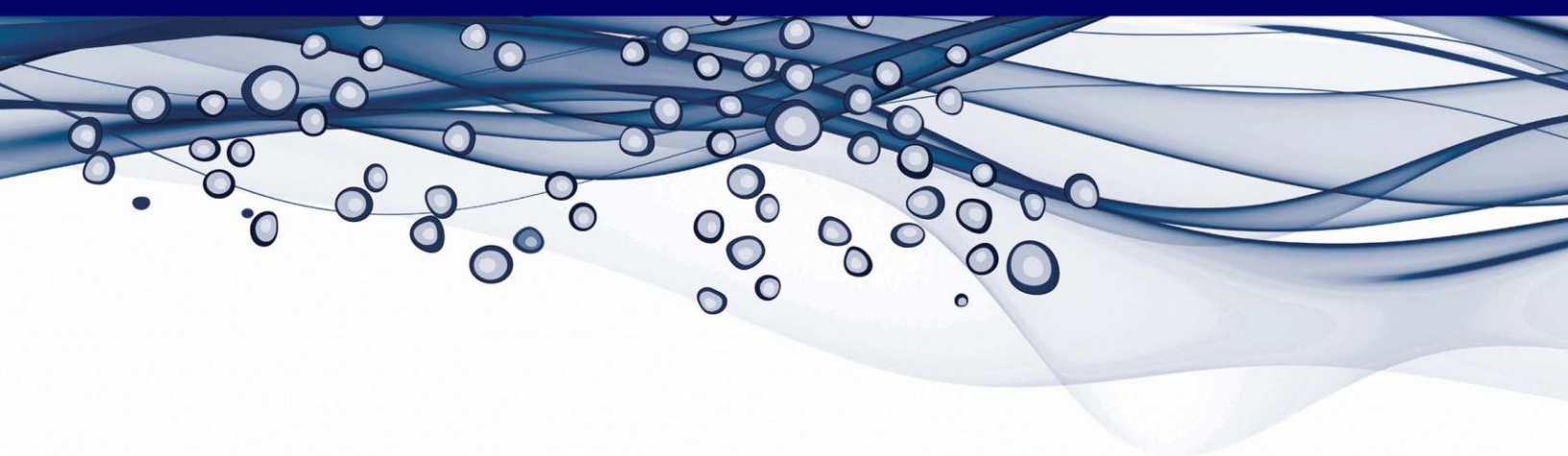
Product Number: CSK-0125-200 μ L

Sample: CSK-0125-S (Not for re-sale)

Description: ViaStain[™] CFDA-AM Yeast Vitality Kit

Instrument (s): Vision10x, X2, Spectrum 10x

Instruction Booklet: ViaStain[™] CFDA-AM Yeast Vitality Kit



This product is for RESEARCH USE ONLY and is not approved for diagnostic or therapeutic use.

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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. One 200µL vial of CFDA-AM solution
 - b. One 25 mL bottle of PBS
2. CSK-0125-S (5 tests)
 - a. One 10 µL vial of CFDA-AM solution
 - b. One 1.25 mL bottle of PBS

Materials Required

1. Micro centrifuge tube
2. Pipette
3. Cellometer counting chamber (SD100 or PD100)
4. Cellometer Vision 10x, Specrum 10x (with Fluorescence Optics Module S1-534-470), or Cellometer X2 (with Fluorescence Optical Module F101, VB-535-401, or equivalent)

Procedure

1. Dilute the yeast sample to 2×10^7 cells/mL.
2. Create a working concentration of CFDA-AM by combining 198 µL PBS (CS0-0113) and 2 µL of the CFDA-AM (CS1-0125) solution; this is now Solution A. Mix by vortexing for 10 seconds. (Use the Solution A within 3 hrs)
3. Stain yeast by combining 100 µL of sample with 100 µL of Solution A. Mix by pipetting up and down at least 10 times.
4. Incubate yeast for 45 min at 30°C in the dark. At the conclusion of the incubation, cells are ready to be imaged, no washing is necessary.
5. Pipette sample up and down 10 times, or vortex, to evenly distribute cells, then load 20 µL into a counting chamber (if using SD100 slides, peel plastic film off both sides before loading).
6. Place loaded slide on a Kimwipe® and wait 1 min before inserting sample into the instrument, to allow the sample to settle in the chamber.
7. Select the appropriate assay type for yeast vitality measurement.
8. Preview bright-field and fluorescent images
9. Count

Storage and Handling

Store the PBS (CS0-0113) at room temperature and the CFDA-AM (CS1-0125) solution between 4°C and -20°C, protected from light. Please consult the Material Safety Data Sheet for more safety information, found on www.nexcelom.com/Products.

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:

Fax a copy of the order to 978-327-5341

Email a copy of the order to sales@nexcelom.com

When ordering with a Credit Card:

Visit www.shop.nexcelom.com and place your order