

Cellometer[®]

Product Number: CS2-0106-5ML

Description: Cellometer ViaStain[™] AOPI Staining Solution in PBS Counting Kit

Instrument (s): Auto2000, K2, Vision, Vision CBA

Instruction Booklet: ViaStain[™] AOPI Staining Solution in PBS



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

8001273 Rev. A

Product

Part Number: **CS2-0106-5ML**

Description: Cellometer ViaStain[™] AOPI Staining Solution in PBS

Manufacturer Lot Number: **YYMMDD-RR-B**

Volume: **5 mL**

pH Range: 7.4 to 8.0

Description

The ViaStain[™] AOPI Staining Solution in PBS enables the user to quantitatively distinguish live and dead nucleated cells from a variety of primary mammalian cell samples, even in the presence of a high background of non-lysed red blood cells, platelets and/or debris using the Cellometer system. This formulation has been optimized to work with whole blood, peripheral blood mononuclear cells (PBMC), bone marrow, splenocytes, thymocytes, lymph nodes and hepatocytes but also works in various other digested tissues and cultured cell lines. The solution contains a combination of the green-fluorescent nucleic acid stain, acridine orange, and the red-fluorescent nucleic acid stain, propidium iodide. Propidium iodide is a membrane exclusion dye that only enters cells with compromised membranes while acridine orange penetrates all cells in a population. When both dyes are present in the nucleus, propidium iodide causes a reduction in acridine orange fluorescence by fluorescence resonance energy transfer (FRET). As a result, nucleated cells with intact membranes stain fluorescent green and are counted as live, whereas nucleated cells with compromised membranes only stain fluorescent red and are counted as dead when using the Cellometer system. Non-nucleated material such as red blood cells, platelets and debris do not fluoresce and are ignored by the Cellometer software.

Materials

Materials Supplied

1. One 5 mL bottle of AOPI Staining Solution in PBS

*Each bottle contains sufficient solution to perform ~ 250 tests using the Cellometer system and the procedure below.

Materials Required

1. Micro centrifuge tube
2. Pipette
3. Cellometer counting chamber (SD100 or PD100)
4. Cellometer Auto 2000, Cellometer K2 or Cellometer Vision / Vision CBA, with Fluorescence Optical Module F101, VB-535-401, or equivalent and F304, VB-660-501, or equivalent)

Procedure

1. Pipette 20 μ L of cell sample into a micro centrifuge tube
2. Add 20 μ L of AOPI staining solution to micro centrifuge tube and mix well by pipetting up and down at least 3 times.
3. Load 20 μ L into a counting chamber (if using SD100 slides, peel plastic film off both sides before loading).
4. Insert loaded slide into the instrument.
5. Select the appropriate assay type for AOPI viability measurement.
6. Preview bright-field and fluorescent images.
7. Focus if necessary.
8. Count.

Storage and Handling

Store the AOPI Staining Solution at 4-6°C protected from light. AVOID FREEZING. The AOPI Staining Solution is highly carcinogenic; safety precautions must be taken when handling the solution. 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.

Quality Control

Manufactured and tested according to SOP #: 8001434

Passed



Matthew Bularzik, Quality Engineer

03/10/2014