Cell Explorer™ Fixed Cell Labeling Kit

Blue Fluorescence

Ordering Information:	*Storage Conditions:*	*Instrument Platform:*
Product Number: 22600 (500 Assays)	Keep in freezer Protect from moisture and light	Fluorescence microscope

Introduction

Our Cell Explorer™ Fixed Cell labeling kits are a set of tools for labeling cells for fluorescence microscopic investigations of cell functions. The effective labeling of cells provides a powerful method for studying cellular events in a spatial and temporal context. This particular kit is designed to uniformly label fixed mammalian cells in blue fluorescence for long term microscopic examination. The kit uses a proprietary blue fluorescent dye which is more fluorescent upon binding to cellular components. The fluorescent dye used in the kit is quite photo-stable so that the images can be repeatedly examined. The kit provides all the essential components with an optimized cell-labeling protocol. It is an excellent tool for preserving the fluorescent images of particular cells, and can also be used for fluorescence microscope demonstrations by using DAPI filter (Ex/Em = 353/442 nm).

Kit Components

Components	Amount
Component A: Stain It™ Blue	1 vial
Component B: DMSO	1 vial (200 µL)

Assay Protocol

Brief Summary

Prepare samples (microplate wells) → Remove the liquid from the plate → Add 100 µL/well of Stain It™ Blue solution → Stain the cells at RT for 10 min to hours → Wash the cells → Examine the specimen under microscope at Ex/Em = 353/442 nm

Note: Thaw all the components to room temperature before opening.

1. Prepare a 500X Stain It™ blue stock solution:

Add 100 µL of DMSO (Component B) into the Stain It™ Blue vial (Component A) to make a 500X stock solution.

Note: The unused Stain It™ Blue stock solution should be divided into single use aliquots and stored at -20 °C. Avoid repeated freeze/thaw cycles.

2. Stain the cells:

2.1 Perform formaldehyde fixation. Incubate the cells with 3.0–4.0% formaldehyde in PBS for 10–30 minutes at room temperature.

2.2 Rinse the fixed cells 2–3 times in PBS.

2.3 Prepare 1X Stain It™ Blue working solution by diluting 20 µL of 500X Stain It™ Blue stock solution (from Step 1) into 10 mL of PBS.

Note: A series concentrations (0.25X to 2.5X) of Stain It™ Blue should be used to get the the desired staining concentration for the cell line of interest.

2.4 Add 100 µL/well (96-well plate) of 1X Stain It™ Blue working solution (from Step 2.3) into the fixed cells (from Step 2.1), and stain the cells at room temperature for 10 minutes up to several hours.

2.5 Rinse cells gently with PBS several times to remove excess dye before plate sealing and imaging.

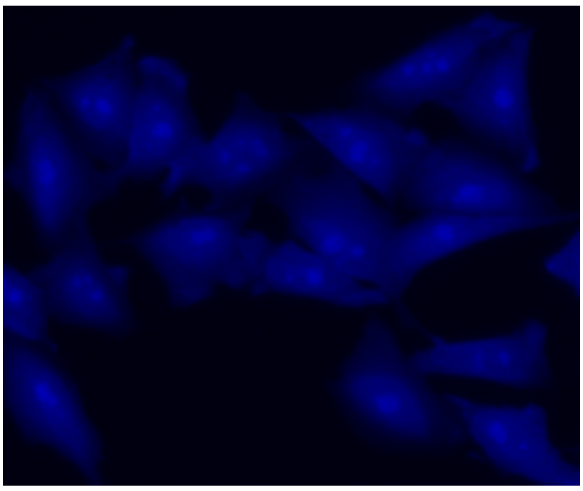

Figure 1. Image of CHO cells fixed with formaldehyde and stained with Cell Explorer™ Fixed Cell Labeling Kit *Blue Fluorescence* in a 96-well Costar black plate

References

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