

ER Green Tracker for live-cell, Glibenclamide-FL

Fluorescent Endoplasmic Reticulum (ER) Probe

Product Description

Name: ER Green Tracker

Catalog Number: FP-BJ097A, 100µg

Molecular Weight: MW= 783.09

Solubility: DMSO, DMF, Chloroform and Methanol

Absorption / Emission : $\lambda_{\text{exc}} \lambda_{\text{em}} \text{ (MeOH)} = 504/511 \text{ nm}$

Molecular Form : $C_{37}H_{42}BClF_2N_6O_6S$

EC $(M^{-1} cm^{-1})$: 86 000

CH₃

Storage: -20°C Protect from light and moisture

Introduction

The ER Green Tracker, FL Glibenclamide, is cell-permeant, live-cell stain that is selective for the endoplasmic reticulum (ER). Glibenclamide (glyburide) binds to the sulphonylurea receptors of ATP-sensitive K+ channels which are prominent on ER.

Directions for use

Reagent Preparation

ER Green Tracker is supplied as 100 μ g of lyophilized material. Prepare a 1 mM stock solution by dissolving the contents of the vial in 128 μ L of DMSO. It is recommended that the 1 mM solution then be separated into aliquots and stored frozen with desiccant.

Cell Preparation and Staining

1.1 Prepare staining solution. Dilute the 1 mM stock solution to the final working concentration. We recommend working concentrations of \sim 1 μ M. To minimize potential labeling artifacts, use the lowest dye concentrations possible. Best results are obtained when staining is performed in Hank's Balanced Salt Solution with calcium and magnesium (HBSS/Ca/Mg, cat. # NJI030) at 37°C/5% CO₂.



FT-BJ097A

1.2 Stain the cells. For adherent cells, remove the medium from the culture dish, rinse with HBSS, and add prewarmed staining solution. Incubate the cells for approximately 15–30 minutes at 37°C. Replace the staining solution with fresh probe-free medium and view the cells using a fluorescence microscope. If the stained cells are to be fixed, refer to the fixation steps below for the appropriate dye.

Fixation

- 2.1 Fix cells. If stained cells are to be fixed, fixation is recommended using 4% formaldehyde for 2 minutes at 37°C.
- 2.2 Wash and view cells. After fixation, perform two 5-minute washes in any suitable buffer prior to mounting, viewing, or further staining. Permeabilization is not recommended; signal is not retained after permeabilization with Triton® X-100.

References

- Lee Jae Hong et al., An intramolecular crossed-benzoin reaction based KCN fluorescent probe in aqueous and biological environments, Chemical Communications, Issue 36 (2015)
- Nakanishi K. et al., Transient Ca2+ depletion from the endoplasmic reticulum is critical for skeletal myoblast differentiation, *The FASEB Journal*, vol. 29 no. 5 2137-2149 (2015)

Technical and scientific information

Related products

DiOC₆(3), FP-467646

 ER Red Tracker for live-cell, Glibenclamide-TR, FP-BJ0981

Ordering information

Catalog size quantities and prices may be found at http://www.interchim.com. Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask: FluoProbes® / Interchim; Hotline: +33(0)4 70 03 73 06

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