

APEXBI

CellTracker Red CMTPX

Introduction

CellTracker Red CMTPX is a red fluorescent probe that is widely used in cell tracing. It can freely cross the cell membrane and then be converted into a membrane-impermeable product, which is retained in living cells and emits a bright red fluorescent signal. CellTracker Red CMTPX is transferred to daughter cells and the signal displays for at least 72 h (typically 3-6 passages). This product is stable, non-toxic, and the emission spectrum can be well separated from GFP, which is very suitable for multiplexing.

Components and Storage

	Unt		Unit
Components	B8827-50 µg	B8827-2x50 μg	Anne Storage
CellTracker Red CMTPX	50 µg	2x50 µg	-20°C away from light and moisture
Shipping: Blue ice	Shelf life:	1 year	

Properties

Physical Appearance	Solid
M.Wt	686.3
Cas No.	942416-35-5
Formula	C ₄₂ H ₄₀ CIN ₃ O ₄
Ex/Em	577/602
Solubility	Soluble in DMSO

Protocol

 Preparation of the stock solution: Dissolve 50 µg CellTracker Red CMTPX in 36 µL anhydrous DMSO to make a 2 mM stock solution. The stock solution should be stored at -20°C away from light. It is recommended to aliquot the stock solution into small volumes and avoid repeated freeze/thaw cycles.

*Note: Allow CellTracker Red CMTPX to warm to room temperature before using.

2. Preparation of the working solution: Dilute the stock solution in the serum-free medium to make a working solution. The recommended concentration of the working solution can be in the range of 0.5-25 µM. Warm the working solution to 37°C. It is suggested to dilute CellTracker Red CMTPX when using it.

*Note: The optimal concentration of the working solution varies depending on the type of cells.

3. Labeling of cell: For adherent cells, grow cells to reach the desired density. Remove the growth medium and add a pre-warmed (37°C) working solution to cover the cells. Incubate at 37°C away from light for 15-45 min. Replace the working solution with a fresh, pre-warmed, suitable buffer or growth medium. Then detect the fluorescence signal of cells by a microscope (Ex/Em: 577/602 nm).

*Note: The optimal time for incubation varies depending on the type of cells. For suspension cells, harvest cells and perform similarly to the adherent cells.

Note

- 1. Fluorescent probes are easy to quench, please protect them from light when using.
- 2. For your safety and health, please wear lab coats and gloves during the experiment.
- 3. For research use only. Not to be used in clinical diagnostic or clinical trials.



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