

Product Name: DiR Membrane Probe (Near-Infrared)

Product number: RA20006

Basic Information

Product Name	DiR Membrane Probe (Near-Infrared)
Size	5 mg
Storage	Store at -20 °C, protected from light
Shipping	Shipped with ice pack
Validity	12 months

Reagent preparation

(1) Preparation of stock solution: The stock solution is prepared with anhydrous DMSO or EtOH at a concentration of 1~5 mM.

Note: Unused stock solution should be stored in aliquots at -20°C to avoid repeated freezing and thawing.

(2) Preparation of working solution: Dilute the stock solution with an appropriate buffer (e.g. serum-free medium, HBSS or PBS) to prepare a working solution with a concentration of 1~5 μ M.

Note: The final concentration of the working solution is recommended to be optimized according to different cell lines and experimental systems. It is recommended to start exploring the optimal concentration within a range of 10 times the recommended concentration.

Experimental procedures

Suspension cell staining

- (1) Add an appropriate volume of staining working solution to resuspend the cells to a density of 1×10^6 cells/mL.
- (2) Incubate the cells at 37°C for 2 to 20 minutes. The optimal incubation time varies for different cells. You can use 20 minutes as the initial incubation time, and then optimize the system to obtain a uniform labeling effect.
- (3) At the end of incubation, centrifuge at 1000-1500 rpm for 5 min. Pour off the supernatant and slowly add 37°C preheated growth medium to resuspend the cells.
- (4) Repeat step (3) two more times.

Adherent cell staining

- (1) Culture adherent cells on sterile coverslips.
- (2) Remove the coverslip from the medium, aspirating any excess, but leaving the surface wet.
- (3) Add 100 μ L of dye working solution to one corner of the coverslip and gently shake to allow the dye to evenly cover all cells.
- (4) Incubate the cells at 37°C for 2 to 20 minutes. The optimal incubation time varies for different cells. You can use 20 minutes as the initial incubation time, and then optimize the system to obtain a uniform labeling effect.
- (5) Aspirate the dye working solution, wash the coverslip 2-3 times with culture medium, cover all cells with pre-warmed culture medium each time, incubate for 5-10 min, and then aspirate the culture medium. However, keep the surface moist.

DiR excitation/emission wavelength: 748/780 nm

Note: This reagent is for scientific research use only!