Product Name: DiI

Catalog Number: RA20004

Basic Information

Product Name	DiI
Size	10mg
Storage	-20 ℃, protected from light
Shipping	Shipped with ice pack
Validity	12 months

Reagent preparation

Staining solution preparation

(1) Preparation of stock solution: The stock solution is prepared in anhydrous DMSO or EtOH with a concentration of 1~10 mM .

Note: Store unused stock solution in aliquots at -20°C to avoid repeated freezing and thawing.

(2) Preparation of working solution: Dilute the stock solution with a suitable buffer (e.g. serum-free culture medium, HBSS or PBS) to prepare a working solution with a concentration of 1-10 μM.

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 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}/mL.

(2) Incubate the cells at 37°C for 20 min. Different cells have different optimal incubation times. You can use 20 min 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) Adherent cells were cultured on sterile coverslips.

(2) Remove the coverslip from the medium, aspirating any excess, but leaving the surface wet.

(3) Add at one corner of the coverslip Add 100 μL of dye working solution and gently shake to allow the dye to evenly cover all cells.

(4) Incubate the cells at 37°C for 5-20 min. The optimal incubation time varies for different cells. You can use 20 min as the initial incubation time, and then optimize the system to obtain a uniform labeling effect.

(5) Aspirate the dye working solution and wash the coverslip with culture medium. 2~3 times, each time covering all cells with pre-warmed culture medium, incubating for 5~10 min, and then aspirating the culture medium, but keeping the surface moist.

DiI excitation/emission wavelength: 549/565nm

Note: This reagent is for scientific research use only!