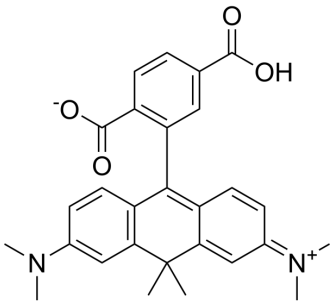
610CP

Cat. No.:	HY-D1346
CAS No.:	1877282-17-1
Molecular Formula:	$C_{28}H_{28}N_2O_4$
Molecular Weight:	456.53
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	610CP is a new type of actin labeling dye. It dissolves in organic solvents. In DMSO the 610CP excitation/emission wavelength is between 609 and 634 nm. 610CP is a fluorescent dye that penetrates living cells. Upon cell entry, 610CP binds to Bromo-des-methyl-Jasplakinolide Therefore, 610CP dye can be used to stain actin fluorescence images with low background and high resolution.
In Vitro	1.Preparation of 610CP working solution 1.1 Preparation of the stock solution. Dissolve 610CP in DMSO to obtain 10 mM of stock solution. Note: It is recommended to store the stock solution at -20 ℃ or -80 ℃ away from light and avoid repetitive freeze-thaw cycles. 1.2 Preparation of 610CP working solution Dilute the stock solution in serum-free cell culture medium to obtain 1-10 μM of working solution. Note: Please adjust the concentration of 610CP working solution according to the actual situation. 2.Cell staining 2.1 Suspension cells (6-well plate) . a.Centrifuge at 1000 g at 4℃ for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time.The cell density is 1×10^6mL. b.Add 1 mL of working solution, and then incubate at room temperature for 30-60 minutes. c.Centrifuge at 400 g at 4℃ for 3-4 minutes and then discard the supernatant. d.Wash twice with PBS, 5 minutes each time. e.Resuspend cells with serum-free cell culture medium or PBS. Observation by fluorescence microscopy or flow cytometry. 2.2 Adherent cells a.Culture adherent cells on sterile coverslips. b.Remove the coverslip from the medium and aspirate excess medium. c.Add 100 μL of working solution, gently shake it to completely cover the cells,and then incubate at room temperature for 30-60 minutes. d.Wash twice with medium, 5 minutes each time. Observation by fluorescence microscopy. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Vladimir N Belov, et al. Synthesis of Fluorescent Jasplakinolide Analogues for Live-Cell STED Microscopy of Actin. J Org Chem. 2020 Jun 5;85(11):7267-7275.

[2]. Vladimir N Belov, et al. Synthesis of Fluorescent Jasplakinolide Analogues for Live-Cell STED Microscopy of Actin. J Org Chem. 2020 Jun 5;85(11):7267-7275.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA