

- **Known Property** exopolysaccharide psl probe
- **Application** Immunofluorescence
- **Cell selectivity mechanism:** COLD (psl exopolysaccharide)

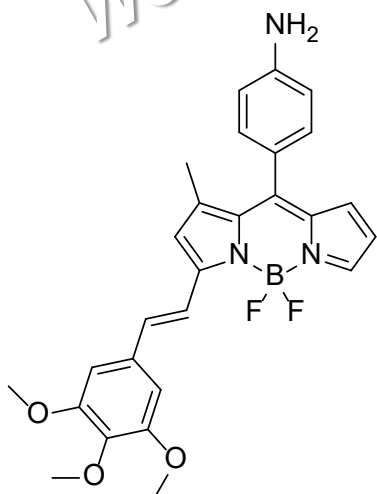
■ General Use Guide

More than 1/100 dilution of 10mM of DMSO stock solution is essential

For biomedical use to avoid DMSO concentration higher than 1%.

Working concentrations for specific applications should be determined by the investigator.

It is recommended to use up the buffer diluted solution within one day. The compound may be decomposed or precipitated out from buffer solution.



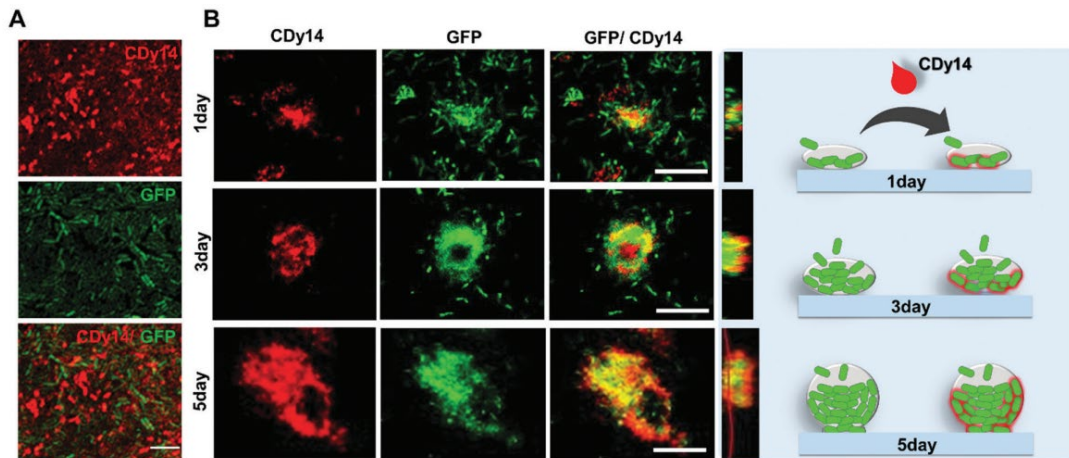
Molecular Weight

489.33 (C₂₇H₂₆BF₂N₃O₃)

$\lambda_{\text{ex}} / \lambda_{\text{em}}$

555 / 580 nm

Bacterial biofilm is a self-generated extracellular polymeric substance (EPS), composed of extracellular DNA, polysaccharides, and proteins such as amyloids. **CDy14** (Compound of Designation yellow 14) is discovered through an unbiased bacterial biofilm screening with cyclic-di-GMP as the biofilm turn-on switch.



Localization of **CDy14** on the biofilm of PAO1-GFP, wild type *P. aeruginosa*. (A) **CDy14** stained extracellular matrix of biofilm with images taken using CLSM or SR-SIM, respectively. Scale bar, 10 mm. (B) The different localizations of **CDy14** on the biofilm are shown at different forming times. PAO1- GFP, wild type *P. aeruginosa*, was cultured in the chamber slide for 1, 3, and 5 days. **CDy14** was applied to the biofilm with different development times. The images were taken using the Nikon confocal microscope. Scale bar, 10 mm. The **CDy14** stain patterns during the biofilm formation are shown in the vertical sectioned images and the schematic figure (blue box)

- Related probes: CDy11, CDr15

Reference

1. **CDy14: a novel biofilm probe targeting exopolysaccharide Psi**, Kwon, H. Y.; Kim, J. Y.; Lee, J. Y.; Yam, J. K. H.; Hultqvist, L. D.; Xu, W.; Rybtke, M.; Tolker-Nielsen, T.; Kim, J. J.; Kang, N. Y.; Yang, L.; Park, S. J.*; Givskov, M.*; Chang, Y. T.* *Chem. Commun.* 2018, 54, 11865-11868.