CDr20
P020
1 μmol

■ **Known Property** microglia selective probe

■ **Application** Immunofluorescence

■ **Cell selectivity mechanism**: MOLD (Ugt1a7c)

■ **Storage** ① Delivery: Room Temperature

② Dried compound: 4 °C or -20 °C

③ Compound solution: 4 °C or -20 °C

■ ORDER

SenPro

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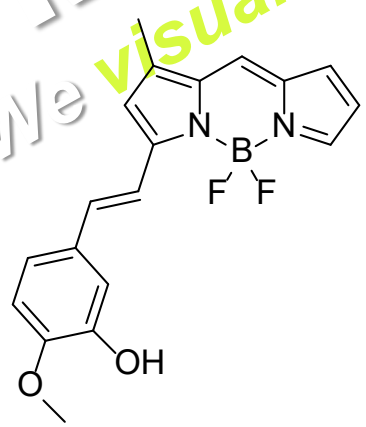
■ General Use Guide

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

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

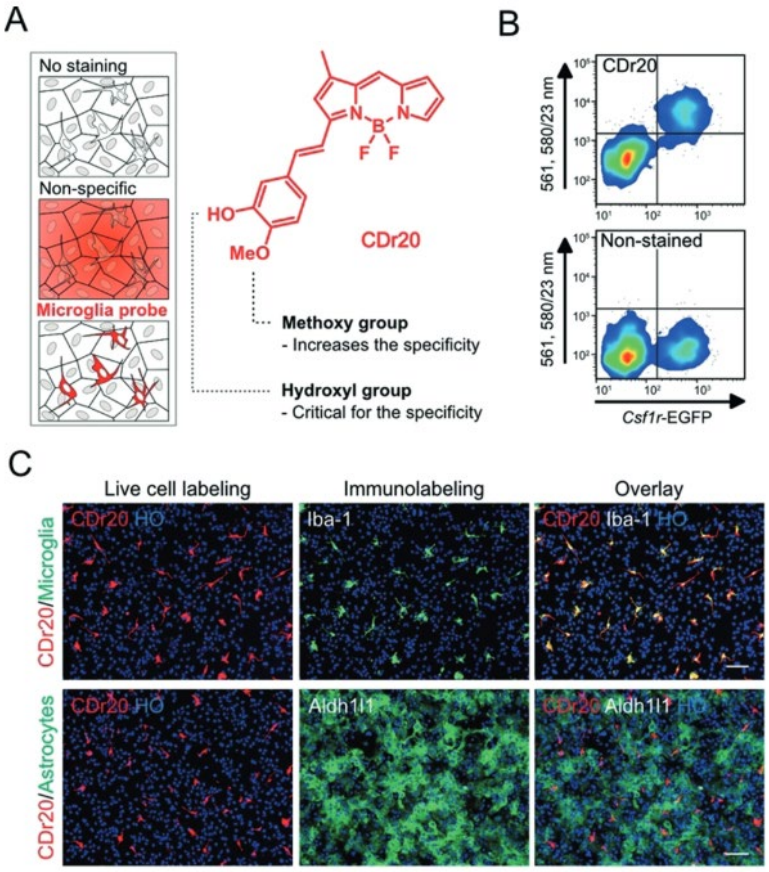
Working concentrations for specific applications should be determined by the investigator.

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	354.16 ($C_{19}H_{17}BF_2N_2O_2$)
λ_{ex} / λ_{em}	568 / 600 nm

CDr20 works both in vitro cell culture and on brain slice. In mouse embryo, **CDr20** penetrated into brain tissue and live microglia was fluorescently stained. Through iv injection, **CDr20** was introduced to Alzheimer mouse brain and the microglia could be in situ imaged by two photon fluorescence microscope.



Identification of **CDr20** as a microglia-specific fluorescent probe. A) Left: Experimental setup. Right: Chemical structure of **CDr20** with the structure–activity relationships. B) Densitometry of non-stained or **CDr20**-stainedCsf1r–EGFP brain cells. C) Superimposed images of **CDr20** live-cell labeling and the indicated immunolabeling in primary cultured glial cells. Scale bars=100μm.

- Related probes: CDr10

Reference

1. **Visualizing Microglia with a Fluorescence Turn-On Ugt1a7c Substrate**, Kim, B.; Fukuda, M.; Lee, J. Y.; Su, D.; Sanu, S.; Silvin, A.; Khoo, A. T. T.; Kwon, T.; Liu, X.; Chi, W.; Liu, X.; Choi, S.; Wan, D. S. Y.; Park, S. J.; Kim, J. S.; Ginhoux, F.; Je, H. S.*; Chang, Y. T.* Angew. Chem. Int. Ed. Engl. 2019, 58, 7972-7976.