
CDg18 M2 Macrophage Stain

<http://www.lumiprobe.com/p/cdg18-m2-macrophage-stain>

CDg18 is a fluorogenic probe for selective labeling of live M2-polarized macrophages. Unlike antibody-based approaches that require fixation or genetic reporters, CDg18 enables direct visualization of viable M2 macrophages in real time, making it suitable for monitoring macrophage polarization and dynamic phenotypic changes. The probe enters cells via fatty acid transporters preferentially expressed in M2 macrophages, providing high selectivity for M2 macrophages relative to M0 and M1 macrophages ^[1].

CDg18 is well suited for live-cell fluorescence microscopy, high-content screening, and flow cytometry. It can be used to study macrophage polarization, tumor-associated macrophages (TAMs), and macrophage reprogramming in cancer and inflammation research. In combination with the M1-selective probe [CDr17](#), CDg18 enables simultaneous dual-color monitoring of M1 and M2 macrophage populations during phenotypic transitions.

[1] J. Am. Chem. Soc. 2023, 145, 5, 2951–2957.

General properties

Appearance: yellow solid

Molecular weight: 536.76

Molecular formula: $C_{33}H_{48}N_2O_4$

Solubility: soluble in organic solvents (DMF, DMSO, dichloromethane), very poorly soluble in water

Quality control: NMR 1H and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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