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LumiCell CDr17 M1 Macrophage Stain

http://www.lumiprobe.com/p/cdr17-m1-macrophage-stain

CDr17 is a selective small-molecule fluorescent probe designed for the identification and tracking of M1 macrophages. The labeling method is based on the higher expression of the GLUT1 transporter in M1 (pro-inflammatory) macrophages compared to M0 (resting) and M2 (anti-inflammatory) macrophages. CDr17 probe is composed of a glucose scaffold and a 2-position Cyanine5 fluorophore, and due to this, it is taken up into cells specifically through the GLUT1 transporter. The CDr17 accumulation is directly proportional to GLUT1 expression levels.

CDr17 has been demonstrated to track M1 macrophages *in vivo* in a rheumatoid arthritis animal model [1].

Excitation maximum is at 649 nm; emission maximum is at 672 nm.

[1] Cho H. et al. Visualizing inflammation with an M1 macrophage selective probe via GLUT1 as the gating target. Nat. Commun. 2022. 13. 5974.

General properties

Appearance:	blue powder
Molecular weight:	745.66
Molecular formula:	$C_{39}H_{52}BF_4N_3O_6$
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 receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.