

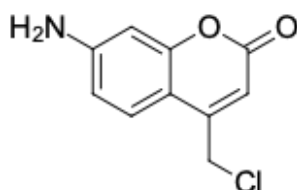
## CytoTracer Blue CMAC

<http://www.lumiprobe.com/p/cmac-celltracker-blue>

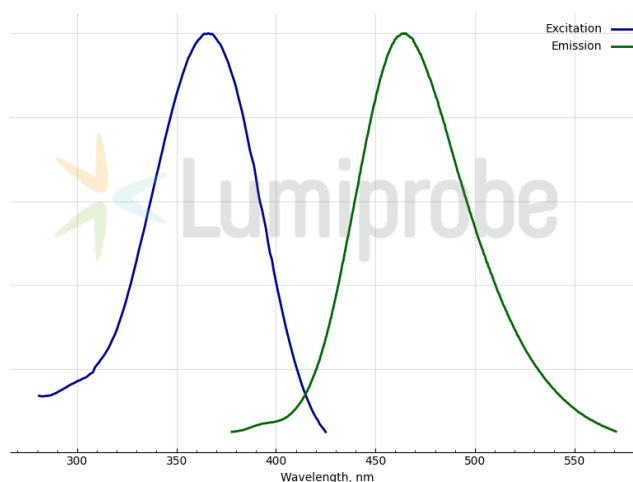
CytoTracer Blue CMAC is a blue fluorescent dye for labeling and long-term tracing of living cells. In working concentrations, the dye has little cytotoxicity and minimal effects on the proliferative ability or biology of the cell. It can be used to analyze cell proliferation, viability, localization, and motility for *in vivo* and *in vitro* assays.

CytoTracer Blue CMAC is a cell-permeant stain that converts into cell-impermeant reaction products inside the cell. During proliferation, the label is transferred to daughter cells, but not adjacent cells in the population, and labeled cells keep the fluorescence for at least 72 hours or through three to six cell generations.

CytoTracer Blue CMAC contains a chloromethyl group that reacts with thiol groups of internal cell components, utilizing a glutathione S-transferase-mediated reaction. This allows the stain to remain in cells after fixation and permeabilization steps and be used for subsequent immunofluorescence applications.



**Structure of CytoTracer Blue CMAC**



**Excitation and emission spectra of CytoTracer Blue CMAC**

### General properties

|                     |  |
|---------------------|--|
| Appearance:         | beige powder   |
| Molecular weight:   | 209.63   |
| CAS number:         | 147963-22-2  |
| Molecular formula:  | C <sub>10</sub> H <sub>8</sub> ClNO <sub>2</sub>   |
| Solubility:         | good in DMSO, DMF  |
| Quality control:    | NMR <sup>1</sup> H 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.  |
| 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. |

### Spectral properties

|                                    |     |
|------------------------------------|-----|
| Excitation/absorption maximum, nm: | 345 |
| Emission maximum, nm:              | 465 |