

FluoriCa-8 AM, green fluorescent calcium indicator

http://hk.lumiprobe.com/p/fluo-8-am

FluoriCa-8 AM is a cell-permeable Ca²⁺-indicator that is metabolized by intracellular esterase, leading to a bright green fluorescent signal upon Ca²⁺-binding (excitation/emission λ at 490/514 nm). FluoriCa-8 AM is used for visualization and quantifying intracellular Ca²⁺. It is well suited for fluorometric and imaging applications such as microscopy, flow cytometry, spectrofluorometry, and fluorometric high-throughput microplate screening assays.

FluoriCa-8 AM is similar in structure and spectral properties to the Ca²⁺ indicators Fluo-3 AM and Fluo-4 AM but has the brightest fluorescence compared to them (two times brighter than Fluo-4 and four times brighter than Fluo-3). The K_d of FluoriCa-8 AM for Ca²⁺ is about 389 nM. With its highest fluorescence intensity, FluoriCa-8 AM is ideal for applications where the concentration of dye loaded into cells is required to be minimized. Unlike Fluo-3 AM and Fluo-4 AM, which require cells to be incubated at 37 °C, FluoriCa-8 AM can be loaded into cells at room temperature.

As FluoriCa-8 AM does not covalently bind to cellular components, it may be actively effluxed from the cell by organic anion transporters. *In vivo* cell imaging with FluoriCa-8 AM is usually performed within one or two hours after loading, but the dye can be re-loaded to cells if it is needed. FluoriCa-8 AM can also be fixed *in situ* by <u>EDC/EDAC</u> for downstream immunofluorescence studies.

FluoriCa-8 AM has low solubility in the water. It is recommended to prepare 1 mM stock solution in <u>labeling grade DMSO</u> prior to cell loading. Use the final concentration of $1-5 \mu$ M and incubation at RT for 15-60 min as a start point of your protocol.

FluoriCa-8 AM solutions in DMSO may be stored at -20 °C for up to 2 months.



外观:

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| 分子量: | 1060.97 |
| CAS 编号: | 1345980-40-6 |
| 分子式: | $C_{51}H_{52}N_2O_{23}$ |
| 溶解度: | |
| 质量控制: | |
| 储存条件: | |
| 法律声明: | 本產品僅供研究目 力測試,且未經明 業用途。 |
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