

Indo-1, AM Ester

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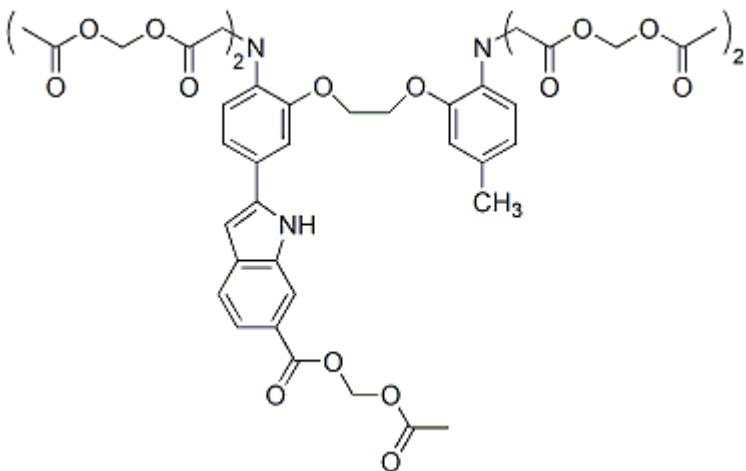
Product attributes

| | |
|---------------------|---|
| CAS number | 112926-02-0 |
| Cell permeability | Membrane permeant |
| Indicator type | Ratiometric |
| Excitation/Emission | 349/482 nm (no Ca ²⁺); 331/398 nm (high Ca ²⁺) (after hydrolysis) |

Product Description

Indo-1, AM ester is membrane-permeant and thus can be loaded into cells via incubation. Because of the relatively low water solubility of the AM ester, the mild detergent [Pluronic® F-127 \(cat# 59004\)](#) is often used as a dispersing agent to facilitate cell loading. Indo-1-AM Ester itself does not bind Ca²⁺, but it is readily hydrolyzed to indo-1 by endogenous esterases once it enters cells. For more information on indo-1, see [cat# 50040](#).

- Light yellow solid soluble in DMSO
- Store desiccated at -20°C and protect from light, especially in solution
- C₄₇H₅₁N₃O₂₂
- MW: 1010
- [112926-02-0]



BAPTA-based ion indicators like Indo-1 have been shown to be fixable in situ by [EDC/EDAC \(cat# 59002\)](#). The fixation of indicator dyes is useful for downstream immunofluorescence and IHC studies ([Cell Calcium 1997, 21\(3\), 175](#)).

As the indicator does not covalently bind to cellular components, it may be actively effluxed from the cell by organic anion transporters. The rate of efflux increases with temperature, and may vary between cell types, resulting in variable retention times of a few minutes to hours. Experiments using indicators in cells usually are performed within one or two hours of loading, but it may be possible to re-load cells with indicator if needed. The organic anion transporter inhibitor [Probenecid \(#50027\)](#) can be used to slow the rate of indicator efflux from cells.

Pluronic is a registered trademark of BASF.

References

1. J Neurophysiol 67, 704 (1992), [DOI: 10.1152/jn.1992.67.3.704](https://doi.org/10.1152/jn.1992.67.3.704)
2. J Biol Chem 262, 15041 (1987), [PMID: 3667622](https://pubmed.ncbi.nlm.nih.gov/3667622/)
3. J. Biol. Chem. 261, 9710 (1986), [PMID: 3755432](https://pubmed.ncbi.nlm.nih.gov/3755432/)
4. Methods Cell Biol, 99, 113, (2021), [DOI: 10.1016/B978-0-12-374841-6.00005-0](https://doi.org/10.1016/B978-0-12-374841-6.00005-0)