

DMNP-EDTA (Caged Calcium), AM Ester

The membrane-permeant form of DMNP-EDTA (also known as DM-Nitrophen™), a photolabile calcium chelator that can be used to release a pulse of calcium when exposed to light.



Product attributes

Cell permeability

Membrane permeant

Product Description

DMNP-EDTA (Caged Calcium), AM Ester is the membrane-permeant form of DMNP-EDTA (also known as DM-Nitrophen™), a photolabile calcium chelator that can be used to release a pulse of calcium when exposed to light. Upon photolysis, the K_d of DMNP-EDTA for calcium increases from 5 nM to 3 mM. DMNP-EDTA may also be useful for caged magnesium studies, with a K_d for magnesium of 2.5 μ M.

This AM ester form of DMNP-EDTA can be loaded into cells via incubation, making it useful in live cell studies. Once inside the cell, intracellular esterases, found in almost all cell types, will hydrolyze the AM group. The resulting AM ester compound is then contained inside the cell and can accumulate. Biotium also offers the non-AM ester, membrane-impermeant form of [DMNP-EDTA \(Caged Calcium\)](#).

- Pale yellow semi-solid soluble in DMSO
- Store desiccated at -20°C and protect from light
- Stock solutions in DMSO are stable for at least 6 months when stored at -20°C, desiccated and protected from light.
- $C_{30}H_{39}N_3O_{20}$
- MW: 762

[View our full selection of calcium and other ion indicators and chelators.](#)

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