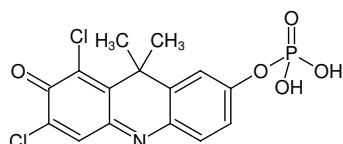




DDAO Phosphate

9H-(1,3-Dichloro-9,9-dimethylacridin-2-one-7-yl) phosphate, Bis(triethylammonium) salt

Cat. No.	Amount
APC-001-1	1 mg
APC-001-5	5 x 1 mg



Structural formula of DDAO Phosphate

For research use only!

Shipping: shipped at ambient temperature

Storage Conditions: store at -20 °C

Additional Storage Conditions: store dark

Shelf Life: 12 months after date of delivery

Molecular Formula: C₁₅H₁₂Cl₂NO₅P (free acid)

Molecular Weight: 388.14 g/mol (free acid)

CAS#: 500883-59-0

Purity: > 95 % (HPLC)

Form: solid

Spectroscopic Properties: λ_{exc} 477 nm; λ_{em} 628 nm;
ε 26.0 L mmol⁻¹ cm⁻¹ (50 mM Potassium Phosphate pH 7.0)

Description:

DDAO-phosphate is a long-wavelength, phosphatase substrate for both solution-based assays^[1,2] and the amplified detection of specific targets on blots^[3,4]. Hydrolysis of the phosphate bond yields a brightly red-fluorescent product with absorption/emission maxima of 646/659 nm that is efficiently excited by the 633 nm spectral line of the He-Ne laser. The shift of emission maxima between DDAO-phosphate and the dephosphorylated product is larger than 200 nm and permits both species to be easily distinguished. DDAO phosphate has good water solubility, a low K_M and a high turnover rate.

Selected References:

- [1] Leira *et al.* (2000) Characterization of 9H-(1,3-dichloro-9,9-dimethylacridin-2-one-7-yl)-phosphate (DDAO) as substrate of PP-2A in a fluorimetric micro-plate assay for diarrhetic shellfish toxins (DSP). *Toxicon* **38**:1833.
- [2] Stratis-Cullum *et al.* (2003) A miniature biochip system for detection of aerosolized *Bacillus globigii* spores. *Anal. Chem.* **75**:275.
- [3] Pretty *et al.* (2001) Green/red dual fluorescence detection of total protein and alkaline phosphate-conjugated probes on blotting membranes. *Electrophoresis* **22**:896.
- [4] Kurien *et al.* (2015) Other notable methods of membrane protein detection: A brief review. *Detection of Blotted Proteins, Springer Chapter 36*:357.