

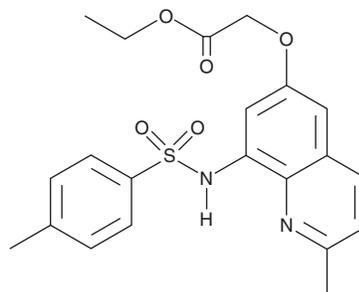
PRODUCT INFORMATION



Zinquin ethyl ester

Item No. 15133

CAS Registry No.: 181530-09-6
Formal Name: 2-[[2-methyl-8-[[[4-methylphenyl]sulfonyl]amino]-6-quinolinyl]oxy]acetic acid, ethyl ester
MF: C₂₁H₂₂N₂O₅S
FW: 414.5
Purity: ≥98%
UV/Vis.: λ_{max}: 212, 244, 336 nm
Ex./Em. Max: 368/490 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Zinquin ethyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the zinquin ethyl ester in the solvent of choice, which should be purged with an inert gas. Zinquin ethyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of zinquin ethyl ester in these solvents is approximately 0.5, 25, and 30 mg/ml, respectively.

Description

Zinquin ethyl ester is a cell-permeable, quinolone-based fluorescent probe used as a zinc indicator.¹ In live cells, cytosolic esterases cleave the ethyl ester group preventing its efflux across the plasma membrane.² This probe is UV-excitable and emits in the blue region of the spectrum (excitation 368 nm, emission 490 nm).² Zinquin ethyl ester has been used to monitor intracellular zinc fluxes associated with apoptosis.³

References

1. Sabnis, R.W. *Handbook of biological dyes and stains: Synthesis and industrial applications*. John Wiley & Sons, Inc., Hoboken, NJ, USA (2010).
2. Nowakowski, A.B. and Petering, D.H. Reactions of the fluorescent sensor, zinquin, with the zinc-proteome: Adduct formation and ligand substitution. *Inorg. Chem.* **50(20)**, 10124-10133 (2011).
3. Helmersson, A., von Arnold, S., and Bozhkov, P.V. The level of free intracellular zinc mediates programmed cell death/cell survival decisions in plant embryos. *Plant Physiol.* **147(3)**, 1158-1167 (2008).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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