

PRODUCT INFORMATION

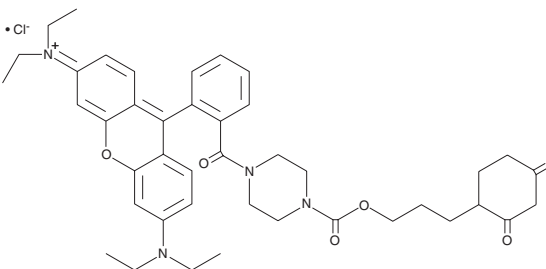


DCP-Rho1

Item No. 13194

CAS Registry No.: 1001575-98-9
Formal Name: 3,6-bis(diethylamino)-9-[2-[[4-[[3-(2,4-dioxocyclohexyl)propoxy] carbonyl]-1-piperazinyl]carbonyl] phenyl]-xanthylium, monochloride

MF: C₄₂H₅₁N₄O₆ • Cl
FW: 743.3
Purity: ≥98%
UV/Vis.: λ_{max}: 258, 562 nm
Ex./Em. Max: 560/581 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

DCP-Rho1 is supplied as a crystalline solid. A stock solution may be made by dissolving the DCP-Rho1 in the solvent of choice, which should be purged with an inert gas. DCP-Rho1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of DCP-Rho1 in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

DCP-Rho1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DCP-Rho1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. DCP-Rho1 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

DCP-Rho1 is a fluorescent probe for the detection of sulfenic acid-containing proteins.^{1,2} It displays excitation/emission maxima of 560/581 nm, respectively, and has been used to visualize protein oxidation sites *in situ*.

References

1. Klomsiri, C., Rogers, L.C., Soito, L., *et al.* Endosomal H₂O₂ production leads to localized cysteine sulfenic acid formation on proteins during lysophosphatidic acid-mediated cell signaling. *Free Rad. Biol. Med.* **71**, 49-60 (2014).
2. Holmila, R.J., Vance, S.A., Chen, X., *et al.* Mitochondria-targeted probes for imaging protein sulfenylation. *Sci. Rep.* **8(1)**, 6635 (2018).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM