

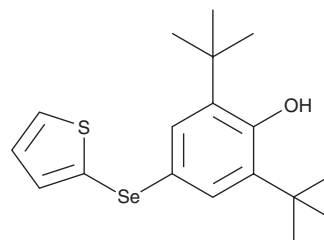
PRODUCT INFORMATION



RC574

Item No. 31408

CAS Registry No.: 2584411-87-8
Formal Name: 2,6-bis(1,1-dimethylethyl)-4-(2-thienylseleno)-phenol
MF: C₁₈H₂₄OSse
FW: 367.4
Purity: ≥98%
UV/Vis.: λ_{max}: 239 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

RC574 is supplied as a crystalline solid. A stock solution may be made by dissolving the RC574 in the solvent of choice, which should be purged with an inert gas. RC574 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RC574 is approximately 30 mg/ml in ethanol and DMSO and approximately 20 mg/ml in DMF.

Description

RC574 is an inhibitor of ferroptosis and a derivative of the antioxidant and hypocholesterolemic agent probucol (Item No. 15043).¹ It inhibits glutamate-induced cell death in HT22 cells (IC₅₀ = 276.2 nM) and mouse primary cortical neurons when used at a concentration of 3 μM. RC574 (3 μM) increases glutathione peroxidase 1 (GPX1) levels and GPX activity, as well as inhibits glutamate-induced mitochondrial superoxide anion production, in HT22 cells. It completely inhibits ferroptosis induced by the GPX4 inhibitor RSL3 in HT22 cells when used at concentrations ranging from 62.5 to 1,000 nM.

Reference

1. Bueno, D.C., Canto, R.F.S., de Souza, V., *et al.* New probucol analogues inhibit ferroptosis, improve mitochondrial parameters, and induce glutathione peroxidase in HT22 cells. *Mol. Neurobiol.* **57**(8), 3273-3290 (2020).

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.

WARRANTY AND LIMITATION OF REMEDY
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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