

Product Data Sheet

Product Name: RC363
Cat. No.: GC48029

Chemical Properties

Cas. No. 2584411-86-7

SMILES OC1=C(C(C)(C)C)C=C(SC2=CC=CS2)C=C1C(C)(C)C

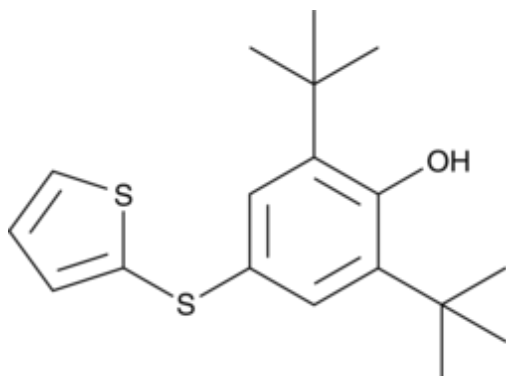
Formula C₁₈H₂₄OS₂ M.Wt 320.5

Solubility DMF: 30 mg/ml, DMSO: 30 mg/ml, Ethanol: 30 mg/ml, Ethanol: PBS (pH 7.2) (1:1): insoluble, PBS (pH 7.2): insoluble
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

RC363 is an inhibitor of ferroptosis and a derivative of the antioxidant and hypocholesterolemic agent probucol.¹ It reduces 2,2-diphenyl-1-picrylhydrazyl radicals by approximately 40% in a cell-free assay when used at a concentration of 25 µM. RC363 prevents glutamate-induced toxicity in HT22 cultured hippocampal cells (IC₅₀ = 234.5 nM) but does not reduce oxidant levels in these cells. It increases the levels of glutathione peroxidase 1 (GPX1) and the activity of GPX in glutamate-challenged HT22 cells when used at a concentration of 3 µM. RC363 inhibits ferroptosis induced by

Caution: Product has not been fully validated for medical applications. For research use only.

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the GPX4 inhibitor RSL3 in HT22 cells ($IC_{50} = 173.6$ nM).

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)

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