

4-Octyl Itaconate

Cat. # F5270-10, F5270-50

Also Known as: N/A
Formula: $C_{13}H_{22}O_4$
MW: 242.3 g/mol
CAS No.: 3133-16-2
Source: Synthetic
Form: Powder
Solubility: Soluble in DMSO up to 40 mg/mL. Insoluble in water.
Preparation of Stocks in DMSO: 10 mg/mL = 41.3 mM

Quality Assurance: >98% purity assayed by HPLC and NMR.

Description: 4-Octyl Itaconate is a cell-permeable derivative of itaconate, an endogenous metabolite produced during the TCA cycle. 4-octyl Itaconate targets KEAP1 to prevent Nrf2 degradation, thereby exhibiting antioxidative and anti-inflammatory activities.

Storage: Eligible for room temperature shipping. Store at -20°C upon receiving. Avoid multiple freeze-thaw cycles after dissolving in DMSO.

Literature: 1. Mills E.L., et al. Nature. 2018, 556, 113.