

AI-1, Nrf2 activator

Catalog	Unit
TBI1471-5MG	5 mg
TBI1471-25MG	25 mg

Product Details

Formal Name: 4-Chloro-1,2-dihydro-1-methyl-2-oxo-3-quinolinecarboxylic acid ethyl ester

Molecular Formula: C₁₃H₁₂ClNO₃

Formula Weight: 265.70

CAS Number: 75483-04-4

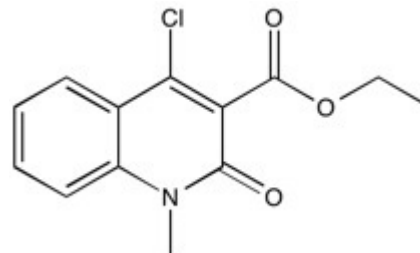
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 15 mg/ml).

Storage: -20°C

Stability: ≥ 2 years.



Applications

Nrf2 activator

Functions

A novel antioxidant response element (ARE) activator which activates Nrf2 by covalently modifying Keap1 (Kelch-like ECH-associated protein 1) a negative regulator of Nrf2. Modification of Cys151 of Keap1 by AI-1 disrupts the ability of Keap1 to serve as an adaptor for Cul3-Keap1 ubiquitin ligase complex, thereby stabilizing and inducing transcriptional activation of Nrf2. A useful pharmacological tool for probing the involvement of Nrf2 in cellular physiology. Cell permeable.

Application Procedures

First dissolved in DMSO (up to 15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° for up to 3 months.

For research use only.