
Catalog	Unit
TBI1417-5MG	5 mg
TBI1417-25MG	25 mg

Product Details

Formal Name: (2,4,6-Trichlorophenoxy)-acetic acid (1H-pyrrol-2-ylmethylene)-hydrazide

Molecular Formula: C₁₃H₁₀Cl₃N₃O₂

Formula Weight: 346.60

CAS Number: 1378872-36-6

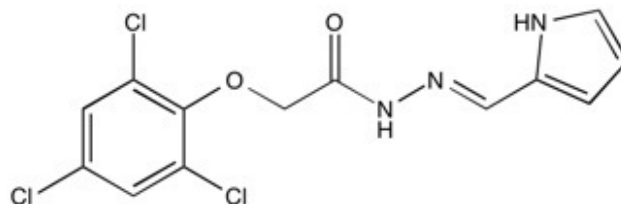
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 25 mg/ml), in DMF (up to 25 mg/ml), or in Ethanol (up to 25 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Selective cancer stem cell killer

Functions

A novel inhibitor of the growth and proliferation of breast cancer stem cells (CSC) discovered in a phenotypic screen employing CSC-like cells produced by inducing human breast epithelial cells into an epithelial-to-mesenchymal transdifferentiated state (HMLE_sh_ECad). ML239 displayed an IC₅₀=1.18 μM against HMLE_sh_ECad and demonstrated a >23-fold selectivity over control cells. It was also toxic to two other CSC-like lines. Gene expression studies showed altered gene expression in the NFκB pathway and support activation of fatty acid desaturase 2 (FADS2) as a potential mechanism of action for ML239.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml), in DMF (up to 25 mg/ml), or in Ethanol (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO, DMF or ethanol may be stored at -20° for up to 3 months.

For research use only.