

PRODUCT INFORMATION



ML-239

Item No. 15188

CAS Registry No.: 1378872-36-6
Formal Name: 2-(2,4,6-trichlorophenoxy)-acetic acid, (2E)-2-(1H-pyrrol-2-ylmethylene)hydrazide

Synonym: CID-49843203

MF: C₁₃H₁₀Cl₃N₃O₂

FW: 346.6

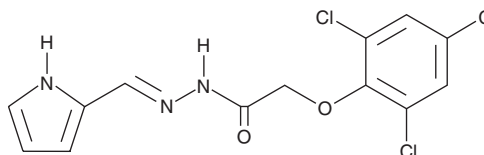
Purity: ≥98%

UV/Vis.: λ_{max}: 314 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

ML-239 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-239 in the solvent of choice, which should be purged with an inert gas. ML-239 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Description

ML-239 is an inhibitor of cancer stem cells, displaying greater than 23-fold selective inhibition of a breast cancer stem cell-like cell line (EC₅₀ = 1.18 μM) over an isogenic control cell line (EC₅₀ = 27.6 μM).¹⁻³ It is also toxic to the breast carcinoma cell line MDA-MB-231.¹ ML-239 alters the expression of genes in the MAPK, NF-κB, and inflammatory cytokine pathways.^{1,3} It is stable in saline and modestly stable in human plasma.²

References

1. Carmody, L.C., Germain, A.R., VerPlank, L., *et al.* Phenotypic high-throughput screening elucidates target pathway in breast cancer stem cell-like cells. *J. Biomol. Screen.* **17(9)**, 1204-1210 (2012).
2. Germain, A.R., Carmody, L.C., Morgan, B., *et al.* Identification of a selective small molecule inhibitor of breast cancer stem cells. *Bioorg. Med. Chem. Lett.* **22(10)**, 3571-3574 (2012).
3. Carmody, L., Garman, A., Morgan, B., *et al.* Identification of a selective small-molecule inhibitor of breast cancer stem cells, in Probe Reports from the NIH Molecular Libraries Program, Probe 1, 1 (2011).

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.

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