

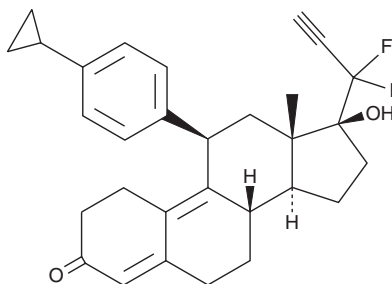
PRODUCT INFORMATION



EC330

Item No. 37551

CAS Registry No.: 2016795-77-8
Formal Name: (11 β ,17 β)-11-(4-cyclopropylphenyl)-17-(1,1-difluoro-2-propyn-1-yl)-17-hydroxy-estra-4,9-dien-3-one
MF: C₃₀H₃₂F₂O₂
FW: 462.6
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

EC330 is supplied as a solid. A stock solution may be made by dissolving the EC330 in the solvent of choice, which should be purged with an inert gas. EC330 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of EC330 in ethanol is approximately 20 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Description

EC330 is an inhibitor of leukemia inhibitory factor (LIF) activity.¹ It binds to the LIF receptor (LIFR) and is selectively cytotoxic to MCF-7 cells ectopically overexpressing LIF (IC₅₀ = 0.075 μ M) over non-LIF-overexpressing MCF-7 cells (IC₅₀ = 0.245 μ M). EC330 reduces ectopic LIF expression-induced increases in the migration of MCF-7 and MDA-MB-231 cells when used at concentrations of 5 and 15 nM, respectively. It also induces ferroptosis in 293T and 786-O cells and reduces the levels of glutathione (GSH) and the intracellular activity of glutathione peroxidase (GPX) *in vitro*.² EC330 (1 mg/kg) reduces tumor burden to a greater extent in a mouse xenograft model using MDA-MB-231 cells with ectopic LIF expression than when using MDA-MB-231 cells without ectopic LIF expression.¹

References

1. Yue, X., Wu, F., Wang, J., *et al.* EC330, a small-molecule compound, is a potential novel inhibitor of LIF signaling. *J. Mol. Cell Biol.* **12(6)**, 477-480 (2020).
2. Feng, C.-Z., Li, N.-Z., Hu, X.-B., *et al.* The LIFR-targeting small molecules EC330/EC359 are potent ferroptosis inducers. *Genes Dis.* **10(3)**, 735-738 (2022).

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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