

Data Sheet

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 Product Name
 :
 HZX-02-059

 Cat. No.
 :
 PC-47003

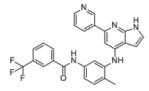
 CAS No.
 :
 2240205-30-3

 Molecular Formula
 :
 C₂₇H₂₀F₃N₅O

 Molecular Weight
 :
 487.486

 Target
 :
 PIKfyve

Solubility : 10 mM in DMSO



Biological Activity

HZX-02-059 (Methuosis inducer 1) is a **PIKfyve** and **tubulin** dual-target inhibitor with high affinity for **PIKfyve** (Kd=10.4 nM), HZX-02-059 is a potent methuosis inducer, shows both in vitro and in vivo anti-tumor activity against TNBC. HZX-02-059 exerts anti-proliferative action of DHL cells in a dose- and time-dependent manner, including Will-2, LR, and TMD8 cells (IC50=150-350 nM, 48 h).

HZX-02-059 induces a caspase-independent cell death in DHL cells. HZX-02-059 triggers non-apoptotic cell death of methuosis as a result of PIKfyve/TFEB inhibition.

HZX-02-059-induced cell cycle arrest is mechanistically associated with the inhibition of tubulin and mTOR/Myc axis. HZX-02-059 (20 mg/kg, i.p.) suppresses growth of xenograft derived from DHL cells with a low systemic toxicity profile.

References

Liying Feng, et al. Cell Death Discov. 2022 Jan 28;8(1):39.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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