

Product Datasheet

TH-302

Catalog No. **BP-02102** · CAS **918633-87-1** · Form **free base** · Physical state **other** · Version **1.0** · Revision **2026-09-14**

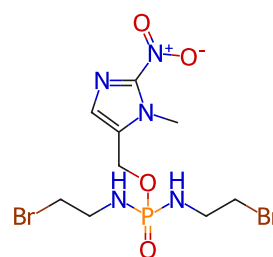
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Target Apoptosis	Research area Cancer
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Molecular formula **C₉H₁₆Br₂N₅O₄P**

Molecular weight **449.0360**

STRUCTURE



DESCRIPTION

Evofofosamide (TH-302) is a hypoxia-activated proagent with IC₅₀ of 10 μM and 1000 μM in hypoxia (N₂) and normoxia (21% O₂), respectively.

BIOLOGICAL ACTIVITY

TH-302 is a 2-nitroimidazole triggered hypoxia-activated precursor of the cytotoxin bromo-isophosphoramidate mustard (Br-IPM). TH-302 inhibits H460 cells and HT29 cells with IC₉₀ of 0.1 μM and 0.2 μM, respectively. TH-302 exhibits potent cytotoxicity to both human and murine MM cells with hypoxic selectivity and dose dependency, and induces G₀/G₁ cell-cycle arrest under hypoxic conditions. TH-302 treatment resulted in a reduction in the volume of the HF 48 hours after dosing and a corresponding increase in the necrotic fraction.

SOLUBILITY

Soluble in DMSO/water

In vitro DMSO : 94 mg/mL H₂O : 4.35 mg/mL

REFERENCES

- [1]. Meng F, et al. Enhancement of hypoxia-activated prodrug TH-302 anti-tumor activity by Chk1 inhibition. BMC Cancer. 2015 May 21;15:422.
- [2]. Zhang X, et al. MR Imaging Biomarkers to Monitor Early Response to Hypoxia-Activated Prodrug TH-302 in Pancreatic Cancer Xenografts. PLoS One. 2016 May 26;11(5):e0155289.
- [3]. Peeters SG, et al. TH-302 in Combination with Radiotherapy Enhances the Therapeutic Outcome and Is Associated with Pretreatment [18F]HX4 Hypoxia PET Imaging. Clin Cancer Res. 2015 Jul 1;21(13):2984-92.

Lot CoA and SDS are separate documents.