

Product Datasheet

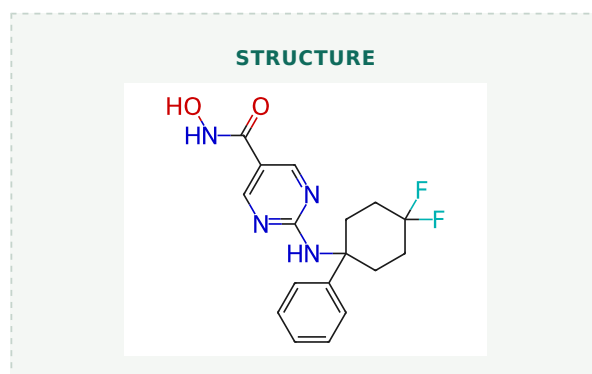
ACY-1083

Catalog No. **BP-01925** · CAS **1708113-43-2** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-03**

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Target HDAC	Research area Cancer
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Molecular formula	C₁₇H₁₈F₂N₄O₂
Molecular weight	348.3472



DESCRIPTION

ACY-1083 is a selective and brain-penetrating HDAC6 inhibitor with an IC₅₀ of 3 nM and is 260-fold more selective for HDAC6 than all other classes of HDAC isoforms. ACY-1083 effectively reverses chemotherapy-induced peripheral neuropathy.

BIOLOGICAL ACTIVITY

In Vitro

Treatment with ACY-1083 (30 and 300 nM) significantly improves cell viability in a dose-dependent manner.

In Vivo

ACY-1083 (i.p.; 10 mg/kg; for 7 days) effectively relieves Cisplatin-induced mechanical allodynia in C57BL/6J mice. ACY-1083 (oral doses of 3 mg/kg ACY-1083 for 7 days) reverses Paclitaxel-induced mechanical allodynia in adult male SD rats.

Mice dosed with 5 mg/kg ACY-1083 by intraperitoneal (i.p.) injection have a maximum plasma concentration (C_{max}) of 936 ng/mL, a half-life (T_{1/2}) of 3.5 hours, and a biologically active plasma exposure of 8 hours after dosing.

SOLUBILITY

Soluble in DMSO : 100 mg/mL

REFERENCES

- [1]. Krukowski K, et al. HDAC6 inhibition effectively reverses chemotherapy-induced peripheral neuropathy. Pain. 2017 Jun;158(6):1126-1137.
- [2]. Vahagn C Nikolian, et al. Isoform 6-selective histone deacetylase inhibition reduces lesion size and brain swelling following traumatic brain injury and hemorrhagic shock. J Trauma Acute Care Surg. 2019 Feb;86(2):232-

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Lot CoA and SDS are separate documents.