

## Tefinostat

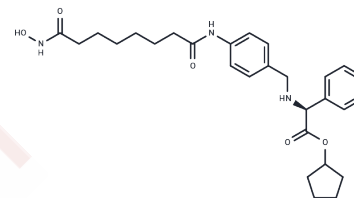
## Chemical Properties

CAS No. : 914382-60-8

Formula: C<sub>28</sub>H<sub>37</sub>N<sub>3</sub>O<sub>5</sub>

Molecular Weight: 495.61

Storage: Store at low temperature, Keep away from direct sunlight  
 Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
*Actual storage temperature shall be subject to the COA.*



## Biological Description

Description	Tefinostat (CHR-2845) is a potent monocyte/macrophage-targeted histone deacetylase (HDAC) inhibitor that is cleaved to the active acid CHR-2847 by intracellular esterase human carboxylesterase-1 (hCE-1). Tefinostat exhibits antitumor activity and can be used in the study of leukemia and advanced hematologic malignancies.
Targets(IC50)	Apoptosis,HDAC
In vitro	Tefinostat (1-4 nM; AML cell lines) demonstrates efficacy in AML cell lines, including HL60 (M2 FAB type), MV411 (M4, FLT3-ITD), OCIAML3 (M4 NPM1mut), and THP1 (M5), with EC50 values of 2.3 μM, 57 nM, 110 nM, and 560 nM, respectively.

## Solubility Information

Solubility	DMSO: 90 mg/mL (181.59 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (6.66 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.0177 mL	10.0886 mL	20.1772 mL
5 mM	0.4035 mL	2.0177 mL	4.0354 mL
10 mM	0.2018 mL	1.0089 mL	2.0177 mL
50 mM	0.0404 mL	0.2018 mL	0.4035 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Zabkiewicz J, et al. The targeted histone deacetylase inhibitor tefinostat (CHR-2845) shows selective in vitro efficacy in monocytoid-lineage leukaemias. *Oncotarget*. 2016 Mar 29;7(13):16650-62.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481