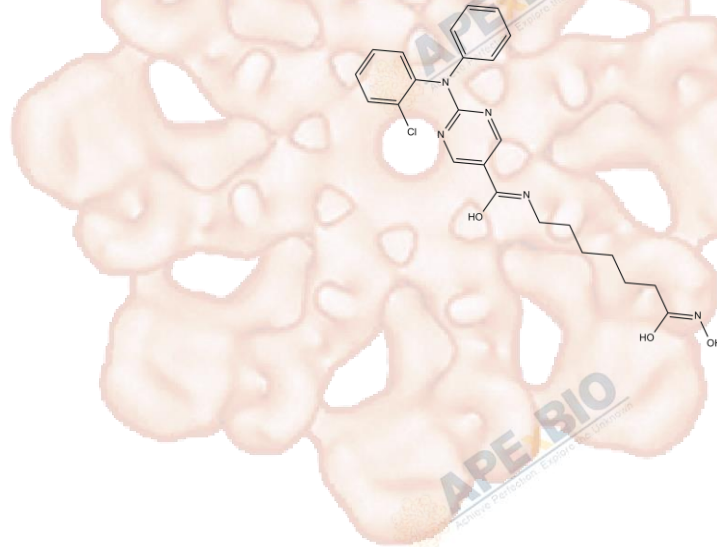


Product Data Sheet

ACY-241

Cat. No.:	B5936
CAS No.:	1316215-12-9
Formula:	C ₂₄ H ₂₆ ClN ₅ O ₃
M.Wt:	467.95
Synonyms:	
Target:	Chromatin/Epigenetics
Pathway:	HDAC
Storage:	Store at -20°C



Solvent & Solubility

≥23.4 mg/mL in DMSO; insoluble in H₂O; ≥4.87 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.1370 mL	10.6849 mL	21.3698 mL
	5 mM	0.4274 mL	2.1370 mL	4.2740 mL
	10 mM	0.2137 mL	1.0685 mL	2.1370 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Selective and orally active HDAC6 inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	A2780 ovarian cancer cells
Preparation method:	The solubility of this compound in DMSO is >23.4mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	0.1, 0.3, 0.5, 1. 3 μM; dissolved in DMSO; 24 h

	Applications:	In A2780 ovarian cancer cells, ACY-241 (0.3 μ M) increased hyperacetylation of α -tubulin, consistent with inhibition of the tubulin deacetylase HDAC6. Hyperacetylation of histone H3, a target of Class I HDACs, was only observed at doses above 1 μ M. ACY-241 preferentially induced hyperacetylation of α -tubulin relative to H3K56.
In Vivo	Animal experiment	
	Animal models:	female athymic nude mice bearing MiaPaCa-2 pancreatic cancer xenografts
	Dosage form:	ACY-241: 50 mg/kg once daily for five days, followed by two days off, for three consecutive weeks; intraperitoneal injection Paclitaxel: 10 mg/kg once daily for five consecutive days; intraperitoneal injection
	Applications:	In female athymic nude mice bearing MiaPaCa-2 pancreatic cancer xenografts, ACY-241 (50 mg/kg) plus paclitaxel (10 mg/kg) inhibited tumor growth and did not result in body weight loss. ACY-241 was well tolerated in mice when dosed as a single agent and in combination with paclitaxel.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Huang P, Almeciga-Pinto I, Jordan M, et al. Selective HDAC inhibition by ACY-241 enhances the activity of paclitaxel in solid tumor models. In: Proceedings of the 2015 AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics; 2015 Nov 5-9; Boston, Massachusetts. Philadelphia (PA): AACR

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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