

Product Data Sheet

BPTES

Cat. No.:	B6008
CAS No.:	314045-39-1
Formula:	C ₂₄ H ₂₄ N ₆ O ₂ S ₃
M.Wt:	524.68
Synonyms:	
Target:	Others
Pathway:	Others
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; insoluble in EtOH; ≥18 mg/mL in DMSO

In Vitro

	Solvent	Mass Concentration	Mass		
			1mg	5mg	10mg
Preparing Stock Solutions		1 mM	1.9059 mL	9.5296 mL	19.0592 mL
		5 mM	0.3812 mL	1.9059 mL	3.8118 mL
		10 mM	0.1906 mL	0.9530 mL	1.9059 mL

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

Biological Activity

Shortsummary

GLS inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	AML cells
Preparation method:	The solubility of this compound in DMSO is > 18 mg/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:	20 or 40 μM

	Applications:	After being exposed to 20 μ M BPTES for 4 days, all IDH1-mutant AML cells were reduced approximately by 50%. The doses of 20 μ M and 40 μ M exhibited similar effects. However, BPTES did not significantly affect the growth of wild type AML cells. According to the mass spectrometry analysis, BPTES did not significantly change α -KG or 2-HG levels in IDH-mutant or wild type AML cells.
In Vivo	Animal experiment	
	Animal models:	Mice harboring P493 tumor xenografts
	Dosage form:	200 μ g; i.p.; every 3 days for 10 days
	Applications:	In mice harboring P493 tumor xenografts, BPTES reduced tumor growth by approximately 50% over a 10-day treatment period. However, BPTES did not inhibit the growth of P493 xenografts expressing wild type GLS or BPTES-resistant mutant GLS K325A. According to the metabolic analysis of P493 xenografts, BPTES treatment increased tumor glutamine levels and decreased glutamate levels.
	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]. Emadi A, Jun SA, Tsukamoto T, et al. Inhibition of glutaminase selectively suppresses the growth of primary acute myeloid leukemia cells with IDH mutations. *Experimental hematology*, 2014, 42(4): 247-251.
- [2]. Xiang Y, Stine ZE, Xia J, Lu Y, O'Connor RS, Altman BJ, Hsieh AL, Gouw AM, Thomas AG, Gao P, Sun L, Song L, Yan B, Slusher BS, Zhuo J, Ooi LL, Lee CG, Mancuso A, McCallion AS, Le A, Milone MC, Rayport S, Felsher DW, Dang CV. Targeted inhibition of tumor-specific glutaminase diminishes cell-autonomous tumorigenesis. *J Clin Invest*. 2015 Jun;125(6):2293-306.

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 APExBIO 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.



APEx BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

