InterBioTech

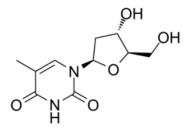


2'-deoxythymidine

Specific precursor of deoxyribonucleic acid, used as a cell synchronizing agent. Thymidine is a **DNA synthesis** inhibitor that can arrest cell at G1/S boundary, prior to DNA replication.

Product Description

Catalog #: Name:	B2V0E0, 25g 2'-deoxythymidine		
	Thymine		
	Purity : >99%		
	CAS: [50-89-5]		
	MW: 242.23		
	$C_{10}H_{14}N_2O_5$		
Storage:	Powder	-20°C	3 years
_		$+4^{\circ}C$	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



Technical and Scientific Information

Thymidine, a specific precursor of deoxyribonucleic acid, is used as a cell synchronizing agent. Thymidine is a DNA synthesis inhibitor that can arrest cell at G1/S boundary, prior to DNA replication^{[1][2][3]}.

In Vitro

DMSO : 50 mg/mL (206.42 mM; Need ultrasonic) H₂O : 33.33 mg/mL (137.60 mM; Need ultrasonic)

In Vivo

Thymidine (500 mg/kg; i.p.; twice a day) completely reverses both Methotrexate- and Tomudex-induced deletion of both CD4+V β 8+ and CD8+V β 8+ T cells ^[3].

References

[1]. Chen G, et al. Cell Synchronization by Double Thymidine Block. Bio Protoc. 2018 Sep 5;8(17).

[2]. FIRKET H, et al. Autoradiographic visualization of synthesis of deoxyribonucleic acid in tissue culture with tritium-labelled thymidine. Nature. 1958 Jan 24;181(4604):274-5.FIRKET H, et al. Autoradiographic visualization of synthesis of deoxyribonucleic acid in tissue culture with tritium-labelled thymidine. Nature. 1958 Jan 24;181(4604):274-5.

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[3]. Izeradjene K, et al. Inhibition of thymidine synthesis by folate analogues induces a Fas-Fas ligand-independent deletion of superantigen-reactive peripheral T cells. Int Immunol. 2001 Jan;13(1):85-93.

FT-B2V0E0

Ordering information

Catalog size quantities and prices may be found at http://www.interchim.com.

Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech - Interchim for any other information

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