



LKT Laboratories, Inc.

Stavudine

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Product Information

Product ID S7603

CAS No. 3056-17-5

Chemical Name 1-[(2R,5S)-5-(hydroxymethyl)-2,5-dihydrofuran-2-yl]-5-methylpyrimidine-2,4-dione

Synonym d4T

Formula $C_{10}H_{12}N_2O_4$

Formula Wt. 224.21

Melting Point 159-160°C

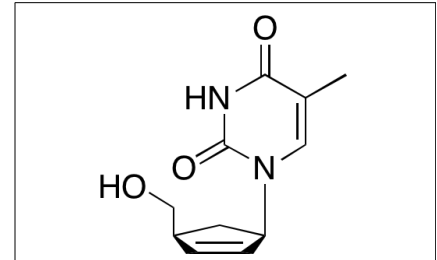
Purity ≥98%

Solubility Water

Store Temp Ambient

Ship Temp Ambient

Description Stavudine is a nucleoside analog of thymidine that exhibits antiviral activity. Stavudine is an inhibitor of reverse transcriptase that intercalates with DNA to inhibit viral replication and growth. Administration of stavudine may increase levels of ROS and mitochondrial dysfunction in adipocytes, leading to apoptosis and decreases in proliferation. Stavudine induces autophagy in adipocytes as well, resulting in lipid accumulation and hepatic dysfunction.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
S7603	100 mg	\$92.90
S7603	250 mg	\$206.60
S7603	1 g	\$516.80

References Sandhya B, Seetharamappa J. Probing the site-selective binding of an antiretroviral drug, Stavudine to calf thymus DNA. *Nucleosides Nucleotides Nucleic Acids*. 2013;32(12):660-9. PMID: 24328563.

Stankov MV, Panayotova-Dimitrova D, Leverkus M, et al. Thymidine analogues suppress autophagy and adipogenesis in cultured adipocytes. *Antimicrob Agents Chemother*. 2013 Jan;57(1):543-51. PMID: 23147731.

Stankov MV, Panayotova-Dimitrova D, Leverkus M, et al. Autophagy inhibition due to thymidine analogues as novel mechanism leading to hepatocyte dysfunction and lipid accumulation. *AIDS*. 2012 Oct 23;26(16):1995-2006. PMID: 22914580.

Naeger LK, Margot NA, Miller MD. ATP-dependent removal of nucleoside reverse transcriptase inhibitors by human immunodeficiency virus type 1 reverse transcriptase. *Antimicrob Agents Chemother*. 2002 Jul;46(7):2179-84. PMID: 12069972.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.