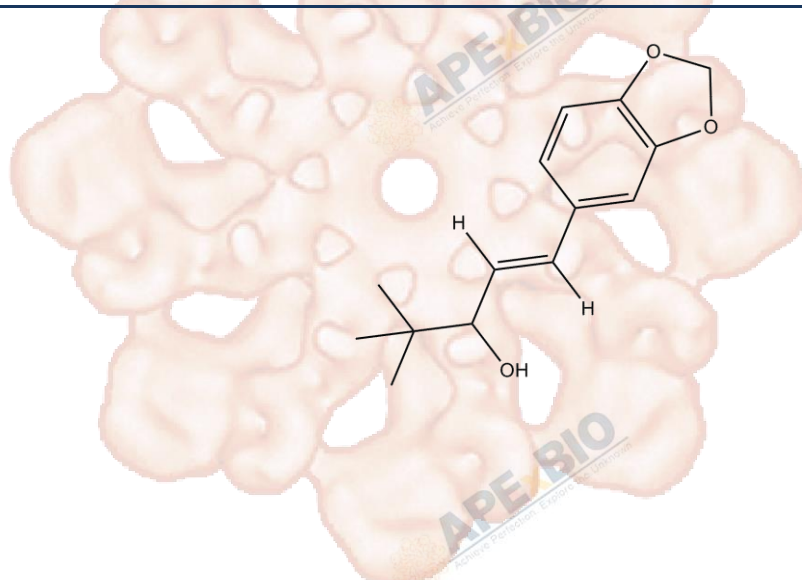


Product Data Sheet

Stiripentol

Cat. No.:	A8704
CAS No.:	49763-96-4
Formula:	C ₁₄ H ₁₈ O ₃
M.Wt:	234.29
Synonyms:	
Target:	Metabolism
Pathway:	Dehydrogenase
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥46.7 mg/mL in EtOH; ≥9.9 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		4.2682 mL	21.3411 mL	42.6821 mL
	5 mM		0.8536 mL	4.2682 mL	8.5364 mL
	10 mM		0.4268 mL	2.1341 mL	4.2682 mL

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

Biological Activity

Shortsummary

An LDH inhibitor

IC₅₀ & Target

Cell Viability Assay

In Vitro

Preparation method:

The solubility of this compound in DMSO is >9.9mg/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:

500 uM

Applications:

Stiripentol inhibited the lactate-to-pyruvate conversion and pyruvate-to-lactate

		conversion by two human LDHs (LDH1 and LDH5). The inhibition by stiripentol was noncompetitive, suggesting that stiripentol binds to the LDHs at a different site with lactate and pyruvate.
In Vivo	Animal experiment	
	Animal models:	kainate mice model
	Dosage form:	300 mg/kg ip
	Applications:	In mice after the kainate injection, stiripentol (300 mg/kg ip) had a small effect on high-voltage spikes. Stiripentol-like compound isosafrole (200 to 300 mg/kg ip) strongly suppressed spontaneous high-voltage spikes and paroxysmal discharges.
	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

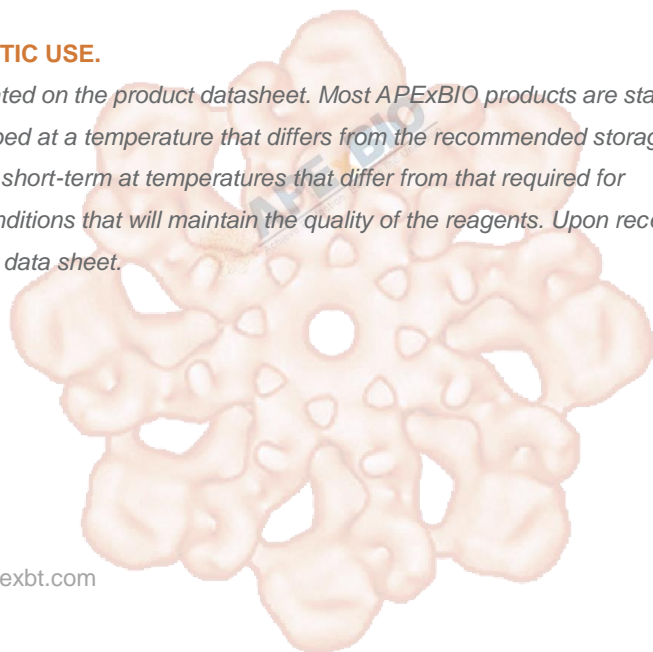
[1]. Sada N, Lee S2, Katsu T et al. Epilepsy treatment. Targeting LDH enzymes with a stiripentol analog to treat epilepsy. Science. 2015 Mar 20;347(6228):1362-7.

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.



APExBIO 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

