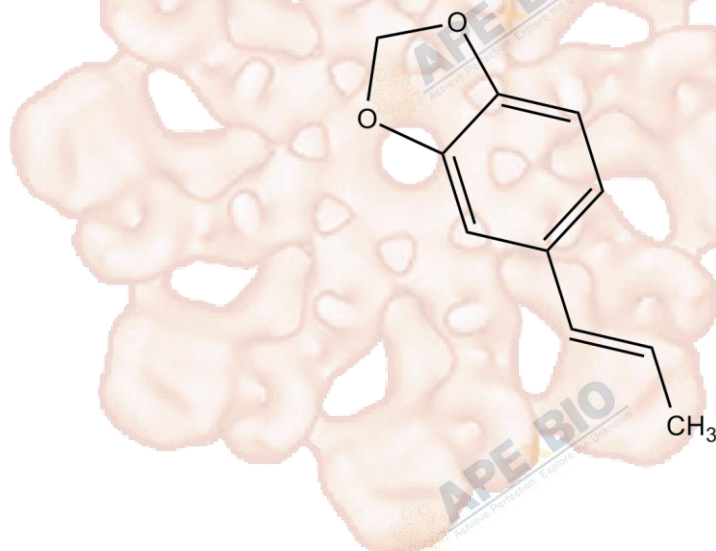


Product Data Sheet

Isosafrole

Cat. No.:	A8703
CAS No.:	120-58-1
Formula:	C ₁₀ H ₁₀ O ₂
M.Wt:	162.19
Synonyms:	
Target:	Metabolism
Pathway:	Dehydrogenase
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥76.4 mg/mL in EtOH; ≥8.8 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass	Concentration		
			1mg	5mg	10mg
	1 mM		6.1656 mL	30.8280 mL	61.6561 mL
	5 mM		1.2331 mL	6.1656 mL	12.3312 mL
	10 mM		0.6166 mL	3.0828 mL	6.1656 mL

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

Biological Activity

Shortsummary

A stiripentol analog, a potent LDH inhibitor.

IC₅₀ & Target

Cell Viability Assay

In Vitro

Preparation method:

The solubility of this compound in DMSO is >8.8mg/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 μM

	Applications:	Isosafrole strongly inhibited the pyruvate-to-lactate conversion by both LDH1 and LDH5, suggesting that it inhibited lactate production itself.
In Vivo	Animal experiment	
	Animal models:	Kainate mice model
	Dosage form:	100 to 300 mg/kg; intraperitoneal injection
	Applications:	In the hippocampus of mice 2 weeks after the kainate injection, Isosafrole (200 to 300 mg/kg) strongly suppressed spontaneous high-voltage spikes and paroxysmal discharges. Isosafrole was an LDH inhibitor that suppressed seizures in vivo.
	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. Shortterm 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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