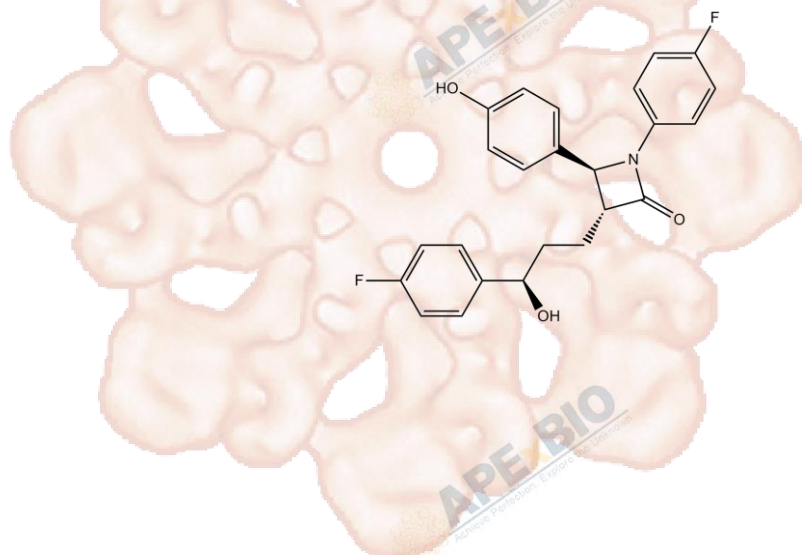


Product Data Sheet

Ezetimibe

Cat. No.:	A8430
CAS No.:	163222-33-1
Formula:	C ₂₄ H ₂₁ F ₂ NO ₃
M.Wt:	409.4
Synonyms:	
Target:	Metabolism
Pathway:	Cholesterol absorption
Storage:	Store at -20°C



Solvent & Solubility

≥20.45 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.4426 mL	12.2130 mL	24.4260 mL
	5 mM	0.4885 mL	2.4426 mL	4.8852 mL
	10 mM	0.2443 mL	1.2213 mL	2.4426 mL

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

Biological Activity

Shortsummary

Cholesterol transport inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Caco-2 cell lines
Preparation method:	The solubility of this compound in DMSO is >20.5mg/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:	1-10 µg/mL

	Applications:	In Caco-2 cells, ezetimibe is an inhibitor of carotenoid transport, an effect that decreases with increasing polarity of the carotenoid molecule. Ezetimibe dose not only interact physically with cholesterol transporter, but also downregulate expression of these proteins.
In Vivo	Animal experiment	
	Animal models:	apolipoprotein E knockout (apoE ^{-/-}) mice
	Dosage form:	5 mg/kg per day for 6 months
	Applications:	Ezetimibe inhibits cholesterol absorption, reduces plasma cholesterol, increases high density lipoprotein levels, and inhibits the progression of atherosclerosis under western, low-fat, and cholesterol-free dietary conditions in apoE ^{-/-} mice.
	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] During A, Dawson HD, Harrison EH. Carotenoid transport is decreased and expression of the lipid transporters SR-BI, NPC1L1, and ABCA1 is downregulated in Caco-2 cells treated with ezetimibe. *J Nutr*, 2005, 135(10): 2305-2312.
- [2] Davis HR Jr, Compton DS, Hoos L, et al. Ezetimibe, a potent cholesterol absorption inhibitor, inhibits the development of atherosclerosis in ApoE knockout mice. *Arterioscler Thromb Vasc Biol*, 2001, 21(12): 2032-2038.

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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