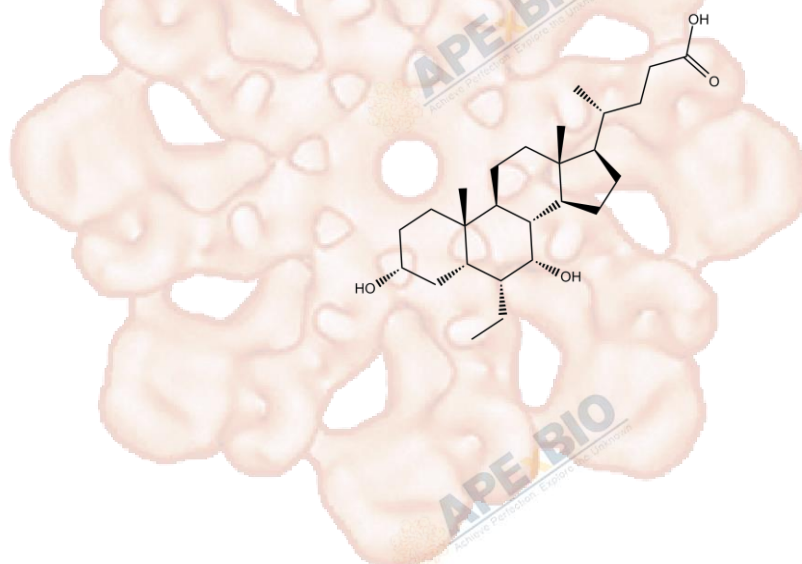


Product Data Sheet

Obeticholic Acid

Cat. No.:	B4888
CAS No.:	459789-99-2
Formula:	C ₂₆ H ₄₄ O ₄
M.Wt:	420.63
Synonyms:	
Target:	Others
Pathway:	FXR
Storage:	Store at -20°C



Solvent & Solubility

≥21.5 mg/mL in DMSO; insoluble in H₂O; ≥21.3 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass Concentration	Mass		
			1mg	5mg	10mg
		1 mM	2.3774 mL	11.8869 mL	23.7739 mL
		5 mM	0.4755 mL	2.3774 mL	4.7548 mL
		10 mM	0.2377 mL	1.1887 mL	2.3774 mL

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

Biological Activity

Shortsummary

FXR agonist with anticholeretic activity

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	Rat hepatocytes
Preparation method:	Limited solubility. 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:	24 h

	Applications:	In rat hepatocytes, obeticholic acid transactivates FXR and modulates FXR regulated genes, resulting in increases of Shp and bsep mRNA expression by 3- to 5-fold and reduction of cyp7a1, cyp8b1, and ntcp mRNA expression by 50 to 70% after exposure to FXR ligands.
In Vivo	Animal experiment	
	Animal models:	Male Wistar rats weighing 200-250 g
	Dosage form:	30 mg/kg
	Applications:	Obeticholic acid can reactivate downstream FXR signaling pathway and reduces PP in the TAA and BDL (thioacetamide (TAA)-intoxicated and bile-duct-ligated) models without systemic hemodynamic impact. It also restores endothelial function and reduces the total IHVR in experimental cirrhosis
	Preparation method:	Dissolved in 0.75-1.0 mL of freshly prepared methylcellulose (1%)
	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

1. Selina Costa. "Characterizing a Novel Ligand for the Farnesoid X Receptor using Transgenic Zebrafish." University of Toronto. Jun-2018.
2. Kent, Rebecca. "Effects of Fenofibrate on CYP2D6 and Regulation of ANG1 and RNASE4 by the FXR Agonist Obeticholic Acid." indigo.uic.edu.2017.

See more customer validations on www.apexbt.com.

References

1. Fiorucci S, Clerici C, Antonelli E et al. Protective effects of 6-ethyl chenodeoxycholic acid, a farnesoid X receptor ligand, in estrogen-induced cholestasis. J Pharmacol Exp Ther. 2005 May;313(2):604-12. Epub 2005 Jan 11.
2. Verbeke L, Farre R, Trebicka J et al. Obeticholic acid, a farnesoid X receptor agonist, improves portal hypertension by two distinct pathways in cirrhotic rats. Hepatology. 2014 Jun;59(6):2286-98.

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

