

Catalog # 10-2838 Obetichoic acid

CAS# 459789-99-2

6-Ethylchenodeoxycholic acid; 6-ECDCA 3α - 7α -dihydroxy- 6α -ethyl- 5β -cholan-24-oic acid Lot # X101339

A novel cholic acid analog which acts as a potent and selective FXR agonist (EC₅₀= 99 nM). Displays anticholeretic activity in a rat model of cholestasis. Promotes adipocyte differentiation and regulates adipose cell function. Normalizes insulin sensitivity in a rabbit model of metabolic syndrome. A potentially new therapeutic agent for management of non-alcoholic fatty liver disease and NASH. Displays therapeutic benefit in patients with primary biliary cirrhosis. Active *in vivo*.

- 1) Fiorucci et al. (2005), Protective effects of 6-ethyl chenodeoxycholic acid, a farnesoid X receptor ligand, in estrogen-induced cholestasis; J. Pharmacol. Exp. Ther., **313** 604
- 2) Rizzo et al. (2006), The farnesoid X receptor promotes adipocyte differentiation and regulates adipose cell function in vivo; Mol. Pharmacol., 70 1164
- Maneschi et al. (2013), FXR activation normalizes insulin sensitivity in visceral preadipocytes of a rabbit model of MetS; J. Endocrinol., 218
- 4) Carr and Reid (2015), FXR agonists as therapeutic agents for non-alcoholic fatty liver disease; Curr. Atheroscler. Rep, 17 500
- 5) Jahn et al. (2016), Non-Alcoholic Steatohepatitis: From Pathophysiology to Novel Therapies; Dig. Dis., 34 356
- 6) Hirschfield et al. (2015), Efficacy of obeticholic acid in patients with primary biliary cirrhosis and inadequate response to ursodeoxycholic acid; Gastroenterology, **148** 751

PHYSICAL DATA

Molecular Weight: 420.63
Molecular Formula: C₂₆H₄₄O₄
Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 35 mg/ml) or Ethanol (up to 25 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 2 months.

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