

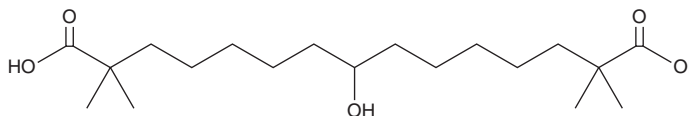
# PRODUCT INFORMATION



## ETC-1002

Item No. 26409

**CAS Registry No.:** 738606-46-7  
**Formal Name:** 8-hydroxy-2,2,14,14-tetramethyl-pentadecanedioic acid  
**Synonyms:** Bempedoic Acid, ESP-55016  
**MF:** C<sub>19</sub>H<sub>36</sub>O<sub>5</sub>  
**FW:** 344.5  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

ETC-1002 is supplied as a crystalline solid. A stock solution may be made by dissolving the ETC-1002 in the solvent of choice, which should be purged with an inert gas. ETC-1002 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ETC-1002 in ethanol is approximately 2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

ETC-1002 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ETC-1002 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ETC-1002 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

ETC-1002 is a prodrug form of ETC-1002-CoA.<sup>1</sup> ETC-1002 is conjugated to coenzyme A (CoA) by very long-chain acyl-CoA synthetase-1 (ACSVL1) to form ETC-1002-CoA, which inhibits ATP citrate lyase (K<sub>i</sub> = 2 μM) and activates AMP-activated protein kinase (AMPK). ETC-1002 suppresses total lipid synthesis in wild-type and AMPKβ1 knockout primary murine hepatocytes. *In vivo*, ETC-1002 (30 mg/kg) prevents increases in hepatic cholesterol and reduces the size of aortic atherosclerotic lesions induced by a high-fat high-cholesterol diet in *Apoe*<sup>-/-</sup>/*Ampkβ1*<sup>-/-</sup> (DKO) mice.

### Reference

1. Pinkosky, S.L., Newton, R.S., Day, E.A., *et al.* Liver-specific ATP-citrate lyase inhibition by bempedoic acid decreases LDL-C and attenuates atherosclerosis. *Nat. Commun.* **7:13457**, (2016).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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