

## Bempedoic acid, ATP citrate lyase inhibitor

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Catalog	Unit
TBI4114-10MG	10 mg
TBI4114-50MG	50 mg

### Product Details

**Formal Name:** 8-Hydroxy-2,2,14,14-tetramethylpentadecanedioic acid

**Alternate Names:** ESP 55016; ETC-1002

**Molecular Formula:** C<sub>19</sub>H<sub>36</sub>O<sub>5</sub>

**Formula Weight:** 344.5

**CAS Number:** 738606-46-7

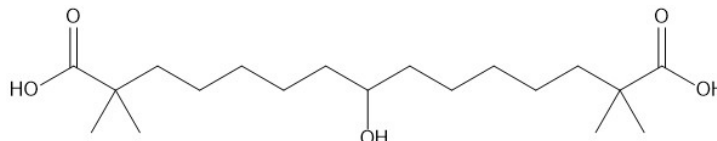
**Purity:** >98%

**Formulation:** Powder

**Solubility:** Soluble in DMSO (60 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

ATP citrate lyase inhibitor

### Functions

Inhibitor of ATP citrate lyase (ACL) and activator of AMPK used in the treatment of hypercholesterolemia. *In vivo*, the active molecule is the CoA ester. Bempedoic acid requires activation by very long-chain acyl-CoA-synthetase (ACSVL1) – the absence of ACSVL1 in skeletal muscle provides a mechanistic basis for its use in statin-intolerant patients. LDL receptor upregulation, decreased LDL-C, and attenuation of atherosclerosis activities are independent of AMPK activation. It significantly cuts the risk of major cardiovascular events. Combination treatment of breast and pancreatic cancer cell lines with bempedoic acid and CDK4/6 inhibitors reduced cell growth and invasion. It displays anti-inflammatory activity possibly through both ACL inhibition and AMPK activation.

### Application Procedures

First dissolved in DMSO (60 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

**For research use only.**