

Firsocostat, Allosteric acetyl-CoA carboxylase inhibitor

Catalog	Unit
TBI4699-5MG	5 mg
TBI4699-25MG	25 mg

Product Details

Formal Name: 2-[1-[(2R)-2-(2-Methoxyphenyl)-2-9oxan-4-yloxy)ethyl]-5-methyl-6-(1,3-oxazol-2-yl)-2,4-

dioxothieno[2,3-d]pyrimidin-3-yl]-2-methylpropanoic acid **Alternate Names:** ND-630; NDI-010976; GS-0976

Molecular Formula: C₂₈H₃₁N₃O₈S **Formula Weight:** 569.63

CAS Number: 1434635-54-7

Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 25 mg/ml)

Storage: -20° C **Stability:** ≥ 2 years.



Applications

Allosteric acetyl-CoA carboxylase inhibitor

Functions

Potent (IC50 = 1.7 nM ACC1; 2.6 nM ACC2) allosteric protein-protein interaction inhibitor of acetyl-CoA carboxylase (ACC). It interacts with the ACC phosphopeptide acceptor and dimerization site to inhibit enzymatic activity resulting in decreased fatty acid synthesis and stimulation of fatty acid oxidation. It reduced hepatic steatosis, improves insulin sensitivity, reduces weight gain, and favorably affects dyslipidemia in rats. Firsocostat decreased hepatic steatosis and fibrosis markers in patients with nonalcoholic fatty liver disease. Directly impairs profibrinogenic activity of hepatic stellate cells (HSC) via prevention of induction of glycolysis and oxidative phosphorylation during HSC activation.

Application Procedures

First dissolved in DMSO (up to at least 25 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.