
Product Data Sheet

Product Name: AAA-10
Cat. No.: GC64241

Chemical Properties

Cas. No. 2758171-70-7

Formula C₂₅H₄₁FO₅S M.Wt 472.65

Solubility DMSO : 50 mg/mL (105.79 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

AAA-10 is an orally active gut bacterial bile salt hydrolases (BSH) inhibitor, with IC₅₀s of 10 nM, 80 nM against *B. theta* rBSH and *B. longum* rBSH respectively[1].

AAA-10 (100 μM; 24 h) inhibits BSH activity in bacterial cultures, with IC₅₀s of 74 nM, 901 nM for Gram-negative and Gram-positive bacteria, respectively[1]. AAA-10 (20 μM; 2 h) significantly inhibits deconjugation of glycochenodeoxycholic acid-d4 or taurocholic acid-d4 substrates of human feces[1].

AAA-10 (30 mg/kg; orally gavage daily for 5 days) decreases the abundances of deoxycholic acid (DCA) and lithocholic acid (LCA) in mice feces starting in day 2-5[1]. AAA-10 (30 mg/kg) displays high colonic exposure and low gut permeability[1].

[1]. Adhikari AA, et al. A Gut-Restricted Lithocholic Acid Analog as an Inhibitor of Gut Bacterial Bile Salt Hydrolases. ACS Chem Biol. 2021;16(8):1401-1412.

Caution: Product has not been fully validated for medical applications. For research use only.

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