EGT-1442
Item No. 21359

CAS Registry No.: 1118567-05-7
Formal Name: (1S)-1,5-anhydro-1-C-[4-chloro-3-[4-[2-(cyclopropyloxy)ethoxy]phenyl]methyl]phenyl]-D-glucitol
Synonym: THR-1442
MF: C_{24}H_{29}ClO_{7
FW: 464.9
Purity: ≥ 95%
UV/Vis.: \lambda_{max}: 225, 277 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

EGT-1442 is supplied as a crystalline solid. A stock solution may be made by dissolving the EGT-1442 in the solvent of choice. EGT-1442 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of EGT-1442 in these solvents is approximately 30 mg/ml.

EGT-1442 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EGT-1442 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. EGT-1442 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

EGT-1442 is a potent, selective sodium glucose co-transporter 2 (SGLT2) inhibitor with IC_{50} values of 5.6 µM and 2 nM for human SGLT1 and SGLT2, respectively.\(^1\) It produces a stable urinary excretion of glucose in rats and dogs with ED_{50} values of 0.38 and 0.09 mg/kg, respectively, and reduces HbA(1c) and blood glucose in db/db mice in a concentration dependent manner.

Reference