

Product Data Sheet

Product Name: Empagliflozin-d4

Cat. No.: GC47289

Chemical Properties

Cas. No. 2749293-95-4

SMILES C1C(C=CC([C@H]1[C@H](O)[C@@H](O)[C@H](O)[C@@H](CO)O1)=C2)=C2CC3=C([2H])C([2H])=C(O[C@@H]4COCC4)C([2H])=C3[2H]

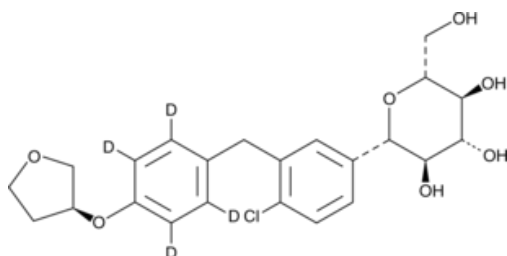
Formula C₂₃H₂₃D₄ClO₇ M.Wt 454.9

Solubility DMSO : 50 mg/mL (109.91 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

Empagliflozin-d₄ contains four deuterium atoms and is intended for use as an internal standard for the quantification of empagliflozin by GC- or LC-MS. Empagliflozin is a potent SGLT2 inhibitor (IC₅₀ = 3.1 nM) that demonstrates a high degree of selectivity (>2,500-fold) over SGLT1, 4, 5, and 6.¹ In clinical trials of patients with type 2 diabetes, formulations containing empagliflozin lowered fasting and postprandial glucose levels by increasing total glucose excretion, improving β-cell function, and shifting substrate utilization from glucose to lipids.²

1. Grempler, R., Thomas, L., Eckhardt, M., et al. Empagliflozin, a novel selective sodium glucose cotransporter-2 (SGLT-2) inhibitor: Characterisation and comparison with other SGLT-2

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

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inhibitors Diabetes Obes. Metab. 14(1)83-90(2012) 2. Ndefo, U.A., Anidiobi, N.O., Basheer, E., et al. Empagliflozin (Jardiance): A novel SGLT2 inhibitor for the treatment of type-2 diabetes P.T. 40(6)364-368(2015)

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