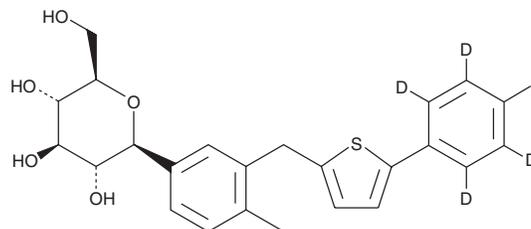


PRODUCT INFORMATION



Canagliflozin-d₄ Item No. 25223

CAS Registry No.: 1997338-61-0
Formal Name: (1S)-1,5-anhydro-1-C-[3-[[5-(4-fluorophenyl)-2,3,5,6-d₄]-2-thienyl]methyl]-4-methylphenyl]-D-glucitol
MF: C₂₄H₂₁D₄FO₅S
FW: 448.5
Chemical Purity: ≥98% (Canagliflozin)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Canagliflozin-d₄ is intended for use as an internal standard for the quantification of canagliflozin (Item No. 11575) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Canagliflozin-d₄ is supplied as a solid. A stock solution may be made by dissolving the canagliflozin-d₄ in the solvent of choice, which should be purged with an inert gas. Canagliflozin-d₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of canagliflozin-d₄ in these solvents is approximately 30 mg/ml.

Description

Canagliflozin is an inhibitor of sodium-glucose cotransporter 2 (SGLT2; IC₅₀ = 2.2 nM) that less potently blocks SGLT1 (IC₅₀ = 910 nM).¹ Canagliflozin is orally bioavailable and lowers plasma glucose by lowering the renal threshold for glucose and increasing urinary glucose excretion in animals.^{1,2} Formulations containing SGLT2 inhibitors, including canagliflozin, have been used to treat type 2 diabetes mellitus.³

References

1. Nomura, S., Sakamaki, S., Hongu, M., *et al.* Discovery of canagliflozin, a novel C-glucoside with thiophene ring, as sodium-dependent glucose cotransporter 2 inhibitor for the treatment of type 2 diabetes mellitus. *J. Med. Chem.* **53**(17), 6355-6360 (2010).
2. Sha, S., Devineni, D., Ghosh, A., *et al.* Canagliflozin, a novel inhibitor of sodium glucose co-transporter 2, dose dependently reduces calculated renal threshold for glucose excretion and increases urinary glucose excretion in healthy subjects. *Diabetes Obes. Metab.* **13**(7), 669-672 (2011).
3. Reed, J.W. Impact of sodium-glucose cotransporter 2 inhibitors on blood pressure. *Vasc. Health Risk Manag.* **12**, 393-405 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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