



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

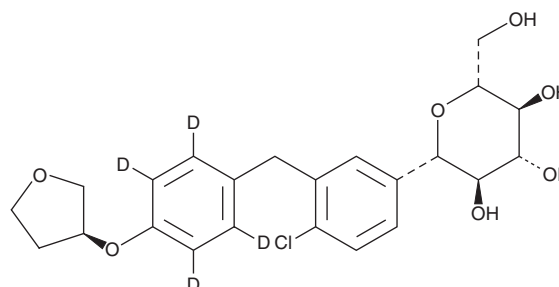
PRODUCT INFORMATION



Empagliflozin-d₄

Item No. 22369

Formal Name: (1S)-1,5-anhydro-1-C-[4-chloro-3-[[4-[[[(3S)-tetrahydro-3-furanyl]oxy]phenyl-d₄]methyl]phenyl]-D-glucitol
MF: C₂₃H₂₃D₄ClO₇
FW: 454.9
Chemical Purity: ≥98% (Empagliflozin)
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

Empagliflozin-d₄ is intended for use as an internal standard for the quantification of empagliflozin (Item No. 17375) 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).

Empagliflozin-d₄ is supplied as a solid. A stock solution may be made by dissolving the empagliflozin-d₄ in the solvent of choice, which should be purged with an inert gas. Empagliflozin-d₄ is soluble in DMSO.

Description

Empagliflozin is a sodium-glucose cotransporter 2 (SGLT2) inhibitor (IC₅₀ = 3.1 nM for the human transporter).¹ It is selective for SGLT2 over SGLT1, -4, -5, and -6 (IC₅₀s = 8.3, 11, 1.1, and 2 μM, respectively). Dietary administration of empagliflozin (0.03% for 10 weeks) reduces non-fasting blood glucose levels, as well as aortic superoxide levels and cardiac interstitial fibrosis, in *db/db* mice.² It also decreases the severity of glomerulosclerosis, as well as reduces the escape latency in the Morris water maze, in the same model. Formulations containing empagliflozin have been used in the treatment of type 2 diabetes.

References

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 inhibitors. *Diabetes Obes. Metab.* **14**(1), 83-90 (2012).
2. Lin, B., Koibuchi, N., Hasegawa, Y., *et al.* Glycemic control with empagliflozin, a novel selective SGLT2 inhibitor, ameliorates cardiovascular injury and cognitive dysfunction in obese and type 2 diabetic mice. *Cardiovasc. Diabetol.* **13**, 148 (2014).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/20/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM