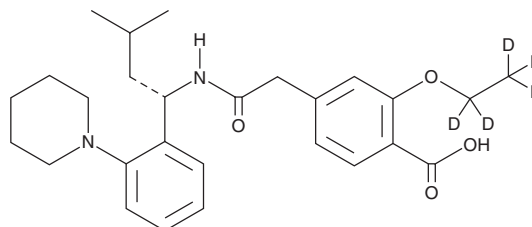


PRODUCT INFORMATION



Repaglinide-d₅ Item No. 26104

CAS Registry No.: 1217709-85-7
Formal Name: 2-(ethoxy-1,1,2,2,2-d₅)-4-[2-[[[(1S)-3-methyl-1-[2-(1-piperidiny)]phenyl]butyl]amino]-2-oxoethyl]-benzoic acid
MF: C₂₇H₃₁D₅N₂O₄
FW: 457.6
Chemical Purity: ≥98% (Repaglinide)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤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

Repaglinide-d₅ is intended for use as an internal standard for the quantification of repaglinide (Item No. 19387) 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).

Repaglinide-d₅ is supplied as a solid. A stock solution may be made by dissolving the repaglinide-d₅ in the solvent of choice, which should be purged with an inert gas. Repaglinide-d₅ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of repaglinide-d₅ in ethanol is approximately 25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Repaglinide is a metaglitinide antidiabetic agent that blocks ATP-dependent potassium (K_{ir}6) channels in pancreatic β-cells (K_d = 0.42 nM for the sulphonylurea receptor SUR1 when co-expressed with K_{ir}6.2).¹ *In vivo*, repaglinide lowers blood glucose in fasted rats and dogs (ED₅₀s = 10 and 28.3 μg/kg, respectively).² Formulations containing repaglinide have been used to control blood sugar levels in patients with type 2 diabetes.

References

1. Hansen, A.M.K., Hansen, J.B., Carr, R.D., *et al.* K_{ir}6.2-dependent high-affinity repaglinide binding to β-cell KATP channels. *Br. J. Pharmacol.* **144**(4), 551-557 (2005).
2. Mark, M. and Grell, W. Hypoglycaemic effects of the novel antidiabetic agent repaglinide in rats and dogs. *Br. J. Pharmacol.* **121**(8), 1597-1604 (1997).

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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