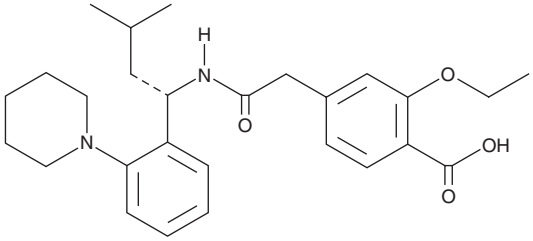
PRODUCT INFORMATION

Repaglinide

Item No. 19387

CAS Registry No.:	135062-02-1
Formal Name:	2-ethoxy-4-[2-[[(1S)-3-methyl-1-[2-(1-piperidinyl)phenyl]butyl]amino]-2-oxoethyl]-benzoic acid
MF:	$C_{27}H_{36}N_2O_4$
FW:	452.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 243, 293 nm
Supplied as:	A crystalline 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 is supplied as a crystalline solid. A stock solution may be made by dissolving the repaglinide in the solvent of choice, which should be purged with an inert gas. Repaglinide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of repaglinide in ethanol is approximately 25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Repaglinide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, repaglinide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Repaglinide has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

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 (ED_{50}s = 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).

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