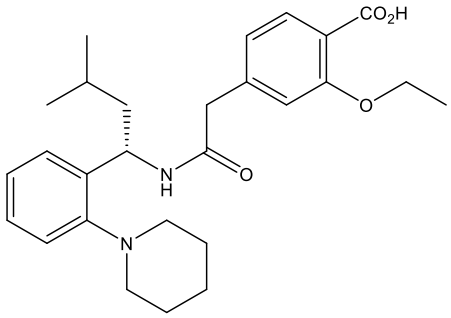
Catalog # 10-4661
Repaglinide

CAS# 135062-02-1

2-Ethoxy-4-[2-[[(1S)-3-methyl-1-(2-piperidin-1-ylphenyl)butyl]amino]-2-oxoethyl]benzoic acid

Lot # FBS3086



Repaglinide is a blocker of the ATP-sensitive potassium channel Kir6 with hypoglycemic activity.[1] Clinically useful antidiabetic agent. It displays 30-fold selectivity for pancreatic Kir6.2/SUR1 over cardiac Kir6.1/SUR2B and Kir6/SUR2A channels.[2] Repaglinide displayed neuroprotective effects in Huntington disease[3], Parkinson's disease[4], and ALS[5] *via* blockade of the DREAM-ATF6 interaction.

1) Mark and Grell (1997), *Hypoglycaemic effects of the novel antidiabetic agent repaglinide in rats and dogs*; Br. J. Pharmacol. **121** 1597
2) Stephan *et al*. (2006), *Selectivity of repaglinide and glibenclamide for the pancreatic over the cardiovascular K(ATP) channels*; Diabetologia **49** 2039
3) Naranjo *et al*. (2016), *Activating transcription factor 6 Activating transcription factor 6 derepression mediates neuroprotection in Huntington disease*; J. Clin. Invest. **126** 627
4) Motawi *et al*. (2022), *Repaglinide Elicits a Neuroprotective Effect in Rotenone-Induced Parkin's Disease in Rats: Emphasis on Targeting the DREAM-ER Stress BiP/ATF6/CHOP Trajectory and Activation of Mitophagy*; ACS Chem. Neurosci. **14** 180
5) Gonzalo-Gobernado *et al*. (2023), *Repaglinide Induces ATF6 Processing and Neuroprotection in Transgenic SOD1G93A Mice*; Int. J. Mol. Sci. **24** 15783

PHYSICAL DATA

Molecular Weight:	452.60
Molecular Formula:	$C_{27}H_{36}N_2O_4$
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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