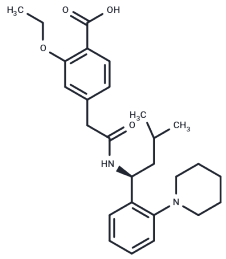
Data Sheet (Cat.No.T1088)

TargetMol

Repaglinide

Chemical Properties



CAS No. : 135062-02-1

Formula: C27H36N2O4

Molecular Weight: 452.59

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Repaglinide (AG-EE 623ZW) is a benzoic acid derivative that stimulates insulin secretion from the pancreas and is used in the therapy of type 2 diabetes. Repaglinide has been linked to rare instances of clinically apparent acute liver injury.
Targets(IC50)	Potassium Channel,PPAR
In vitro	Repaglinide binds to NCS proteins in a calcium-dependent manner, but does not bind to CAM or S100 proteins.Repaglinide tightly binds to CCaMK and PpCaMK in a calcium-dependent manner, antagonizing the regulatory function of the structural domains, with IC 50 values of 55 mM and 4 mM for the CCaMK and PpCaMK domains.Repaglinide binds to CCaMK and PpCaMK domains with low affinity (K(D) = 59 nM) to bind SUR1 alone, but binds SUR1 with high affinity to co-express with Kir6.2, increasing it approximately 150-fold.Repaglinide antagonizes the inhibitory effect of restoring protein in the retinal kinase assay, with an IC50 value of 400 mM.Repaglinide also antagonizes the inhibitory effect of restoring protein in the retinal kinase assay, with an IC50 value of 400 mM.
In vivo	Repaglinide binds to NCS proteins in a calcium-dependent manner, but does not bind to CAM or S100 proteins.Repaglinide tightly binds to CCaMK and PpCaMK in a calcium-dependent manner, antagonizing the regulatory function of the structural domains, with IC 50 values of 55 mM and 4 mM for the CCaMK and PpCaMK domains.Repaglinide binds to CCaMK and PpCaMK domains with low affinity (K(D) = 59 nM) to bind SUR1 alone, but binds SUR1 with high affinity to co-express with Kir6.2, increasing it approximately 150-fold.Repaglinide antagonizes the inhibitory effect of restoring protein in the retinal kinase assay, with an IC50 value of 400 mM.Repaglinide also antagonizes the inhibitory effect of restoring protein in the retinal kinase assay, with an IC50 value of 400 mM.

Solubility Information

Solubility	Ethanol: 84 mg/mL (185.6 mM),Sonication is recommended. DMSO: 55 mg/mL (121.52 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2095 mL	11.0475 mL	22.0951 mL
5 mM	0.4419 mL	2.2095 mL	4.419 mL
10 mM	0.221 mL	1.1048 mL	2.2095 mL
50 mM	0.0442 mL	0.221 mL	0.4419 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Hansen AM, et al. Br J Pharmacol,2005, 144(4), 551-557.
Tan Y, Zhou Y, Zhang W, et al.Repaglinide restrains HCC development and progression by targeting FOXO3/lumican/p53 axis.Cellular Oncology.2024: 1-15.
Okada M, et al. Biochem J,2003, 375(Pt 1), 87-97.
Laghmich A, et al. Eur J Pharmacol,1998, 348(2-3), 265-270.
Ladrière L, et al. Eur J Pharmacol. 1997 Sep 24;335(2-3):227-34.