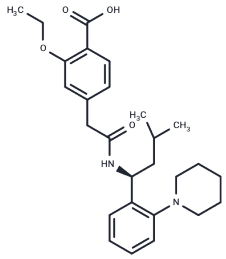
Data Sheet (Cat.No.T1088)

TargetMol

Repaglinide

Chemical Properties



CAS No. : 135062-02-1

Formula: C27H36N2O4

Molecular Weight: 452.59

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

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
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

Solubility Information

Solubility	Ethanol: 84 mg/mL (185.6 mM),Sonication is recommended. DMSO: 250 mg/mL (552.38 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn oil: 10 mg/mL (22.1 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (22.1 mM),Lower concentrations may be soluble, but exact solubility limit is unknown.

In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (22.1 mM),Suspension. 10% DMSO+90% (20% SBE-β-CD in Saline): < 10 mg/mL (22.1 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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.