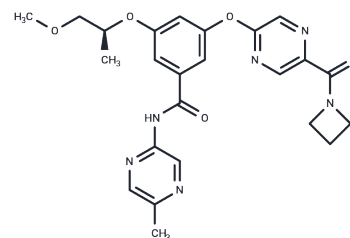


AZD-1656

Chemical Properties

CAS No. : 919783-22-5
Formula: C₂₄H₂₆N₆O₅
Molecular Weight: 478.5
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	AZD-1656 is a glucokinase activator (GKA) that can cause dose-limiting hypoglycemia in normal animals used in embryofetal development studies and type 2 diabetes.
Targets(IC50)	Glucokinase
In vivo	The gkdel/wt mouse was used as an alternative rodent strain for embryofetal development studies with AZD-1656. Heterozygous global knockout gkdel/wt females were dosed with 20, 50, or 130 mg/kg/day of AZD-1656 or vehicle for a minimum of 14 consecutive days before mating with wild-type males and throughout organogenesis. Maternal effects were confined to slightly reduced food consumption, reduced body weight gain, and the pharmacologic effect of decreased plasma glucose. Fetuses were genotyped. Fetal weights at the high dose were slightly reduced but there was no effect on fetal survival. There were two specific major malformations, omphalocele and right-sided aortic arch, with increased fetal incidence in mid- and high-dose fetuses (e.g., omphalocele fetal incidence of 0.6, 0.7, 4.6, and 2% across the dose groups) plus increased incidences of minor abnormalities and variants indicative of either delayed or disturbed development. Fetal weight and abnormalities were unaffected by fetal genotype. The fetal effects are considered hypoglycemia related. There was no effect on embryofetal survival in the gkdel/wt mouse at AZD-1656 exposures[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (522.47 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0899 mL	10.4493 mL	20.8986 mL
5 mM	0.418 mL	2.0899 mL	4.1797 mL
10 mM	0.209 mL	1.0449 mL	2.0899 mL
50 mM	0.0418 mL	0.209 mL	0.418 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

Krentz AJ, et al. Effect of exogenously administered glucagon versus spontaneous endogenous counter-regulation on glycaemic recovery from insulin-induced hypoglycaemia in patients with type 2 diabetes treated with a novel