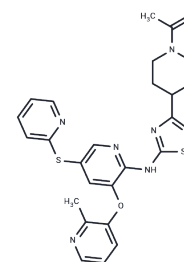


AR453588

## Chemical Properties

CAS No. : 1065609-00-8  
 Formula: C<sub>25</sub>H<sub>25</sub>N<sub>7</sub>O<sub>2</sub>S<sub>2</sub>  
 Molecular Weight: 519.64  
 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	AR453588 is an orally bioavailable anti-diabetic glucokinase activator (EC <sub>50</sub> : 42 nM) with anti-hyperglycemic activity.
Targets(IC <sub>50</sub> )	Others,Glucokinase
In vivo	AR453588 (3-30 mg/kg; p.o) reduces post-prandial glucose in normal C57BL/6J mice and exhibits anti-hyperglycemic activity in a dose-ranging 14-day ob/ob mouse study (3-30 mg/kg; p.o.; once-daily for 14 days). Following AR453588 (10 mg/kg; p.o.) administration, T <sub>max</sub> , AUC <sub>inf</sub> , V <sub>ss</sub> , C <sub>max</sub> , and F are 1.0 mL/min/kg, 4.65 h µg/mL, 1.67 µg/mL, and 60.3%, respectively. With AR453588 (1 mg/kg; i.v.) administration, the CL, AUC <sub>inf</sub> , V <sub>ss</sub> , and t <sub>1/2</sub> are 21.6 mL/min/kg, 0.77 h µg/mL, 0.746 L/kg, and 1.28 hours, respectively.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9244 mL	9.622 mL	19.2441 mL
5 mM	0.3849 mL	1.9244 mL	3.8488 mL
10 mM	0.1924 mL	0.9622 mL	1.9244 mL
50 mM	0.0385 mL	0.1924 mL	0.3849 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

Hinklin RJ, et al. Discovery and preclinical development of AR453588 as an anti-diabetic glucokinase activator. Bioorg Med Chem. 2020 Jan 1;28(1):115232.

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