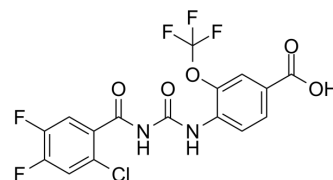


AVE5688

Cat. No.:	HY-100320
CAS No.:	613260-13-2
Molecular Formula:	C ₁₆ H ₈ ClF ₅ N ₂ O ₅
Molecular Weight:	438.69
Target:	Others
Pathway:	Others
Storage:	<div>Powder</div> <div>-20°C 3 years</div> <div>4°C 2 years</div> <div>In solvent</div> <div>-80°C 6 months</div> <div>-20°C 1 month</div>



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (227.95 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div>Solvent Concentration</div>	Mass	1 mg	5 mg	10 mg
		1 mM	2.2795 mL	11.3976 mL	22.7951 mL	
		5 mM	0.4559 mL	2.2795 mL	4.5590 mL	
		10 mM	0.2280 mL	1.1398 mL	2.2795 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil					
	Solubility: 2.5 mg/mL (5.70 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	AVE5688 is an inhibitor of glycogen phosphorylase (GP), with IC ₅₀ s of 430 nM and 915 nM and K _d s of 170 nM and 530 nM for rabbit muscle glycogen phosphorylase (rmGPb and rmGPa, respectively); AVE5688 can be used for the research of type 2 diabetes.
IC ₅₀ & Target	IC ₅₀ : 430 nM (rmGPb), 915 nM (rmGPa) ^[1] K _d : 170 nM (rmGPb), 530 nM (rmGPa) ^[1]
In Vitro	AVE5688 is an inhibitor of glycogen phosphorylase (GP), with IC ₅₀ s of 430 nM and 915 nM and K _d s of 170 nM and 530 nM for rabbit muscle glycogen phosphorylase (rmGPb and rmGPa, respectively) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Kinase Assay ^[1]

Glycogen phosphorylase activity is measured in the physiological direction of glycogen breakdown. rmGP is used for the kinetic characterization of the inhibitors (AVE5688). To routinely check the phosphorylation grade of enzyme batches, activity is measured in the direction of glycogen synthesis; the phosphorylation grade is estimated from the ratio of the activity in the presence of 0.5 mM caffeine to the activity in the presence of 2 mM AMP^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Anderka O, et al. Thermodynamic characterization of allosteric glycogen phosphorylase inhibitors. Biochemistry. 2008 Apr 22;47(16):4683-91.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA