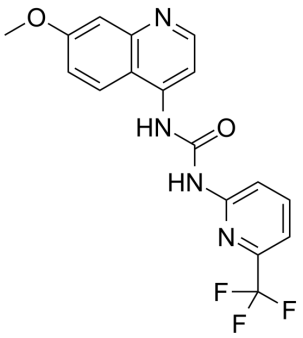
A 1070722



Cat. No.:	HY-107531
CAS No.:	1384424-80-9
Molecular Formula:	$C_{17}H_{13}F_3N_4O_2$
Molecular Weight:	362.31
Target:	GSK-3
Pathway:	PI3K/Akt/mTOR; Stem Cell/Wnt
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year

SOLVENT & SOLUBILITY

In Vitro

DMSO : 83.33 mg/mL (230.00 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7601 mL	13.8003 mL	27.6007 mL
	5 mM	0.5520 mL	2.7601 mL	5.5201 mL
	10 mM	0.2760 mL	1.3800 mL	2.7601 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

A 1070722 is a potent and selective glycogen synthase kinase 3 (GSK-3) inhibitor, with a K_i of 0.6 nM for both GSK-3α and GSK-3β. A 1070722 can penetrate the blood-brain barrier (BBB) and accumulates in brain regions, thus potential for PET radiotracer for the quantification of GSK-3 in brain[1].

IC_{50} & Target		
	GSK-3α 0.6 nM (Ki)	GSK-3β 0.6 nM (Ki)

REFERENCES

[1]. Prabhakaran J, et al. Radiosynthesis and in Vivo Evaluation of [11C]A1070722, a High Affinity GSK-3 PET Tracer in Primate Brain. ACS Chem Neurosci. 2017 Aug 16;8(8):1697-1703.

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

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