



A 1070722

Cat. No.:	OB0225WX-2160
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR, and LC-MS.
Size:	5 mg; 10 mg; 25 mg; 50 mg; 100 mg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	A 1070722 is a potent, brain-penetrant GSK-3 inhibitor possessing high and equal affinity for both GSK-3 α and GSK-3 β isoforms (K_i = 0.6 nM).
Synonym	1384424-80-9; 1-(7-methoxyquinolin-4-yl)-3-[6-(trifluoromethyl)pyridin-2-yl]urea ; A-1070722; 1-(7-methoxyquinolin-4-yl)-3-(6-(trifluoromethyl)pyridin-2-yl)urea
CAS No.	1384424-80-9
Compound CID	49830684
Formula	C ₁₇ H ₁₃ F ₃ N ₄ O ₂
Formula Weight	362.31

Specification

Targets&IC50	GSK-3 β : 0.6 nM (ki); GSK-3 α : 0.6 nM (ki)
Relative Density	1.461 g/cm ³
IUPAC Name	1-(7-Methoxyquinolin-4-yl)-3-[6-(trifluoromethyl)pyridin-2-yl]urea
InChI	InChI=1S/C17H13F3N4O2/c1-26-10-5-6-11-12(7-8-21-13(11)9-10)22-16(25)24-15-4-2-3-14(23-15)17(18,19)20/h2-9H,1H3,(H2,21,22,23,24,25)
InChI Key	VQPBIIJGXSXEOCU-UHFFFAOYSA-N
SMILES string	COC1=CC2=NC=CC(=C2C=C1)NC(=O)NC3=CC=CC(=N3)C(F)(F)F
Stability	3 years in powder form.
Storage	Storage at -20°C.

**Applications**

A 1070722 is employed in neuropharmacology to investigate the selective inhibition of GSK-3 and its impact on the modulation of mood-related signaling and neurotransmitter release.

Library Information

Target	GSK-3
Receptor	GSK-3 α ; GSK-3 β
Pathways	Stem cells; PI3K/Akt/mTOR signaling
Plate Number	AOCL-28
Plate Location	f5
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	83.33 mg/mL; 230.00 mM