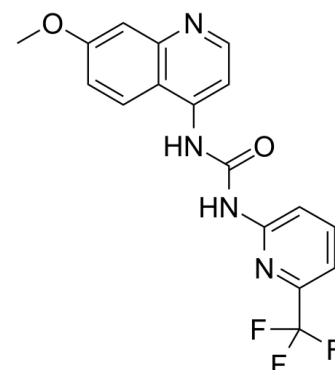


## Data Sheet

<b>Product Name:</b>	A 1070722
<b>Cat. No.:</b>	CS-0028815
<b>CAS No.:</b>	1384424-80-9
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>13</sub> F <sub>3</sub> N <sub>4</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	362.31
<b>Target:</b>	GSK-3
<b>Pathway:</b>	PI3K/Akt/mTOR; Stem Cell/Wnt
<b>Solubility:</b>	DMSO : 83.33 mg/mL (230.00 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

A 1070722 is a potent and selective **glycogen synthase kinase 3 (GSK-3)** inhibitor, with a **K<sub>i</sub>** of 0.6 nM for both GSK-3 $\alpha$  and GSK-3 $\beta$ . 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<sup>[1]</sup>. IC<sub>50</sub> & Target: K<sub>i</sub>: 0.6 nM (GSK-3)<sup>[1]</sup>

### References:

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

### CAIndexNames:

Urea, N-(7-methoxy-4-quinolinyl)-N'-[6-(trifluoromethyl)-2-pyridinyl]-

### SMILES:

FC(F)(F)C1=NC(NC(NC2=CC=NC3=C2C=CC(OC)=C3)=O)=CC=C1

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

Tel: 732-484-9848

Fax: 888-484-5008

E-mail: sales@ChemScene.com

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