

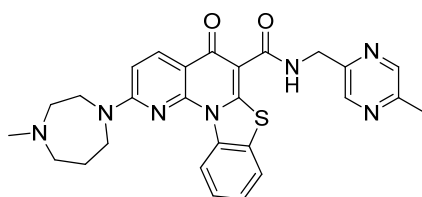
## Product Data Sheet

**Product: CX-5461**

**Catalogue # SYN-3031**

**CAS Name:**

2-(4-methyl-1,4-diazepan-1-yl)-N-((5-methylpyrazin-2-yl)methyl)-5-oxo-5H-benzo[4,5]thiazolo[3,2-a][1,8]naphthyridine-6-carboxamide



**CAS Registry**

**Number:**

[1138549-36-6]

**Molecular Formula:**

C<sub>27</sub>H<sub>27</sub>N<sub>7</sub>O<sub>2</sub>S

**Molecular Weight:**

513.61

**Purity:**

> 95%

**Smiles String:**

O=C(NCC1=CN=C(C)C=N1)C2=C3N(C(C=CC=C4)=C4S3)C5=NC(N6CCN(C)CCC6)=CC=C5C2=O

**Shipping and Storage Temperature:**

**Shipping:** Ambient

**Storage temperature:** 1 year - 4°C in powder format, 2 weeks - 4°C in DMSO, 6 months -80°C in DMSO

**Biological Activity**

**Description:** CX-5461 is an inhibitor of rRNA synthesis, selectively inhibits Pol I-driven transcription of rRNA with IC<sub>50</sub> of 142 nM, has no effect on Pol II, and possesses 250- to 300-fold selectivity for inhibition of rRNA transcription versus DNA replication and protein translation.

**Targets:** rRNA synthesis

**QC Data:**

**<sup>1</sup>H-NMR:** √

**HPLC:** 98.5% @ 254nm

**ES-MS:** 514 [M+1]

**Solubility:**

DMSO  $\geq$  0.02mg/mL, Ethanol <1mg/mL

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**Preparing Stock Solutions**

<b>Stock Solution (1ml DMSO)</b>	1mM	10mM	20mM	50mM
<b>Mass(mg)</b>	0.5136	5.1360	10.2720	25.6800

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**Reference:**

*Targeting RNA Polymerase I with an Oral Small Molecule CX-5461 Inhibits Ribosomal RNA Synthesis and Solid Tumor Growth.* Denis Drygin<sup>1</sup>, Amy Lin<sup>1</sup>, Josh Bliesath<sup>1</sup>, Caroline B. Ho<sup>1</sup>, Sean E. O'Brien<sup>1</sup>, Chris Proffitt<sup>1</sup>, Mayuko Omori<sup>1</sup>, Mustapha Haddach<sup>1</sup>, Michael K. Schwaebe<sup>1</sup>, Adam Siddiqui-Jain., etc.  
**Cancer Res February 15, 2011 71; 1418**

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