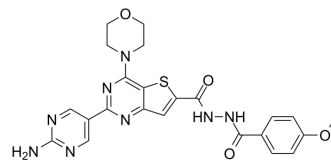


## PI3K/mTOR Inhibitor-8

Cat. No.:	HY-146200
CAS No.:	2492376-85-7
Molecular Formula:	C <sub>23</sub> H <sub>22</sub> N <sub>8</sub> O <sub>4</sub> S
Molecular Weight:	506.54
Target:	PI3K; mTOR
Pathway:	PI3K/Akt/mTOR
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PI3K/mTOR Inhibitor-8 (Compound 18b) is a PI3K and mTOR dual inhibitor with IC <sub>50</sub> values of 0.46 nM and 12 nM against PI3K $\alpha$ and mTOR, respectively. PI3K/mTOR Inhibitor-8 induces HCT-116 cells apoptosis and arrests cell cycle at the G1/S phase <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	PI3K $\alpha$ 0.46 nM (IC <sub>50</sub> )	mTOR 12 nM (IC <sub>50</sub> )
<b>In Vitro</b>	PI3K/mTOR Inhibitor-8 (Compound 18b) shows anti-proliferation activities with IC <sub>50</sub> values of 1.95 $\pm$ 0.02, 2.02 $\pm$ 0.01, 1.62 $\pm$ 0.01 and 1.55 $\pm$ 0.01 $\mu$ M against PC-3, HCT-116, A549 and MDA-MB-231 cells, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Han Y, et al. Design, synthesis and biological evaluation of thieno[3,2-d]pyrimidine derivatives containing aroyl hydrazone or aryl hydrazide moieties for PI3K and mTOR dual inhibition. *Bioorg Chem.* 2020 Nov;104:104197.

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

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