



# INK-128

# Data Sheet

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<b>Catalog Number:</b>	MC11117	<b>Product Type:</b>	Small Molecule
<b>Bio-Activity:</b>	mTOR inhibitor	<b>CAS #:</b>	1224844-38-5
<b>Research Categories:</b>	Cell death, cancer	<b>Chemical Name:</b>	3-(2-Amino-5-benzoxazolyl)-1-(1-methylethyl)-1H-pyrazolo[3,4-d]pyrimidin-4-amine
<b>Solubility:</b>	Soluble in DMSO (up to 25 mg/ml)	<b>Molecular Formula:</b>	C15H15N7O
<b>Purity:</b>	> 98%	<b>Molecular Weight:</b>	309.33
<b>Format:</b>	Powder	<b>Ship Temp:</b>	Ambient
<b>Storage:</b>	-20°C		

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## Application Notes

### Description/Data:

A potent and selective, ATP-competitive inhibitor of mTOR kinase,  $K_i = 1.4$  nM [1]. Inhibits growth and proliferation of various breast cancer cell lines and human endothelial cells [2].

### References:

- 1) Hsieh et al. (2012), The translational landscape of mTOR signaling steers cancer initiation and metastasis; *Nature*, 485 55
- 2) Gokmen-Polar et al. (2012) Investigational drug MLN0128, a novel TORC1/2 inhibitor, demonstrates potent oral antitumor activity in human breast cancer xenograft models; *Breast Cancer Res. Treat.*, 136 673

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