

## **Data Sheet**

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 M2698

 Cat. No.
 :
 PC-60433

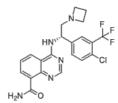
 CAS No.
 :
 1379545-95-5

 Molecular Formula
 :
 C<sub>21</sub>H<sub>19</sub>ClF<sub>3</sub>N<sub>5</sub>O

Molecular Weight: 449.862

Target : Ribosomal S6 Kinase (RSK)

**Solubility** : 10 mM in DMSO



## **Biological Activity**

M2698 (MSC2363318A) is a potent, selective, ATP-competitive, orally bioavailable and brain penetrant dual inhibitor of **p70S6K** and **Akt1/3** with IC50 of 1 nM and 17 nM, respectively.

M2698 displays relative selectivity against a panel of 264 kinases (only 6 kinases within 10-fold IC50 of p70S6K). M2698 inhibits the phosphorylation of p70S6K1 and Akt substrates, S6 (IC50=11 nM) and GSK3 $\beta$  (IC50=17 nM) in MDA-MB-468 cells, shows proliferation inhibition of 9 breast cancer cell lines (IC50<2 uM).

M2698 inhibits growth of human breast cancer xenografted tumors in mice.

## References

Machl A, et al. Am J Cancer Res. 2016 Mar 15;6(4):806-18.

Previs RA, et al. *J Natl Cancer Inst*. 2017 Jul 1;109(7).

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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