

Data Sheet

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 Product Name
 :
 AZD-8055

 Cat. No.
 :
 PC-42576

 CAS No.
 :
 1009298-09-2

 Molecular Formula
 :
 C₂₅H₃₁N₅O₄

 Molecular Weight
 :
 465.5447

 Target
 :
 mTOR

Solubility : 10 mM in DMSO

Biological Activity

AZD-8055 is a potent, selective, ATP-competitive and orally bioavailable **mTOR** inhibitor with IC50 of 0.8 nM. AZD-8055 shows excellent selectivity (1,000-fold) against all class I PI3K isoforms and other PI3K-like kinases. AZD-8055 inhibits the phosphorylation of mTORC1 substrates p70S6K and 4E-BP1, and phosphorylation of the mTORC2 substrate AKT and downstream proteins, also fully inhibits rapamycin-resistant T37/46 phosphorylation sites on 4E-BP1. AZD-8055 potently inhibits proliferation and induces autophagy in H838 and A549 cells, exhibits tumor growth inhibition in vivo.

References

Chresta CM, et al. *Cancer Res.* 2010 Jan 1;70(1):288-98.

Sini P, et al. *Autophagy*. 2010 May;6(4):553-4.

Jiang Q, et al. *Cancer Res.* 2011 Jun 15;71(12):4074-84. Willems L, et al. *Leukemia*. 2012 Jun;26(6):1195-202.

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

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