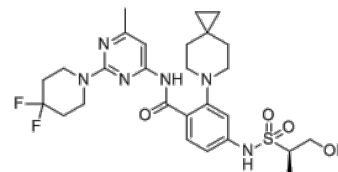


Product Name : AM-9022
Cat. No. : PC-21658
CAS No. : 2446872-46-2
Molecular Formula : C₂₇H₃₆F₂N₆O₄S
Molecular Weight : 578.68
Target : Kinesin
Solubility : 10 mM in DMSO



CAS: 2446872-46-2

Biological Activity

AM-9022 (AM9022) is a potent, selective and orally active mitotic kinesin **KIF18A** inhibitor with IC₅₀ of 47 nM in kinesin-8 microtubule (MT)-ATPase motor assays.

AM-9022 exhibits good specificity against a panel of diverse kinesin motor proteins, except for the KIF19A motor (IC₅₀=926 nM).

AM-9022 shows cellular EC₅₀ of 42 and 37 nM for cell line pH3+ and PCM foci in mitotic image assays respectively.

AM-9022 has similar inhibitory effects on the motor activity of human and mouse KIF18A.

AM-9022 (30 mg per kg, p.o.) increased pH3 mitotic marker levels in OVCAR-3 tumors by 3.4-fold in the OVCAR-3 HGSOC CDX tumor model, inhibited tumor growth with evidence of TR (95% TR) and no body weight loss.

AM-9022 administered at 30 and 100 mg per kg inhibited tumor growth with evidence of TR (16% and 94% TR, respectively) at well-tolerated doses in JIMT-1 breast cancer CDX tumor model.

References

Marc Payton, et al. *Nat Cancer*. 2023 Dec 27. doi: 10.1038/s43018-023-00699-5.

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

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