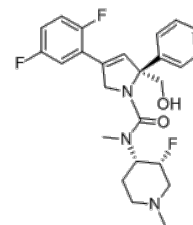


Product Name : MK-0731
Cat. No. : PC-62338
CAS No. : 845256-65-7
Molecular Formula : C₂₅H₂₈F₃N₃O₂
Molecular Weight : 459.513
Target : Kinesin
Solubility : 10 mM in DMSO



Biological Activity

MK-0731 (MK0731) is a potent, selective **kinesin spindle protein (KSP, KIF11)** inhibitor with IC₅₀ of 2.2 nM, cell EC₅₀ of 5.3 nM.

MK-0731 displays >20,000-fold selectivity for KSP over a panel of eight related kinesins (CENP-E, MKLP-1, Kif3A, Kif1B, uKHC, nKHC, KIF14, and MCAK).

MK-0731 induces a mitotic block with an IC₅₀ of 19 nM in cells that are refractory to paclitaxel due to P-gp overexpression.

MK-0731 induces dose-dependent mitotic arrest in tumors and inhibits tumor growth in mouse xenograft.

References

Cox CD, et al. *J Med Chem.* 2008 Jul 24;51(14):4239-52.

Cox CD, et al. *Anticancer Agents Med Chem.* 2010 Nov 1;10(9):697-712.

Holen K, et al. *Invest New Drugs.* 2012 Jun;30(3):1088-95.

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

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