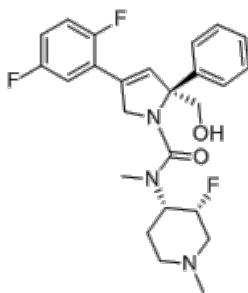


Product Name	: MK-0731	
Synonyms	: MK0731	
Cat No.	: M16139	
CAS Number	: 845256-65-7	
Molecular Formula	: C ₂₅ H ₂₈ F ₃ N ₃ O ₂	
Formula Weight	: 459.51	
Chemical Name	(S)-4-(2,5-difluorophenyl)-N-((3R,4S)-3-fluoro-1-methylpiperidin-4-yl)-2-(hydroxymethyl)-N-methyl-2-phenyl-2,5-dihydro-1H-pyrrole-1-carboxamide	
Description	MK-0731 is a potent, selective kinesin spindle protein (KSP) inhibitor with IC ₅₀ of 2.2 nM, cell EC ₅₀ of 5.3 nM; 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); induces a mitotic block with an IC ₅₀ of 19 nM in cells that are refractory to paclitaxel due to P-gp overexpression; induces dose-dependent mitotic arrest in tumors and inhibits tumor growth in mouse xenograft. Solid Tumors Discontinued	
Pathway	: Cytoskeleton/Cell Adhesion Molecules	
Target	: Kinesin	
Receptor	: Kinesin	
Solubility	: —	
SMILES	<chem>O=C(N1[C@@](C2=CC=CC=C2)(CO)C=C(C3=CC(F)=CC=C3F)C1N([C@@H]4[C@H](F)CN(C)CC4)C</chem>	
Storage	: (-20°C)	
Stability	: ≥ 2 years	
Reference	:	

1. Cox CD, et al. J Med Chem. 2008 Jul 24;51(14):4239-52. | 2. Cox CD, et al. Anticancer Agents Med Chem. 2010 Nov 1;10(9):697-712. | 3. Holen K, et al. Invest New Drugs. 2012 Jun;30(3):1088-95.