

Product Name	: Tozasertib
Synonyms	: MK-0457; VX-680; MK0457; VX680; VX 680; MK 0457
Cat No.	: M15426
CAS Number	: 639089-54-6
Molecular Formula	: C ₂₃ H ₂₈ N ₈ O ₂ S
Formula Weight	: 464.59
Chemical Name	: Cyclopropanecarboxamide, N-[4-[[4-(4-methyl-1-piperazinyl)-6-[(5-methyl-1H-pyrazol-3-yl)amino]-2-pyrimidinyl]thio]phenyl]-
Description	Tozasertib (MK-0457, VX-680) is a highly potent, selective and reversible Aurora kinase inhibitor with K_i of 0.6, 18 and 4.6 nM for Aurora A, B and C, respectively; also inhibits the imatinib-resistant ABL(T315I) kinase with K_d of 5 nM, displays >100-fold selectivity for the Aurora-A kinase over 55 other kinases with the only exception FLT-3 (K_i=30 nM); blocks cell-cycle progression and induces apoptosis in a diverse range of human tumor types; causes profound inhibition of tumor growth in a variety of in vivo xenograft models. Blood Cancer Discontinued
Pathway	: Cell Cycle/DNA Damage
Target	: Aurora Kinase
Receptor	: AuroraA; AuroraB; AuroraC; Bcr-Abl; FLT3
Solubility	: 10 mM in DMSO
SMILES	: <chem>O=C(C1CC1)NC2=CC=C(SC3=NC(NC4=CC(C)=NN4)=CC(N5CCN(C)CC5)=N3)C=C2</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Harrington EA, et al. Nat Med. 2004 Mar;10(3):262-7. | 2. Young MA, et al. Cancer Res. 2006 Jan 15;66(2):1007-14. | 3. Carter TA, et al. Proc Natl Acad Sci U S A. 2005 Aug 2;102(31):11011-6. | 4. Giles FJ, et al. Blood. 2007 Jan 15;109(2):500-2.