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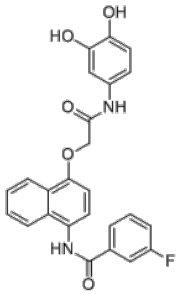
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	T417
Cat. No.	:	PC-72727
CAS No.	:	2032123-28-5
Molecular Formula	:	$C_{25}H_{19}FN_2O_5$
Molecular Weight	:	446.434
Target	:	Other Targets
Solubility	:	10 mM in DMSO



Biological Activity

T417 (PBX1 inhibitor T417, TCRS-417) is a novel small molecule compound capable of docking to the interface between **PBX1** and its cognate DNA target sequence, potently interferes with the PBX1-DNA interaction with IC50 of 6.58 uM.
T417 destabilizes the PBX1-DNA complex, T417 competition of PBX1 protein binding to immobilized PBX1 consensus DNA with IC50 of 5 uM.
T417 selectively suppresses the formation of the PBX1/MEIS2 transcriptional complex, inhibits PBX1 transcriptional activity by hindering its binding to the promoter regions of PBX1 downstream target genes.
T417 (PBX1 inhibitor T417) selectively inhibits carboplatin-resistant tumor cells, and suppresses tumor growth in xenograft models of carboplatin-resistant cancer models.
T417 also is selectively toxic against chr1q-amplified myeloma and solid tumour cells.

References

Shen YA, et al. ***iScience.*** 2021 Oct 15;24(11):103297.

Trasanidis N, et al. ***Blood.*** 2022 Jan 11:blood.2021014391.

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