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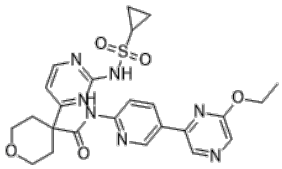
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Dencatistat
Cat. No.	:	PC-24123
CAS No.	:	2377000-84-3
Molecular Formula	:	$C_{24}H_{27}N_7O_5S$
Molecular Weight	:	525.58
Target	:	Other Targets
Solubility	:	10 mM in DMSO



CAS: 2377000-84-3

Biological Activity

Dencatistat (STP938) is a potent, orally bioavailable, selective inhibitor of cytidine triphosphate synthase 1 (**CTPS1**) with IC50 of <100 nM, > 1,300-fold selectivity over CTPS2, specifically blocks cell proliferation of the hematological cancers.
STP938 has an IC50 <100 nM against 43 (77%) of the hematological cell lines, whereas only 15% of the solid tumor derived cell lines are affected.
T-cell derived cell lines are extremely sensitive to STP938 with many IC50 <10 nM.
STP938 demonstrated the selective depletion of CTP but not ATP or GTP in activated human T-cells.|
STP938 enables cell specific inhibition of de novo pyrimidine nucleotide synthesis with a particular sensitivity displayed by cell lines derived from hematological malignancies.
STP938 selectively induces apoptosis in lymphocyte cells but not in other cell types that are able to rely upon CTPS2 for their CTP synthesis.

References

Andy Parker, et al. ***Blood*** (2020) 136 (Supplement 1): 31.

Philip Beer, et al. ***Blood*** (2022) 140 (Supplement 1): 12027–12028.

Patent WO2019179652 A1.

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