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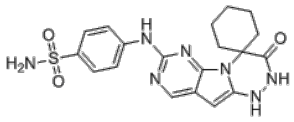
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	INX-315
Cat. No.	:	PC-21500
CAS No.	:	2745060-92-6
Molecular Formula	:	$C_{19}H_{21}N_7O_3S$
Molecular Weight	:	427.48
Target	:	Cyclin-dependent Kinase (CDK)
Solubility	:	10 mM in DMSO



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Biological Activity

INX-315 (INX315) is a highly potent, selective **CDK2** inhibitor with IC50 of 0.6 and 2.5 nM for CDK2/cyclin E1 and CDK2/cyclin A2 respectively, shows high selectivity over other CDK family members.
INX-315 shows greater potency against CDK2/cyclin E1 in the NanoBRET assay (2.3 nM) and a greater selectivity over CDK1 and 9 compared to PF-07104091 (Cat# PC-20283).
INX-315 displays selectivity for CDK2/cyclin A1/E1/O with IC50 values of 4 nM or less, also potently inhibits CSF1R with IC50 of 2.29 nM.
INX-315 has a cellular mean IC50 of 26 nM against a panel of ovarian cancer cell lines (including five HGSOC with CCNE1-amplification), induces cell cycle arrest.
INX-315 promotes retinoblastoma protein hypo-phosphorylation and therapy-induced senescence (TIS) in CCNE1-amplified tumors, leading to durable control of tumor growth.
INX-315 overcomes breast cancer resistance to CDK4/6i, restoring cell cycle control whilst re-instating the chromatin architecture of CDK4/6i-induced TIS.
INX-315 delays the onset of CDK4/6i resistance in breast cancer by driving deeper suppression of E2F targets

References

Dietrich C, et al. ***Cancer Discov.*** 2023 Dec 4. doi: 10.1158/2159-8290.CD-23-0954.

E-mail: tech@probechem.com