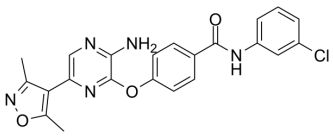
Aurora Kinases-IN-2

Cat. No.:	HY-150592
CAS No.:	2241914-86-1
Molecular Formula:	$C_{22}H_{18}ClN_5O_3$
Molecular Weight:	435.86
Target:	Aurora Kinase
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Aurora Kinases-IN-2 (compound 12Aj) is a potent Aurora kinases inhibitor with IC_{50} values of 90 and 152 nM for Aurora A and Aurora B. Aurora Kinases-IN-2 arrests cell cycle at G2/M phase by regulating cyclin B1 and cdc2. Aurora Kinases-IN-2 can be used for cancer research[1].

IC_{50} & Target	Aurora A	Aurora B
	90 nM (IC_{50})	152 nM (IC_{50})

In Vitro

Aurora Kinases-IN-2 (compound 12Aj) (72 hours) has antiproliferative activity with IC_{50} values of 11.5 μM, 1.34 μM, 7.30 μM and 1.64 μM for U87, HeLa, HepG2 and LoVo tumor cell lines, respectively[1].

Aurora Kinases-IN-2 (compound 12Aj) (0-10 μM; 24 hours) inhibits Aurora A and Aurora B in HeLa cells[1].

Aurora Kinases-IN-2 (compound 12Aj) (0-10 μM; 24 hours; HeLa cells) results in G2/M accumulation by regulating the expression of Cyclin B1 and cdc2[1].

Aurora Kinases-IN-2 (compound 12Aj) (0-10 μM; 24 hours) blocks phosphorylation of Aurora kinases in HeLa cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	HeLa cells
Concentration:	0, 1, 5 and 10 μM
Incubation Time:	24 hours
Result:	Decreased the expression level of Aurora A and B, as well as reduced phosphorylation of Aurora A on Thr288 (p-Thr288) and Aurora B on Thr232 (p-Thr232) in a dose-dependent manner.

REFERENCES

[1]. Bo YX, et, al. Synthesis, biological evaluation and molecular modeling study of 2-amino-3,5-disubstituted-pyrazines as Aurora kinases inhibitors. Bioorg Med Chem. 2020 Mar 1;28(5):115351.

Caution: Product has not been fully validated for medical applications. For research use only.

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