Cat No. 94-U12

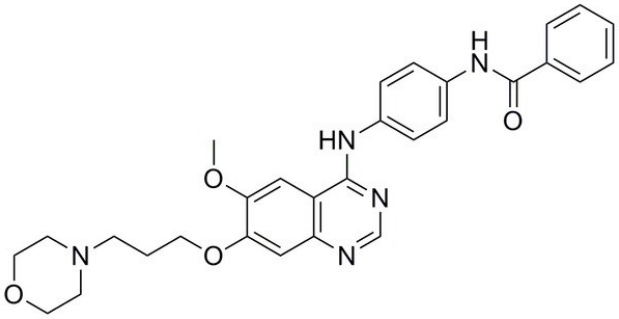
ZM447439

5mg

For research purposes only

ZM447439 is a selective ATP-competitive inhibitor of Aurora B kinase. The Aurora kinases have important roles in regulating mitosis and cytokinesis, with Aurora B involved in centromere function as part of the Chromosomal Passenger Complex, with survivin, INCENP, and borealin. ZM447439 selectively inhibits proliferating cells rather than non-dividing cells, suggesting its potential in cancer therapy.

TECHNICAL INFORMATION



Other Names: N-[4-[[6-methoxy-7-[3-(4-morpholinyl) propoxy]-4-quinazolinyl]amino]phenyl]-benzamide

Chemical Formula: $C_{29}H_{31}N_5O_4$

CAS Number: 331771-20-1

PubChem Substance ID: 9914412

Molecular Weight: 513.6

Purity: >99%

Appearance: Off white crystalline solid

Solubility: DMSO

IC_{50} : Aurora B-50nM, Aurora C & A-250 & 1000nM, CDK1, CDK2, CDK4, PLK1, CHK1, KDR2 & FAK– 10µM

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in 25mg/ml of DMSO.

REFERENCES

1. Bedrick, B., et al (2005). Aurora kinase inhibitor ZM447439 blocks chromosome-induced spindle assembly, the completion of chromosome condensation, and the establishment of the spindle integrity check point in xenopus egg extracts. Mol. Biol. Cell. 16:1305-1318.
2. Walsby, E., et al (2008). Effects if the aurora kinase inhibitors AZD1152-HQPA and ZM447439 on growth arrest and polyploidy in acute myeloid leukemia cell lines and primary blasts. Haematologica. 93:662-9.
3. Ditchfield, C., et al (2003). Aurora B couples chromosome alignment with anaphase by targeting BubR1, Mad2, and Cenp-E to kinetochores. J. Cell. Biol. 16:267-80.