

Product Datasheet

CEP-28122

Catalog No. **BP-02493** · CAS **1022958-60-6** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-10**

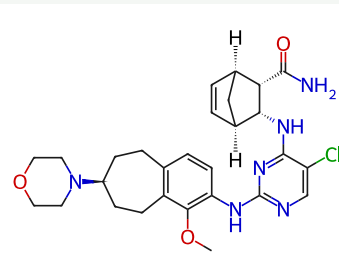
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Target Anaplastic lymphoma kinase (ALK)	Research area Cancer
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Molecular formula **C₂₈H₃₅ClN₆O₃**

Molecular weight **539.0690**

STRUCTURE



DESCRIPTION

CEP-28122, a diaminopyrimidine derivative, is a potent, selective, and orally active ALK inhibitor with an IC₅₀ value of 1.9 nM. CEP-28122 has antitumor activity in experimental models of ALK-positive human cancers. CEP-28122 has good pharmacodynamic and pharmacokinetic activity. CEP-28122 can be used for the study of ALK-positive anaplastic large-cell lymphoma (ALCL), non-small cell lung cancer (NSCLC), and neuroblastoma cells .

BIOLOGICAL ACTIVITY

In Vitro

CEP-28122 (3-3000 nM; 48 hours) treatment leads to concentration-dependent growth inhibition of Karpas-299 and Sup-M2 cells in culture, associates with concentration-related caspase 3/7 activation.

CEP-28122 (30-1000 nM; 2 hours) treatment leads to substantial suppression of phosphorylation of putative downstream effectors of ALK in Sup-M2 cells, indicating that the downstream signaling pathways are mediated by individual ALK fusion protein.

In Vivo

CEP-28122 (3-30 mg/kg; oral gavage; twice a day; 12 days) produces dose-dependent antitumor activity in Sup-M2 subcutaneous tumor xenografts in SCID mice. In contrast, CEP-28122 has no antitumor activity in nu/nu mice bearing HCT116, suggesting that the antitumor activity of CEP-28122 in NPM-ALK-positive Sup-M2 tumor models is due to sustained NPM-ALK inhibition in tumors

SOLUBILITY

Soluble in DMSO

REFERENCES

[1].Cheng M, et al. CEP-28122, a highly potent and selective orally active inhibitor of anaplastic lymphoma kinase with antitumor activity in experimental models of human cancers. Mol Cancer Ther. 2012 Mar;11(3):670-679.

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Lot CoA and SDS are separate documents.