

Product Data Sheet

Product Name: NVP-ADW742

Cat. No.: GC14310

Chemical Properties

Cas. No. 475488-23-4

Chemical Name 5-(3-phenylmethoxyphenyl)-7-[3-(pyrrolidin-1-ylmethyl)cyclobutyl]pyrrolo[2,3-d]pyrimidin-4-amine

SMILES C1CCN(C1)CC2CC(C2)N3C=C(C4=C3N=CN=C4N)C5=CC(=CC=C5)OCC6=CC=CC=C6

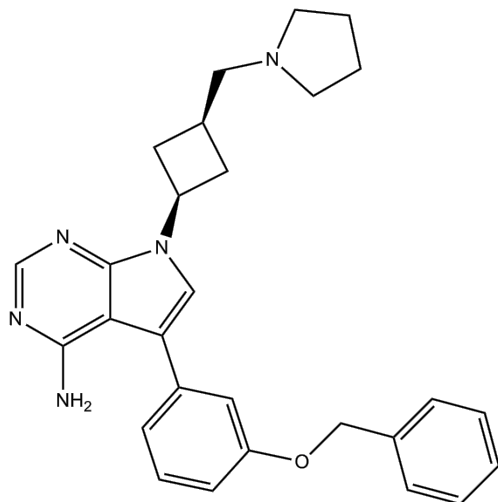
Formula C₂₈H₃₁N₅O M.Wt 453.58

Solubility DMF: 30 mg/mL, DMSO: 30 mg/mL, Ethanol: 30 mg/mL, Ethanol: PBS (pH 7.2) (1:10): 0.09 mg/mL
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

NVP-ADW742 is a novel inhibitor of IFG-1 receptor (IGF-1R) kinase with the IC₅₀ value of 0.17 μM [1].

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

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NVP-ADW742 has shown above 16-fold effective function against IGF-1R than insulin receptor (InsR). Furthermore, NVP-ADW742 has also been reported to inhibit other kinases, with the IC₅₀ values of >10 μ M for HER2, PDGFR, VEGFR-2, or Bcr-Abl p210, and the IC₅₀ values >5 μ M for c-Kit [1]. Besides, NVP-ADW742 combined with etoposide and carboplatin has been reported to inhibit cell growth and induce cytotoxicity by MTT assay using the small cell lung cancer (SCLC), including H526, H146, WBA and H209 cell lines. In addition, NVP-ADW742 has been revealed to completely inhibit the expression of VEGF mRNA which induced by IGF-I in H526 cells [2].

References:

[1] Mitsiades CS1, Mitsiades NS, McMullan CJ, Poulaki V, Shringarpure R, Akiyama M, Hideshima T, Chauhan D, Joseph M, Libermann TA, García-Echeverría C, Pearson MA, Hofmann F, Anderson KC, Kung AL. Inhibition of the insulin-like growth factor receptor-1 tyrosine kinase activity as a therapeutic strategy for multiple myeloma, other hematologic malignancies, and solid tumors. *Cancer Cell*. 2004 Mar; 5(3):221-30.

[2] Warshamana-Greene GS1, Litz J, Buchdunger E, García-Echeverría C, Hofmann F, Krystal GW. The insulin-like growth factor-I receptor kinase inhibitor, NVP-ADW742, sensitizes small cell lung cancer cell lines to the effects of chemotherapy. *Clin Cancer Res*. 2005 Feb 15;11(4):1563-71.

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