

**Product Name:** NVP ADW 742

**Catalog No.:** 5247

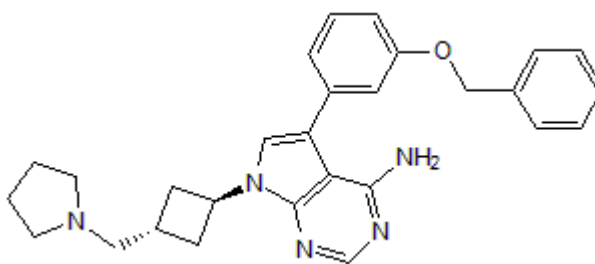
**Batch No.:** 1

**CAS Number:** 475488-23-4

**IUPAC Name:** 5-[3-(Phenylmethoxy)phenyl]-7-[*trans*-3-(1-pyrrolidinylmethyl)cyclobutyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-amine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>28</sub>H<sub>31</sub>N<sub>5</sub>O  
**Batch Molecular Weight:** 453.58  
**Physical Appearance:** Off White solid  
**Solubility:** DMSO to 50 mM  
 ethanol to 10 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

|             | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 74.14  | 6.89     | 15.44    |
| Found       | 73.94  | 6.89     | 15.53    |

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

ATP-competitive inhibitor of IGF1R (IC<sub>50</sub> in the range of 0.1-0.2 µM). Also inhibits c-Kit kinase activity (IC<sub>50</sub> in the range of 3-5 µM). Exhibits a synergistic effect with Imatinib, enhancing the sensitivity of multiple small cell lung cancer cell lines to the chemotherapeutics etoposide (Cat. No. 1226) and carboplatin (Cat. No. 2626).

**Physical and Chemical Properties:**

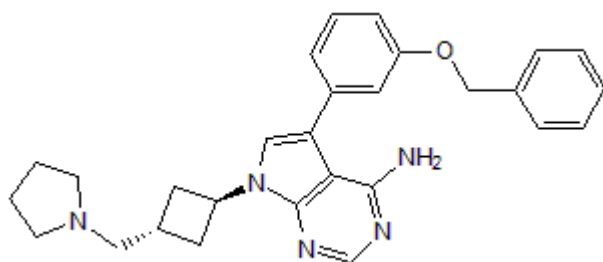
Batch Molecular Formula: C<sub>28</sub>H<sub>31</sub>N<sub>5</sub>O

Batch Molecular Weight: 453.58

Physical Appearance: Off White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 50 mM

ethanol to 10 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Warshamana-Greene et al** (2004) The insulin-like growth factor-I (IGF-I) receptor kinase inhibitor NVP-ADW742, in combination with STI571, delineates a spectrum of dependence of small cell lung cancer on IGF-I and stem cell factor signaling. *Mol.Cancer Ther.* **3** 527. PMID: 15141010.

**Warshamana-Greene et al** (2005) 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.* **11** 1563. PMID: 15746061.

**Zhou et al** (2011) The insulin-like growth factor-I receptor kinase inhibitor NVP-ADW742 sensitizes medulloblastoma to the effects of chemotherapy. *Oncol. Rep.* **25** 1565. PMID: 21455580.

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