

## Certificate of Analysis

**Product Name:** GTP 14564

**Catalog No.:** 2086

**Batch No.:** 1

CAS Number: 34823-86-4

IUPAC Name: 3-Phenyl-1*H*-benzofuro[3,2-*c*]pyrazole

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O·¼H<sub>2</sub>O

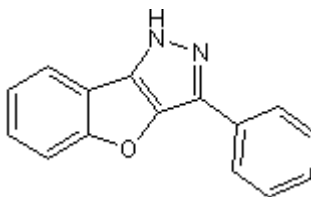
**Batch Molecular Weight:** 238.76

**Physical Appearance:** Light brown solid

**Solubility:** DMSO to 100 mM  
ethanol to 25 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.2 (Chloroform:Methanol [95:5])

**Melting Point:** Between 221 - 227°C

**HPLC:** Shows >99.3% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

Carbon Hydrogen Nitrogen

Theoretical 75.46 4.43 11.73

Found 75.31 4.27 11.81

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

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**Description:**

Potent, selective inhibitor of class III receptor tyrosine kinases (IC<sub>50</sub> values are 0.3 μM for c-Fms, c-Kit, FLT3 and ITD-FLT3 and 1 μM for PDGFRβ). Displays no activity against ERK1, ERK2, EGFR, MEK1, HER2, Src, Abl, PKC, PKA and Akt (IC<sub>50</sub> > 10 μM). Inhibits FL-dependent proliferation in BaF/ITD-FLT3 cells more potently than BaF/wt-FLT3 cells; anti-leukemic.

**Physical and Chemical Properties:**

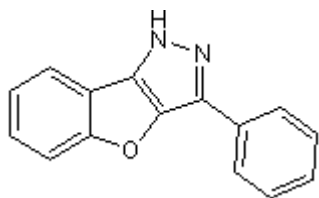
Batch Molecular Formula: C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O.¼H<sub>2</sub>O

Batch Molecular Weight: 238.76

Physical Appearance: Light brown solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

**Murata et al** (2003) Selective cytotoxic mechanism of GTP-14564, a novel tyrosine kinase inhibitor in leukemia cells expressing a constitutively active Fms-like tyrosine kinase 3 (FLT3). *J.Biol.Chem.* **278** 32892. PMID: 12815052.

**Yao et al** (2005) Human leukemias with mutated FLT3 kinase are synergistically sensitive to FLT3 and Hsp90 inhibitors: the key role of the STAT5 signal transduction pathway. *Leukemia* **19** 1605. PMID: 16034464.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 25 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.

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