

**Product Name:** PD 173074

**Catalog No.:** 3044

**Batch No.:** 5

CAS Number: 219580-11-7

IUPAC Name: *N*-[2-[[4-(Diethylamino)butyl]amino]-6-(3,5-dimethoxyphenyl)pyrido[2,3-*d*]pyrimidin-7-yl]-*N'*-(1,1-dimethylethyl)urea

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>28</sub>H<sub>41</sub>N<sub>7</sub>O<sub>3</sub>·¼H<sub>2</sub>O

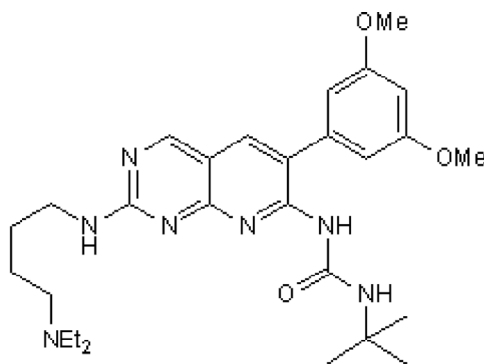
**Batch Molecular Weight:** 528.17

**Physical Appearance:** Yellow solid

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

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.0% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.67	7.92	18.56
Found	63.77	7.83	18.59

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956

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**Description:**

PD 173074 is a selective FGFR1 and FGFR3 inhibitor (IC<sub>50</sub> values are 5, 21.5, ~100, 17600 and 19800 nM for FGFR3, FGFR1, VEGFR2, PDGFR and c-Src respectively, and > 50000 nM for EGFR, InsR, MEK and PKC). Inhibits VEGF- and FGF-induced angiogenesis in the mouse cornea model of angiogenesis. Inhibits proliferation and differentiation of oligodendrocyte progenitors. Also promotes mESC self-renewal, facilitates the conversion of mouse epiblast stem cells to an earlier pluripotency state and inhibits differentiation of miPSCs to cardiomyocytes. Suppresses cell proliferation in cell lines expressing mutated FGFR3 protein. Blocks tumor growth in ... Please see product specific page on www.tocris.com for full description.

**Physical and Chemical Properties:**

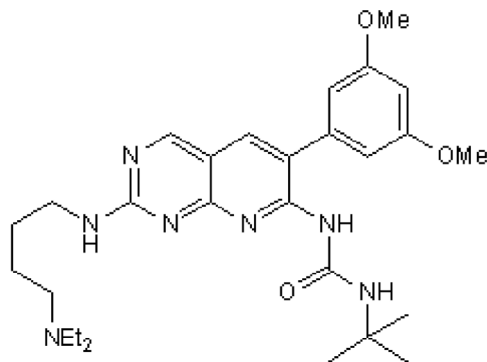
Batch Molecular Formula: C<sub>28</sub>H<sub>41</sub>N<sub>7</sub>O<sub>3</sub>·¼H<sub>2</sub>O

Batch Molecular Weight: 528.17

Physical Appearance: Yellow solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

Chan *et al* (2010) PLoS One **5** e14414.

Miyake *et al* (2010) 1-tert-butyl-3-[6-(3,5-dimethoxy-phenyl)-2-(4-diethylamino-butylamino)-pyrido[2,3-d]pyrimidin-7-yl]-urea (PD173074), a selective tyrosine kinase inhibitor of fibroblast growth factor receptor-3 (FGFR3), inhibits cell proliferation of bla J.Pharmacol.Exp.Ther. **332** 795. PMID: 19955487.

Pardo *et al* (2010) The fibroblast growth factor receptor inhibitor PD173074 blocks small cell lung cancer growth *in vitro* and *in vivo*. Cancer Res. **69** 8645. PMID: 19903855.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 100 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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.

**Licensing Information:**

Sold for research purposes under agreement from Pfizer Inc.

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**bio-techne.com**

info@bio-techne.com  
techsupport@bio-techne.com

**North America**

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**China**

info.cn@bio-techne.com  
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www.tocris.com/distributors  
Tel:+1 612 379 2956