

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** DMH4

**Catalog No.:** 4471

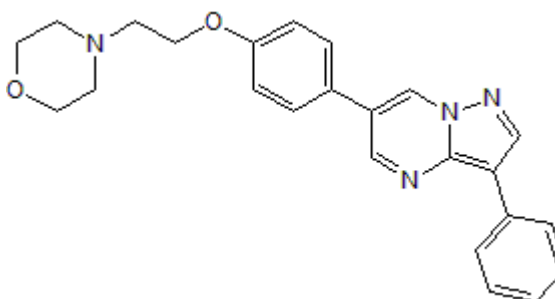
**Batch No.:** 1

CAS Number: 515880-75-8

IUPAC Name: 6-[4-[2-(4-Morpholinyl)ethoxy]phenyl]-3-phenylpyrazolo[1,5-a]pyrimidine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>24</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 400.47  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 50 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.98	6.04	13.99
Found	71.95	5.86	13.93

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

**Product Name:** DMH4

**Catalog No.:** 4471

**Batch No.:** 1

CAS Number: 515880-75-8

IUPAC Name: 6-[4-[2-(4-Morpholinyl)ethoxy]phenyl]-3-phenylpyrazolo[1,5-a]pyrimidine

**Description:**

Selective VEGFR-2 inhibitor (IC<sub>50</sub> values are 161, 3558, 8038 and > 30000 nM for VEGFR-2, BMPR-I, AMPK and TGFβR-I respectively). Displays antiangiogenic activity in vitro and in vivo.

**Physical and Chemical Properties:**

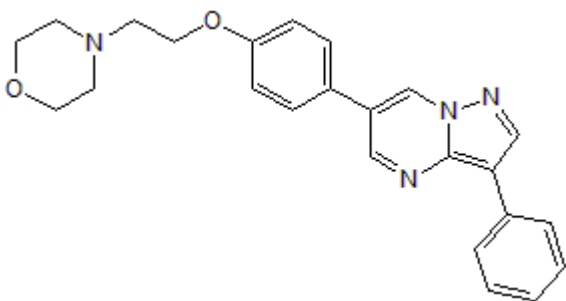
Batch Molecular Formula: C<sub>24</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>

Batch Molecular Weight: 400.47

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 50 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:**

**Fraley *et al*** (2002) Optimization of a pyrazolo[1,5-a]pyrimidine class of KDR kinase inhibitors: improvements in physical properties enhance cellular activity and pharmacokinetics. *Bioorg.Med.Chem.Lett.* **12** 3537. PMID: 12443771.

**Hao *et al*** (2010) In vivo structure-activity relationship study of dorsomorphin analogues identifies selective VEGF and BMP inhibitors. *ACS Chem.Biol.* **5** 245. PMID: 20020776.

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

**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