

**Product Name:** ML 347

**Catalog No.:** 4945

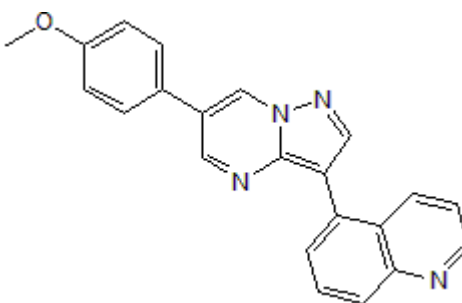
**Batch No.:** 1

CAS Number: 1062368-49-3

IUPAC Name: 5-[6-(4-Methoxyphenyl)pyrazolo[1,5-a]pyrimidin-3-yl]quinoline

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>22</sub>H<sub>16</sub>N<sub>4</sub>O.¼H<sub>2</sub>O  
**Batch Molecular Weight:** 356.89  
**Physical Appearance:** Pale yellow solid  
**Solubility:** DMSO to 20 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.5 (Chloroform:Methanol [97.5:2.5])  
**HPLC:** Shows >99.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	74.04	4.66	15.7
Found	74.33	4.49	15.81

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

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**Description:**

Potent and selective ALK2 and ALK1 inhibitor (IC<sub>50</sub> values are 32 and 46 nM, respectively); displays >200 fold selectivity over ALK3 and ALK6 and >400 fold selectivity over VEGF2. Exhibits no activity at ALK4, ALK5 or in a panel of related kinases. Inhibits BMP4 signaling in a functional assay (IC<sub>50</sub> = 152 nM).

**Physical and Chemical Properties:**

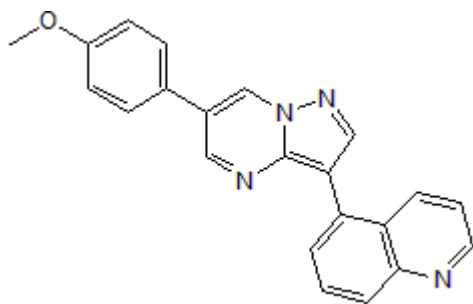
Batch Molecular Formula: C<sub>22</sub>H<sub>16</sub>N<sub>4</sub>O.¼H<sub>2</sub>O

Batch Molecular Weight: 356.89

Physical Appearance: Pale yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 20 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:**

**Engers et al** (2013) Synthesis and structure-activity relationships of a novel and selective bone morphogenetic protein receptor (BMP) inhibitor derived from the pyrazolo[1,5-a]pyrimidine scaffold of dorsomorphin: the discovery of ML347 as an ALK2 versus ALK3 selective MLPCN probe. *Bioorg Med Chem Lett.* **23** 3248. PMID: 23639540.

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