

Certificate of Analysis

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Product Name: MLR 1023

Catalog No.: 4582

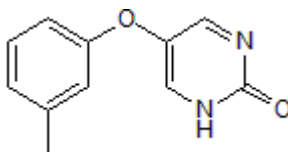
Batch No.: 1

CAS Number: 41964-07-2

IUPAC Name: 5-(3-Methylphenoxy)-2(1*H*)-pyrimidinone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₀N₂O₂
Batch Molecular Weight: 202.21
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 20 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	65.34	4.98	13.85
Found	64.92	4.94	13.86

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

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Description:

Selective allosteric activator of Lyn kinase ($EC_{50} = 63$ nM); displays no significant activity against a range of 47 other kinases, including other Src family kinases such as Fyn, Lck and Src kinase. Reduces blood glucose levels without affecting in vivo insulin secretion. Orally bioavailable.

Physical and Chemical Properties:

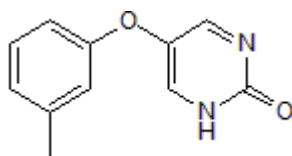
Batch Molecular Formula: $C_{11}H_{10}N_2O_2$

Batch Molecular Weight: 202.21

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Ochman *et al* (2012) The Lyn kinase activator MLR-1023 is a novel insulin receptor potentiator that elicits a rapid-onset and durable improvement in glucose homeostasis in animal models of type 2 diabetes. *J.Pharmacol.Exp.Ther.* **342** 23. PMID: 22431203.

Saporito *et al* (2012) MLR-1023 is a potent and selective allosteric activator of Lyn kinase in vitro that improves glucose tolerance in vivo. *J.Pharmacol.Exp.Ther.* **342** 15. PMID: 22473614.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol 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.

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