

**Product Name:** Nutlin-3

**Catalog No.:** 3984

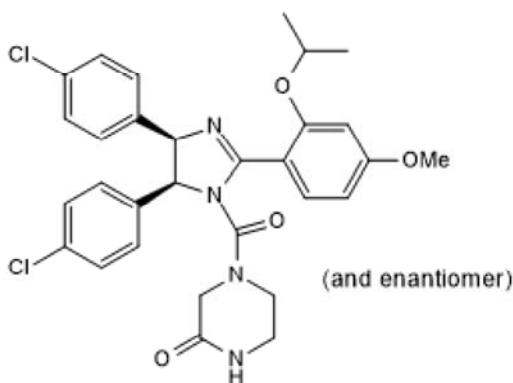
**Batch No.:** 3

CAS Number: 548472-68-0

IUPAC Name: (±)-4-[4,5-Bis(4-chlorophenyl)-2-(2-isopropoxy-4-methoxy-phenyl)-4,5-dihydro-imidazole-1-carbonyl]-piperazin-2-one

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>30</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>.  
**Batch Molecular Weight:** 581.49  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	61.97	5.2	9.64
Found	61.22	5.09	9.57

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

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**Description:**

Nutlin-3 is a MDM2 antagonist; inhibits the MDM2-p53 interaction (IC<sub>50</sub> = 0.09 μM) and activates p53. Antiproliferative agent; induces apoptosis in cancer cells.

**Physical and Chemical Properties:**

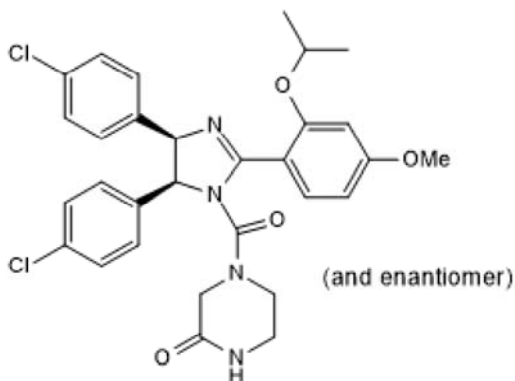
Batch Molecular Formula: C<sub>30</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>.

Batch Molecular Weight: 581.49

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°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. 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.

**Licensing Information:**

Sold under license from F. Hoffmann-La Roche Ltd.

**References:**

Vassilev *et al* (2004) *In vivo* activation of the p53 pathway by small-molecule antagonists of MDM2. *Science* **303** 844. PMID: 14704432.

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