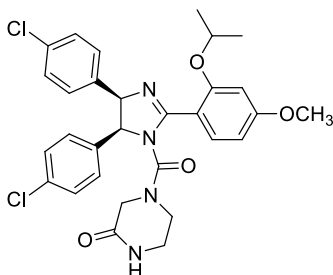


**Catalog # 10-1350**

**Nutlin-3**

CAS# 548472-68-0

(±)-4-[4,5-Bis(4-chlorophenyl)-2-(2-isopropoxy-4-methoxy-phenyl)-4,5-dihydro-imidazole-1-carbonyl]-piperazin-2-one  
Lot # B104715



MDM2 antagonist; inhibits the MDM2-p53 interaction (IC<sub>50</sub> = 0.09 μM) and activates p53<sup>1</sup>. Displays antiproliferative activity and induces apoptosis in a variety of tumor cells<sup>2-4</sup>.

- 1) Vassilev *et al.* (2004), *In vivo activation of the p53 pathway by small-molecule antagonists of MDM2.*; Science, **303** 844.
- 2) Ghassemifar *et al.* (2012), *MDM2 antagonism by nutlin-3 induces death in human medulloblastoma cells*; Neurosci. Lett., **513** 106
- 3) Manfe *et al.* (2012), *MDM2 inhibitor nutlin-31 induces apoptosis and senescence in cutaneous T-cell lymphoma: role of p53*; J. Invest. Dermatol., **132** 1487
- 4) Kunkele *et al.* (2012), *Pharmacological activation of the p53 pathway by nutlin-3 exerts anti-tumoral effects in medulloblastomas*; Neuro. Oncol., **14** 859

**PHYSICAL DATA**

Molecular Weight: 581.51  
Molecular Formula: C<sub>30</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>  
Purity: 98% by TLC:  
NMR: Conforms  
Solubility: DMSO (up to 50 mg/ml), Ethanol (up to 50 mg/ml)  
Physical Description: White solid  
Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**