

# PRODUCT INFORMATION



## (±)-Nutlin-3

Item No. 10004372

CAS Registry No.: 548472-68-0

Formal Name: rel-4-[[[(4R,5S)-4,5-bis(4-chlorophenyl)-4,5-dihydro-2-[4-methoxy-2-(1-methylethoxy)phenyl]-1H-imidazol-1-yl]carbonyl]-2-piperazinone

MF:  $C_{30}H_{30}Cl_2N_4O_4$

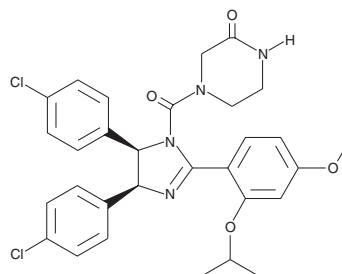
FW: 581.5

Purity:  $\geq 98\%$

Supplied as: A crystalline solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years



NOTE: Relative stereochemistry shown in chemical structure

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

(±)-Nutlin-3 is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-nutlin-3 in the solvent of choice, which should be purged with an inert gas. (±)-Nutlin-3 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (±)-nutlin-3 is approximately 30 mg/ml in ethanol and DMF and approximately 25 mg/ml in DMSO.

(±)-Nutlin-3 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (±)-nutlin-3 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. (±)-Nutlin-3 has a solubility of approximately 0.1 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

(±)-Nutlin-3 is a racemic mixture of the p53-Mdm2 protein-protein interaction inhibitor (–)-nutlin-3 (Item No. 18585) and its less active enantiomer (+)-nutlin-3 (Item No. 10009816).<sup>1</sup> *In vivo*, (±)-nutlin-3 (200 mg/kg twice daily) reduces tumor volume in an SJS-1 osteosarcoma mouse xenograft model.

### References

1. Vassilev, L.T., Vu, B.T., Graves, B., *et al.* *In vivo* activation of the p53 pathway by small-molecule antagonists of MDM2. *Science* **303**(5659), 844-848 (2004).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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