

PRODUCT INFORMATION

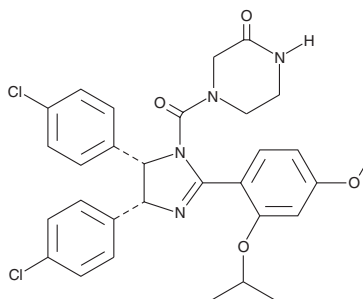


(+)-Nutlin-3

Item No. 10009816

CAS Registry No.: 675576-97-3
Formal Name: 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

Synonym: Nutlin 3b
MF: C₃₀H₃₀Cl₂N₄O₄
FW: 581.5
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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 in ethanol is approximately 20 mg/ml and approximately 14 mg/ml in DMSO and DMF.

(+)-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 0.12 mg/ml in a 1:7 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 the enantiomer and less active form of the p53-Mdm2 protein-protein interaction inhibitor (-)-nutlin-3 (Item No. 18585).¹ It inhibits the interaction between p53 and Mdm2 150-fold less potently than (-)-nutlin-3 with an IC₅₀ value of 13.6 μM. (+)-Nutlin-3 has been used as a negative control for the p53-modulating activity of (-)-nutlin-3 in cancer cells.

Reference

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/25/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM