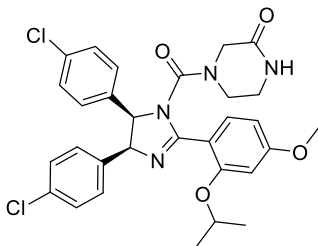




Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#:
406308	Nutlin-3a	T22D03P02

Chemical name	
4-((4S,5R)-4,5-bis(4-chlorophenyl)-2-(2-isopropoxy-4-methoxyphenyl)-4,5-dihydro-1H-imidazole-1-carbonyl)piperazin-2-one	
Synonyms	
Nutlin3a; Nutlin 3a; Nutlin-3a; SML 0580; SML0580; SML-0580; (-)-Nutlin 3, (-)-Nutlin-3;	
Chemical structure	CAS# and Theoretical analysis
	MedKoo Cat#: 406308 Name: Nutlin-3a CAS#: 675576-98-4 (4S5R) Lot#: T22D03P02 Chemical Formula: C ₃₀ H ₃₀ Cl ₂ N ₄ O ₄ Exact Mass: 580.16441 Molecular Weight: 581.49

Analysis item	Specifications / Results
Appearance	White to off-white solid powder
Structure	¹ H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent with those reported in the literature.
Purity (HPLC)	>98.0%
Solubility	Soluble in CDCl ₃
Conclusion	This product conforms with MedKoo's quality standards
Shipping condition	Shipped under ambient temperature as non-hazardous chemical. This product is stable for a few weeks during ordinary shipping and time spent in customs.
Storage condition	Short term storage (weeks): 0 – 4 °C under dry condition Long term storage (months): -20 °C under dry condition
Shelf life	At least 3 years if properly stored.

CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE