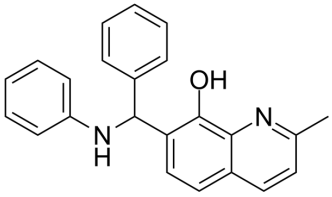
NSC 66811

Cat. No.:	HY-14967
CAS No.:	6964-62-1
Molecular Formula:	$C_{23}H_{20}N_2O$
Molecular Weight:	340.42
Target:	MDM-2/p53
Pathway:	Apoptosis

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (293.75 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9375 mL	14.6877 mL	29.3755 mL
	5 mM	0.5875 mL	2.9375 mL	5.8751 mL
	10 mM	0.2938 mL	1.4688 mL	2.9375 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (7.34 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.34 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

NSC 66811 is a MDM2-p53 inhibitor, with a K_i of 120 nM for binding to MDM2[1].

In Vitro

NSC 66811 (0, 5, 10, 20 μM) dose-dependently induces the accumulation of p53, MDM2, and $p21^{cip1/waf}$ due to the functional activation of p53[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	HCT-116 ($p53^{+/+}$ and $p53^{-/-}$) cells[1].
Concentration:	0, 5, 10, 20 μM.

Incubation Time:	48 h.
Result:	Dose-dependently induced the accumulation of p53, MDM2, and $p21^{cip1/waf}$ proteins in the HCT-116 human colon cancer cell line with wild-type p53. Had no effect on the levels for p53, MDM2, and $p21^{cip1/waf}$ protein in the isogenic HCT-116 $p53^{-/-}$ cell line.

REFERENCES

[1]. Yipin Lu, et al. Discovery of a nanomolar inhibitor of the human murine double minute 2 (MDM2)-p53 interaction through an integrated, virtual database screening strategy. J Med Chem. 2006 Jun 29;49(13):3759-62.

[2]. Sanjeev Shangary, et al. Small-Molecule Inhibitors of the MDM2-p53 Protein-Protein Interaction to Reactivate p53 Function: A Novel Approach for Cancer Therapy. Annu Rev Pharmacol Toxicol. 2009;49:223-41.

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