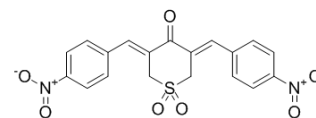


Ubiquitin Isopeptidase Inhibitor I, G5

Cat. No.:	HY-100738		
CAS No.:	108477-18-5		
Molecular Formula:	C ₁₉ H ₁₄ N ₂ O ₇ S		
Molecular Weight:	414.39		
Target:	Apoptosis		
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 : 50 mg/mL (120.66 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4132 mL	12.0659 mL	24.1319 mL
	5 mM	0.4826 mL	2.4132 mL	4.8264 mL
	10 mM	0.2413 mL	1.2066 mL	2.4132 mL

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

BIOLOGICAL ACTIVITY

Description

Ubiquitin Isopeptidase Inhibitor I, G5 (NSC 144303) is an apoptosome-independent caspase and apoptosis activator with IC₅₀ values of 1.76 and 1.6 μM in E1A and E1A/C9DN cells, respectively.

IC₅₀ & Target

IC₅₀: 1.76 μM (E1A cells), 1.6 μM (E1A/C9DN cells)^[1]

In Vitro

G5 is capable of activating an apoptosome-independent apoptotic pathway. It targets the ubiquitinproteasome system by inhibiting the ubiquitin isopeptidases. G5 induces a rather unique apoptotic pathway, which includes a Bcl-2-dependent but apoptosome-independent mitochondrial pathway with upregulation of the BH3-only protein Noxa, stabilization of the inhibitor of apoptosis antagonist Smac, but also the involvement of the death receptor pathway. G5 is a potent apoptotic inducer showing IC₅₀s of 1.76 and 1.6 μM in E1A and E1A/C9DN cells, respectively^[1].

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

PROTOCOL

Cell Assay ^[1]

Different drug concentrations are used to determine the dose-response profile and to calculate the IC₅₀ value. Cells are incubated with the required concentrations of the 57 compounds. After 24 or 48 hours of incubation, cell death is evaluated by trypan blue staining^[1].

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

REFERENCES

[1]. Aleo E, et al. Identification of new compounds that trigger apoptosome-independent caspase activation and apoptosis. Cancer Res. 2006 Sep 15;66(18):9235-44.

Caution: Product has not been fully validated for medical applications. For research use only.

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