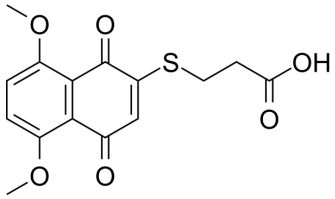
GN25

Cat. No.:	HY-117280
CAS No.:	1227401-27-5
Molecular Formula:	$C_{15}H_{14}O_6S$
Molecular Weight:	322.33
Target:	MDM-2/p53
Pathway:	Apoptosis
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (310.24 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1024 mL	15.5121 mL	31.0241 mL
	5 mM	0.6205 mL	3.1024 mL	6.2048 mL
	10 mM	0.3102 mL	1.5512 mL	3.1024 mL

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

BIOLOGICAL ACTIVITY

Description

GN25 is a specific p53-Snail binding inhibitor with antitumor effects[1].

In Vitro

GN25 (10 and 20 μM; 24 h) inhibits cell viability of K-Ras-mutated MEF cells[1].
GN25 (5 μM; 4 h) activates p53 in a K-Ras-dependent manner[1].
GN25 (1-10 μM; 1-6 h) induces p53 and p21 in a dose- and time- dependent manner in K-Ras-mutated A549 and HCT116 cell lines[1].
GN25 activates wild-type p53 in $p53^{WT/MT}$ cells[1].
GN25 (0.25 μM) recovers the masking effect of p53 on CK1/GSK3b-mediated Snail phosphorylation[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	HCT116, A459 and MKN45 cell lines
Concentration:	10 μM
Incubation Time:	24 h

Result:	Obviously suppressed the cell viability of HCT116 and A459 cell lines.

Cell Proliferation Assay[1]

Cell Line:	K-Ras-transformed and N-Ras/Myc-transformed MEF cells
Concentration:	10 μM and 20 μM
Incubation Time:	24 h
Result:	Inhibited the viability of K-Ras-transformed but not N-Ras/Myc-transformed MEF cells.

Western Blot Analysis[1]

Cell Line:	K-Ras-MEF, N-Ras/Myc-MEF and Nontransformed MEF cells
Concentration:	5 μM
Incubation Time:	4 h
Result:	Only induced p53 and p21 in K-Ras-MEF cells.

Western Blot Analysis[1]

Cell Line:	K-Ras-mutated A549, HCT116 cell lines and MKN45
Concentration:	1, 5, and 10 μM
Incubation Time:	1, 3, and 6 h
Result:	Induced p53 and p21 in a dose- and time- dependent manner in A549 and HCT116 cells.

In Vivo

GN25 (10 and 20 mg/kg; i.p. once a week for 10 weeks) blocks the tumor progression and induces tumor regression in mice[1].

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

Animal Model:	Athymic mice with A549 xenografts[1]
Dosage:	10 and 20 mg/kg
Administration:	Intraperitoneal injection; once a week for 10 weeks
Result:	Obviously regressed tumors in mice. Showed no significant toxicity in liver, pancreas and kidney.

REFERENCES

[1]. Lee SH, Shen GN, Jung YS, Lee SJ, Chung JY, Kim HS, Xu Y, Choi Y, Lee JW, Ha NC, Song GY, Park BJ. Antitumor effect of novel small chemical inhibitors of Snail-p53 binding in K-Ras-mutated cancer cells. Oncogene. 2010 Aug 12;29(32):4576-87.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA