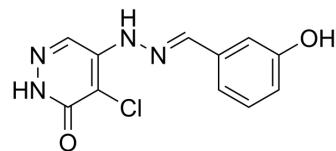


L82-G17

Cat. No.:	HY-148161		
CAS No.:	92285-87-5		
Molecular Formula:	C ₁₁ H ₉ ClN ₄ O ₂		
Molecular Weight:	264.67		
Target:	DNA/RNA Synthesis		
Pathway:	Cell Cycle/DNA Damage		
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 : 125 mg/mL (472.29 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.7783 mL	18.8914 mL	37.7829 mL
5 mM	0.7557 mL	3.7783 mL	7.5566 mL
10 mM	0.3778 mL	1.8891 mL	3.7783 mL

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

BIOLOGICAL ACTIVITY

Description

L82-G17 is an uncompetitive DNA ligase I (Lig I)-selective inhibitor. L82-G17 inhibits the third step of the ligation reaction, phosphodiester bond formation. L82-G17 can be used as a probe of the catalytic activity^[1].

In Vitro

L82-G17 (200 μM, 30 min) has selective uncompetitive inhibitory effect for LigI^[1].
 L82-G17 (0-100 μM) increases LigI binding to non-ligatable nicked DNA binding^[1].
 L82-G17 inhibits step 3 of the ligation reaction, phosphodiester bond formation^[1].
 L82-G17 (0-100 μM) inhibits DNA synthesis, cell viability and induces DNA damage^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.
 Cell Viability Assay^[1]

Cell Line: HeLa cells

Concentration: 0-30 μM

Incubation Time: 5 days

Result:	Reduced cell number by about 70% at 20 μ M.
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Cell Proliferation Assay^[1]

Cell Line:	CH12F3 WT and CH12F3 Δ cells
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Concentration:	0-100 μ M
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Incubation Time:	72 h
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Result:	Had great effect on the proliferation and survival of the parental CH12F3 cells.
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REFERENCES

[1]. Timothy R L Howes, et al. Structure-activity relationships among DNA ligase inhibitors: Characterization of a selective uncompetitive DNA ligase I inhibitor. DNA Repair (Amst). 2017 Dec;60:29-39.

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

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