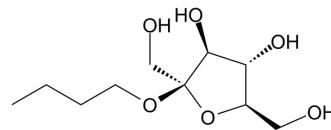


n-Butyl-β-D-fructofuranoside

Cat. No.:	HY-N9802
CAS No.:	80971-60-4
Molecular Formula:	C ₁₀ H ₂₀ O ₆
Molecular Weight:	236.26
Target:	Apoptosis; Bcl-2 Family
Pathway:	Apoptosis
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (423.26 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		4.2326 mL	21.1631 mL	42.3263 mL
	5 mM		0.8465 mL	4.2326 mL	8.4653 mL
	10 mM		0.4233 mL	2.1163 mL	4.2326 mL

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

BIOLOGICAL ACTIVITY

Description

n-Butyl-β-D-fructofuranoside could be isolated from kangaisan. n-Butyl-β-D-fructofuranoside induces apoptosis through the mitochondrial pathway. n-Butyl-β-D-fructofuranoside can be used for cancer research^[1].

IC₅₀ & Target

Bax Bcl-2

In Vitro

n-Butyl-β-D-fructofuranoside (0-23.6 μg/mL; 24-78 hours) has antiproliferation activity and inhibits the viability of Bel-7402 cells^[1].

n-Butyl-β-D-fructofuranoside (0-75 μg/mL; 0-72 hours) inhibits BEL-7402 cells by interfering with cell cycle and inducing apoptosis^[1].

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

Cell Viability Assay^[1]

Cell Line:	Bel-7402 cells
Concentration:	0.47, 2.95, 5.90, 11.8, 17.7 and 23.6 μg/mL
Incubation Time:	24, 48 and 72 hours

Result:	Inhibited the proliferation of Bel-7402 cells at both time- and dose-dependent manner.
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Cell Cycle Analysis^[1]

Cell Line:	Bel-7402 cells
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Concentration:	0, 50 and 75 µg/mL
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Incubation Time:	24, 48 and 72 hours
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Result:	Induced cell cycle arrest at G0/G1 phase.
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Western Blot Analysis^[1]

Cell Line:	Bel-7402 cells
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Concentration:	23.6 µg/mL
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Incubation Time:	0, 24, 48 and 72 hours
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Result:	Decreased Bcl-2 and increased Bax and p53 levels in a time manner.
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REFERENCES

[1]. Lu P, et, al. Antiproliferative effects of n-butyl-β-D-fructofuranoside from Kangaisan on Bel-7402 cells. Indian J Pharmacol. 2014 Jan-Feb;46(1):69-75. doi: 10.4103/0253-7613.125175.

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

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