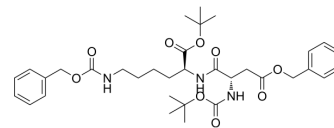


Reversin 121

Cat. No.:	HY-125486
CAS No.:	174630-04-7
Molecular Formula:	C ₃₄ H ₄₇ N ₃ O ₉
Molecular Weight:	641.75
Target:	P-glycoprotein
Pathway:	Membrane Transporter/Ion Channel
Storage:	Sealed storage, away from moisture and light, under nitrogen Pure form -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (155.82 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.5582 mL	7.7912 mL	15.5824 mL
5 mM	0.3116 mL	1.5582 mL	3.1165 mL
10 mM	0.1558 mL	0.7791 mL	1.5582 mL

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

BIOLOGICAL ACTIVITY

Description

Reversin 121 is a P-glycoprotein inhibitor. Reversin 121 increases the ATPase activity of MDR1. Reversin 121 reverses P-glycoprotein-mediated multidrug resistance. Reversin 121 can be used in the research of cancers^{[1][2]}.

IC₅₀ & Target

P-glycoprotein^[1]

In Vitro

Reversin 121 (12 µg/mL) (with [gemcitabine](#) (HY-17026)) reduces the proportions of tumor cells positive for MDR proteins in Panc1 cell^[1].
 Reversin 121 (5 µM) reverses the resistance against paclitaxel in paclitaxel-resistant NCI-H460 cell^[2].
 Reversin 121 (10 µM, 48 h) inhibits T cell proliferation^[3].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Reversin 121 (2.5 mg/kg, plus 5-fluorouracil, 35 mg/kg/day, i.p.) decreases tumor size and prevalence of metastases^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Orthotopic pancreatic carcinoma mouse model ^[1] .
Dosage:	2.5 mg/kg, plus 5-fluorouracil, 35 mg/kg/day
Administration:	Intraperitoneal injection (i.p.), 5 days a week
Result:	Decreased in MRP3-positive cells.

REFERENCES

- [1]. Hoffmann K, et al. Effects of the high-affinity Peptide reversin 121 on multidrug resistance proteins in experimental pancreatic cancer. *Tumour Biol.* 2008;29(6):351-8.
- [2]. Yabuki N, et al. Gene amplification and expression in lung cancer cells with acquired paclitaxel resistance. *Cancer Genet Cytogenet.* 2007 Feb;173(1):1-9.
- [3]. Kooij G, et al. P-glycoprotein acts as an immunomodulator during neuroinflammation. *PLoS One.* 2009 Dec 8;4(12):e8212.

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

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