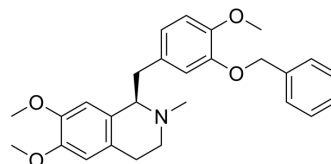


(R)-OY-101

Cat. No.:	HY-149053B
CAS No.:	23495-82-1
Molecular Formula:	C ₂₇ H ₃₁ NO ₄
Molecular Weight:	433.54
Target:	P-glycoprotein; Apoptosis
Pathway:	Membrane Transporter/Ion Channel; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(R)-OY-101 is an orally active and specific inhibitor of P-gp. (R)-OY-101 increases tumor sensitivity to anticancer agents. (R)-OY-101 has good activity against tumor resistance and promoting apoptosis and can be used in cancer related research ^[1] .										
In Vitro	(R)-OY-101 increases the cytotoxicity of Vincristine (HY-N0488A) on Eca109/VCR cells with an IC ₅₀ value of 9.9 nM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.										
In Vivo	Pharmacokinetic (PK) parameters of OY-101 in SD Rats ^[1] Notes: (R)-OY-101 is a stereoscopic configuration of OY-101.										
	Administration manner	T _{max} (h)	C _{max} (ng/mL)	λ _z (1/h)	T _{1/2} (h)	MRT _{0-inf} (h)	AUC _{0-t} (ng/mL•h)	AUC _{0-inf} (ng/mL•h)	AUMC _{0-inf} (ng/mL•h ²)	V _z /F (L/kg)	Cl/F (L/kg/h)
	Intravenous injection	0.17±0.12	1573.20±143.97	0.15±0.13	8.43±7.83	2.68±0.47	2688.45±180.10	2742.45±218.99	7391.35±1874.05	12.84±11.33	1.10±0.11
	Oral gavage	0.38±0.18	636.55±355.60	0.12±0.08	7.37±4.92	4.89±1.01	2665.45±450.92	2737.40±515.20	131110.55±237.09	11.27±56.82	11.16±2.11
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.										

REFERENCES

[1]. Zeng R, et al. Simplified Derivatives of Tetrandrine as Potent and Specific P-gp Inhibitors to Reverse Multidrug Resistance in Cancer Chemotherapy. J Med Chem. 2023 Mar 23;66(6):4086-4105.

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