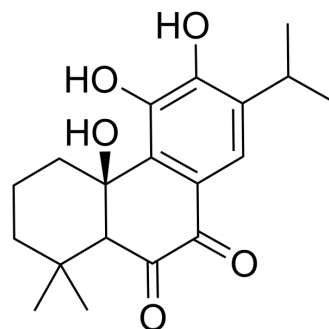


Mutabilol

Cat. No.:	HY-N10562
Molecular Formula:	C ₁₉ H ₂₄ O ₅
Molecular Weight:	332.39
Target:	P-glycoprotein
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Mutabilol (compound 1) is a potent p-glycoprotein (P-gp) regulator. Mutabilol is a nature product could be isolated from <i>Plectranthus mutabilis</i> leaves. Mutabilol increases the P-gp expression in NCI-H460/R cells ^[1] .								
In Vitro	<p>Mutabilol (compound 1; 2, 5, 10, 20, and 50 μM; 72 h) has low toxicity with IC₅₀ values of >50, >50, and >50 μM for NCI-H460, NCI-H460/R, and MRC-5 cells, respectively^[1].</p> <p>Mutabilol (5 and 10 μM; 72 h) stimulates P-gp activity by a direct interaction and decreases the Rho123 accumulation in NCI-H460/R cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>NCI-H460, NCI-H460/R, and MRC-5 cells</td> </tr> <tr> <td>Concentration:</td> <td>2, 5, 10, 20, and 50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>Showed low toxicity of cancer cell lines (IC₅₀>50μM)</td> </tr> </table>	Cell Line:	NCI-H460, NCI-H460/R, and MRC-5 cells	Concentration:	2, 5, 10, 20, and 50 μM	Incubation Time:	72 hours	Result:	Showed low toxicity of cancer cell lines (IC ₅₀ >50μM)
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Result:	Showed low toxicity of cancer cell lines (IC ₅₀ >50μM)								

REFERENCES

[1]. Ntungwe EN, et al. C20-nor-Abietane and Three Abietane Diterpenoids from *Plectranthus mutabilis* Leaves as P-Glycoprotein Modulators. *ACS Med Chem Lett.* 2022 Mar 11;13(4):674-680.

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