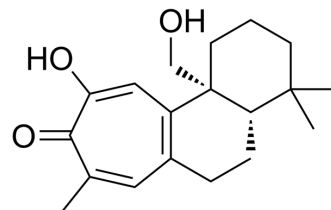


Isograndifoliol

Cat. No.:	HY-N10781
CAS No.:	1445475-53-5
Molecular Formula:	C ₁₉ H ₂₆ O ₃
Molecular Weight:	302.41
Target:	Cholinesterase (ChE)
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Isograndifoliol is a selective inhibitor of butyrylcholinesterase (BChE) with an IC ₅₀ value of 0.9 μM. And Isograndifoliol moderately inhibits acetylcholinesterase (AChE) with an IC ₅₀ value of 342.9 μM. Isograndifoliol also has vasorelaxant effect and anti-tumor effect. Isograndifoliol can be used for research against dementia caused by neurodegenerative diseases ^{[1][2][3]} .	
IC₅₀ & Target	AChE 342.9 μM (IC ₅₀)	BChE 0.9 μM (IC ₅₀)
In Vitro	Isograndifoliol exhibits dose-dependent vasorelaxant effects on rat aortic rings, precontracted by KCl or norepinephrine, with EC ₅₀ values of 36.36-74.51 μg/mL ^[2] . Isograndifoliol exhibits potent activity against HL-60 cells with an IC ₅₀ value of 0.33 μM ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

- [1]. Ślusarczyk S, et al. Norditerpenoids with Selective Anti-Cholinesterase Activity from the Roots of *Perovskia atriplicifolia* Benth. *Int J Mol Sci.* 2020 Jun 23;21(12):4475.
- [2]. Kang J, et al. Isolation and bioactivity of diterpenoids from the roots of *Salvia grandifolia*. *Phytochemistry.* 2015 Aug;116:337-348.
- [3]. Tsukada H, et al. Two New Diterpenoids from *Salvia przewarskii*. *Nat Prod Commun.* 2016 Feb;11(2):159-61.

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

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