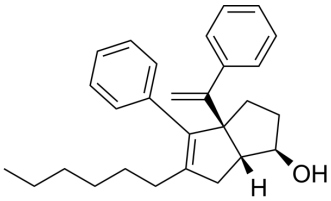
RJW100

Cat. No.:	HY-131445
CAS No.:	1276664-20-0
Molecular Formula:	$C_{28}H_{34}O$
Molecular Weight:	386.57
Target:	MicroRNA
Pathway:	Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



Relative stereochemistry

BIOLOGICAL ACTIVITY

Description	RJW100 is a potent liver receptor homolog 1 (LRH-1, NR5A2) and steroidogenic factor-1 (SF-1, NR5A1) agonist with pEC_{50}s of 6.6 and 7.5, respectively[1]. RJW100 also causes strong activation of the miR-200c (miRNA-200c, microRNA-200c) promoter[2] .
IC_{50} & Target	pEC50: 6.6 (LRH-1) and 7.5 (SF-1)[1]
In Vitro	RJW100 (compound 24-exo) treatment induces a significant dose-dependent increase in small/short heterodimer partner (SHP) transcripts beginning at 5 μM[1]. RJW100 (compound 24-exo) clearly displaces the bound PIP2 phospholipid from SF-1 almost completely at 1 μM[1]. Using hLRH-1 LBD alone that had not been complexed with any phospholipids, the result shows a clear dose-dependent shift in hLRH-1 LBD (ligand binding domain) native PAGE migration upon RJW100 (compound 24-exo; 0-100 μM) binding[1]. RJW100 causes strong activation of the miR-200c promoter and exhibits strong ability to downregulate ZEB1 and ZEB2 proteins[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR[1]

Cell Line:	HEK293 cells
Concentration:	1 μM, 5 μM, 10 μM
Incubation Time:	24 hours
Result:	Induced a significant dose-dependent increase in SHP transcripts beginning at 5 μM.

REFERENCES

[1]. Richard J Whitby, et al. Small molecule agonists of the orphan nuclear receptors steroidogenic factor-1 (SF-1, NR5A1) and liver receptor homologue-1 (LRH-1, NR5A2). J Med Chem. 2011 Apr 14;54(7):2266-81.

[2]. Yuxia Zhang, et al. Regulation of miR-200c by nuclear receptors PPARα, LRH-1 and SHP. Biochem Biophys Res Commun. 2011 Dec 9;416(1-2):135-9.

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

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