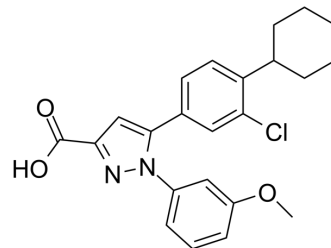


TC LPA5 4

Cat. No.:	HY-107615
CAS No.:	1393814-38-4
Molecular Formula:	C ₂₃ H ₂₃ ClN ₂ O ₃
Molecular Weight:	410.89
Target:	LPL Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	TC LPA5 4 is a LPA ₅ (GPR92)-specific non-lipid antagonist. TC LPA5 4 inhibits LPA-induced aggregation of isolated human platelet (LPA ₅ -RH7777 cell line) with an IC ₅₀ of 800 nM. TC LPA5 4 displays selectivity for LPA ₅ over 80 other screened drug targets ^[1] . TC LPA5 4 inhibits cell proliferation and migration of thyroid cancer cells ^[2] .								
In Vitro	TC LPA5 4 inhibits the proliferation on thyroid cancer cells CGTH-W3, TPC-1, B-CAPAP, and BHT101 significantly with IC ₅₀ at 103.0 μM, 84.9 μM, 55.9 μM, and 57.17 μM. TC LPA5 4 (5 μM; 24 hours) significantly inhibits LPA-stimulated migration of CGTH-W3 and TPC-1 cells, with an inhibitory rate of ~ 30%. B-CPAP and BHT101 cells expressed higher LPAR5 mRNA. TC LPA5 4 inhibits these two cell lines' proliferations with IC ₅₀ at 55.9 μM and 57.17 μM. CGTH-W3 and TPC-1 cells expressed lower LPAR5 mRNA. TC LPA5 4 displays differential antitumor activity with IC ₅₀ at 103.0 μM and 84.9 μM ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	TC LPA5 4 (10 mg/kg; intraperitoneal injection; 5 days/week for 2 weeks) could delay CGTH-W3 xenograft growth in nude mice ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>BALB/C nu/nu mice, aged 4-5 weeks (CGTH-W3 xenografts) ^[2]</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intraperitoneal injection; 5 days/week for 2 weeks</td> </tr> <tr> <td>Result:</td> <td>Significantly inhibits CGTH-W3 xenograft growth with inhibitory rates of 46.7%.</td> </tr> </table>	Animal Model:	BALB/C nu/nu mice, aged 4-5 weeks (CGTH-W3 xenografts) ^[2]	Dosage:	10 mg/kg	Administration:	Intraperitoneal injection; 5 days/week for 2 weeks	Result:	Significantly inhibits CGTH-W3 xenograft growth with inhibitory rates of 46.7%.
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REFERENCES

[1]. Kozian DH, et al. Selective non-lipid modulator of LPA₅ activity in human platelets. *Bioorg Med Chem Lett*. 2012;22(16):5239-5243.

[2]. Zhao WJ, et al. LPAR5 promotes thyroid carcinoma cell proliferation and migration by activating class IA PI3K catalytic subunit p110β. *Cancer Sci*. 2021;112(4):1624-1632.

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

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