$TR\beta$ agonist 1

Cat. No.: CAS No.: Molecular Formula: Molecular Weight: Target: Pathway: Storage:	HY-146997 2770681-85-9 C ₂₉ H ₂₅ FN ₂ O ₈ 548.52 Thyroid Hormone Receptor Others Please store the product under the recommended conditions in the Certificate of Analysis.	
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BIOLOGICAL ACTIVITY			
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Description	TRβ agonist 1 is a selective and mutation-sensitive thyroid hormone receptor β (TRβ) agonist, with an EC ₅₀ value of 21 nM. TRβ agonist 1 can be used for researching dyslipidemia, nonalcoholic steatohepatitis (NASH), and resistance to thyroid hormone (RTH) ^[1] .		
IC ₅₀ & Target	EC ₅₀ : 21.0 nM [TRβ (WT)], 1344.0 nM [TRβ (H435R)] ^[1]		
In Vitro	 TRβ agonist 1 (compound 16g) (1, 3, 10 μM; 24 hours) reduces lipid accumulation and cholesterol levels by triglyceride (TG) and total cholesterol (TC) analyses in HepG2 cells and primary mouse hepatocytes; also reduces the total lipid accumulation at 10 μM^[1]. TRβ agonist 1 (10 μM; 24 hours) induces a significant enhancement of the p-AMPK/AMPK ratio, the p-ACC/ACC ratio, and CPT1 levels^[1]. TRβ agonist 1 (0.01, 0.1, 1 and 10 μM; 24 hours) does not display significant cellular toxicity on multiple cell lines (HepG2, 22Rv1, A549, MCF7, MDA-MB-231, HFL-1, and BxPC-3) at concentrations up to 10 μM^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only. 		

REFERENCES

[1]. Li Q, et al. Discovery of a Highly Selective and H435R-Sensitive Thyroid Hormone Receptor β Agonist. J Med Chem. 2022;65(10):7193-7211.

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

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Product Data Sheet



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