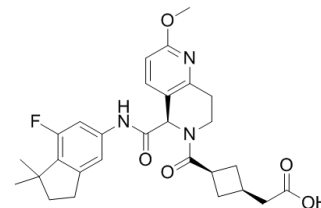


TAK-828F

Cat. No.:	HY-111509
CAS No.:	1854901-94-2
Molecular Formula:	C ₂₈ H ₃₂ FN ₃ O ₅
Molecular Weight:	509.57
Target:	ROR
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	TAK-828F is a potent, selective, and orally available retinoic acid receptor-related orphan receptor γ (RORγt) inverse agonist (binding IC_{50} =1.9 nM, reporter gene IC_{50} =6.1 nM). TAK-828F shows excellent ROR γ t isoforms selectivity (>5000-fold selectivity against human ROR α and ROR β) ^[1] .								
IC₅₀ & Target	IC ₅₀ : 1.9 nM (ROR γ t, binding IC_{50}), 6.1 nM (ROR γ t, reporter gene IC_{50}) ^[1]								
In Vivo	TAK-828F (0.3, 1, and 3 mg/kg; orally administered; b.i.d.; 28 days; in mice with IL-23-induced cytokine expression model) shows robust and dose-dependent inhibition of IL-17A expression with an ED ₈₀ of 0.5 mg/kg ^[1] . <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none;">Animal Model:</td> <td style="border: none;">Mice with IL-23-induced cytokine expression model^[1]</td> </tr> <tr> <td style="border: none;">Dosage:</td> <td style="border: none;">0.3, 1, and 3 mg/kg</td> </tr> <tr> <td style="border: none;">Administration:</td> <td style="border: none;">Orally administered; b.i.d.; 28 days</td> </tr> <tr> <td style="border: none;">Result:</td> <td style="border: none;">Showed robust and dose-dependent inhibition of IL-17A expression (ED₈₀=0.5 mg/kg).</td> </tr> </table>	Animal Model:	Mice with IL-23-induced cytokine expression model ^[1]	Dosage:	0.3, 1, and 3 mg/kg	Administration:	Orally administered; b.i.d.; 28 days	Result:	Showed robust and dose-dependent inhibition of IL-17A expression (ED ₈₀ =0.5 mg/kg).
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Result:	Showed robust and dose-dependent inhibition of IL-17A expression (ED ₈₀ =0.5 mg/kg).								

REFERENCES

[1]. Kono M, et al. Discovery of [cis-3-((5 R)-5-[(7-Fluoro-1,1-dimethyl-2,3-dihydro-1 H-inden-5-yl)carbonyl]-2-methoxy-7,8-dihydro-1,6-naphthyridin-6(5 H)-yl)carbonyl)cyclobutyl]acetic Acid (TAK-828F) as a Potent, Selective, and Orally Available Novel Retinoic Acid Receptor-Related Orphan Receptor γ Inverse Agonist. *J Med Chem.* 2018 Apr 12;61(7):2973-2988.

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

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