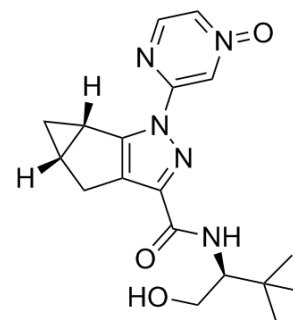


Olorinab

Cat. No.:	HY-111110
CAS No.:	1268881-20-4
Molecular Formula:	C ₁₈ H ₂₃ N ₅ O ₃
Molecular Weight:	357.41
Target:	Cannabinoid Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Olorinab (APD 371) is a highly potent, selective and fully efficacious cannabinoid receptor type 2 (CB ₂) agonist, with an EC ₅₀ of 6.2 nM for hCB ₂ .
IC₅₀ & Target	EC ₅₀ : 6.2 nM (hCB ₂) ^[1] .
In Vitro	A comprehensive in vitro profile of Olorinab (APD 371) (6) shows that single digit nanomolar potency and full intrinsic efficacy are maintained in all species assessed, and that Olorinab (APD 371) is highly selective for CB ₂ over CB ₁ in both binding and functional assays. Furthermore, Olorinab (APD 371) induces efficient receptor internalization (~106% relative to the CB ₁ /2 agonist CP55,940) in CHO cells expressing HA-tagged rat CB ₂ suggesting that, according to the hypothesis, Olorinab (APD 371) would be able to drive agonist-induced receptor recycling ^[1] .
In Vivo	Olorinab (APD 371) significantly increases paw withdrawal thresholds at doses ≥3 mg/kg PO (ED ₅₀ =2.3 mg/kg). In a separate experiment, a single dose of Olorinab (APD 371) (10 mg/kg, PO) inhibits paw withdrawal threshold for up to 4 hours after administration. Separately, the analgesic effects of Olorinab (APD 371) are shown to be highly likely mediated via activity at CB ₂ receptors ^[1] .

REFERENCES

[1]. Han S, et al. Discovery of APD371: Identification of a Highly Potent and Selective CB₂ Agonist for the Treatment of Chronic Pain. ACS Med Chem Lett. 2017 Nov 30;8(12):1309-1313.

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

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