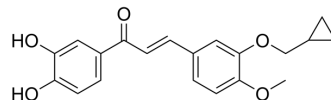


PDE4-IN-13

Cat. No.:	HY-155692
Molecular Formula:	C ₂₀ H ₂₀ O ₅
Molecular Weight:	340.37
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PDE4-IN-13 is a PDE4 inhibitor with an IC ₅₀ of 1.56 μM. PDE4-IN-13 shows anti-inflammatory and antioxidant properties and can be used for chronic obstructive pulmonary disease (COPD) research ^[1] .
IC₅₀ & Target	PDE4 1.56 μM (IC ₅₀)
In Vitro	PDE4-IN-13 (compound 6o) reduces TNF-α production induced by lipopolysaccharide (LPS) in RAW264.7 macrophages and malondialdehyde (MDA) production induced by Fe ²⁺ in mouse lung homogenate. Meanwhile, PDE4-IN-13 shows outstanding abilities in reducing Fe ³⁺ and complexing Fe ²⁺ ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PDE4-IN-13 (compound 6o) (50 mg/kg and 100 mg/kg, i. p.) distinctly prevents LPS-induced serum levels of TNF-α in mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Youzhi Wang, et al. Design and synthesis of a novel class of PDE4 inhibitors with antioxidant properties as bifunctional agents for the potential treatment of COPD. Eur J Med Chem. 2023 Aug 5;256:115374.

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

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