

Product Data Sheet

COX-2/15-LOX-IN-3

Cat. No.: HY-155160

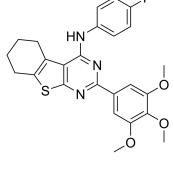
Molecular Formula: $C_{25}H_{24}FN_3O_3S$ Molecular Weight: 465.54

Target: Lipoxygenase; COX

Pathway: Metabolic Enzyme/Protease; Immunology/Inflammation

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



BIOLOGICAL ACTIVITY

Description	COX-2/15-LOX-IN-3 (compound 5k) is a dual inhibitor of COX-2/15-LOX with IC $_{50}$ s of 0.075 μ M and 1.97 μ M, respectively. COX-2/15-LOX-IN-3 can inhibit LPS-induced cell production of promoting cytokines (IL-6, ROS, and NO), with specific anti-inflammatory activity ^[1] .
IC ₅₀ & Target	IC50: 0.068 μ M (COX-2), 10.91 μ M (COX-1), 2.29 μ M (15-LOX) $^{[1]}$
In Vitro	COX-2/15-LOX-IN-3 (compound 5k) decreases LPS-induced production of pro-inflammatory cytokines (IL-6, ROS, and NO) in RAW 264.7 macrophage cell line, with IC $_{50}$ s of 63.03 μ M, 167.91 μ M and 39.31 μ M, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Elsayed S, et al. Magic shotgun approach to anti-inflammatory pharmacotherapy: Synthesis of novel thienopyrimidine monomers/heterodimer as dual COX-2 and 15-LOX inhibitors endowed with potent antioxidant activity. Eur J Med Chem. 2023 Aug 15;260:115724.

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

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