Product Data Sheet

Anti-inflammatory agent 48

Cat. No.: HY-155646 Molecular Formula: $\mathsf{C_{24}H_{21}Cl_2NO_3}$

Molecular Weight: 442.33 Target: NF-κB Pathway: NF-κΒ

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Anti-inflammatory agent 48 is an anti-inflammatory agent based on its role in inhibiting the NF- κ B signaling pathway and activating HO-1 expression ^[1] .
In Vitro	Anti-inflammatory agent 48 (compound 1) shows NO-inhibitory ability in LPS-induced RAW 264.7 macrophage cells. Anti-inflammatory agent 48 exhibits superior NF-kB-inhibitory ability compared to Diclofenac through the activation of Nrf2/HO-1 signaling pathway in RAW 264.7 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Anti-inflammatory agent 48 (compound 1; 20 mg/kg) results in remarkable colitis improvement in dextran sulfate sodium (DSS)-induced mice model by up-regulating HO-1 and down-regulating phosphorylation level of NF-kB p65 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wei Wang, et al. Diclofenac and eugenol hybrid with enhanced anti-inflammatory activity through activating HO-1 and inhibiting NF-kB pathway in vitro and in vivo. Eur J Med Chem. 2023 Nov 5;259:115669.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA