Product Data Sheet

Nitidanin

Molecular Weight:

Cat. No.: HY-120104 CAS No.: 171674-89-8 Molecular Formula: $C_{21}H_{24}O_8$

Target: Parasite; HCV
Pathway: Anti-infection

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

Analysis.

404.41

BIOLOGICAL ACTIVITY

Description	Nitidanin ((±)-Nitidanin) is an antimalarial and antiviral compound that can be isolated from the wood of Xanthoxylum nitidun D. C. Nitidanin is shows IC $_{50}$ values of 21.2 and 18.4 μ M for D6 and W2 clones of Plasmodium falciparum, respectively. Nitidanin can be used for the research of malaria and virus infection ^{[1][2]} .
IC ₅₀ & Target	Plasmodium
In Vitro	Nitidanin shows inhibitory effects to D6 and W2 clones of Plasmodium falciparum with IC $_{50}$ values of 21.2 and 18.4 μ M, respectively ^[1] . Nitidanin shows noncytotoxic effects to human oral epidermoid carcinoma (KB) cells with an EC $_{50}$ value \boxtimes 99 μ M ^[1] . Nitidanin shows low cytotoxic effect to human hepatoma Huh7.5.1 cells with an CC $_{50}$ value of 464.4 μ M ^[2] . Nitidanin (0-250 μ M; 5 hours) shows anti-HCV activity with an IC $_{50}$ value of 200 μ M ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ma C, et al. Antimalarial compounds from Grewia bilamellata. J Nat Prod. 2006 Mar;69(3):346-50.

[2]. Pilkington LI, et al. 1,4-Benzodioxane Lignans: An Efficient, Asymmetric Synthesis of Flavonolignans and Study of Neolignan Cytotoxicity and Antiviral Profiles. J Nat Prod. 2018 Dec 28;81(12):2630-2637.

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