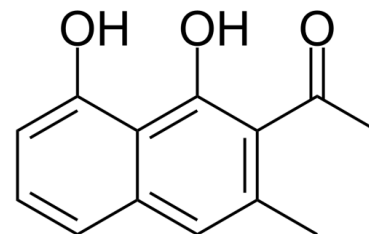


Data Sheet

Product Name:	Nepodin
Cat. No.:	CS-0032082
CAS No.:	3785-24-8
Molecular Formula:	C ₁₃ H ₁₂ O ₃
Molecular Weight:	216.23
Target:	AMPK; Parasite
Pathway:	Anti-infection; Epigenetics; PI3K/Akt/mTOR
Solubility:	DMSO : 125 mg/mL (578.09 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Nepodin (Musizin) is a **quinone oxidoreductase (PfNDH2)** inhibitor isolate from *Rumex crispus*^[1]. Nepodin (Musizin) stimulates the translocation of GLUT4 to the plasma membrane by activation of AMPK^[2]. Nepodin (Musizin) has antidiabetic and antimalarial activities. **In Vitro:** Nepodin (Musizin) exhibits significant IC₅₀ values that are 0.74 and 0.79 µg/ml against *P. falciparum* chloroquine-sensitive (3D7) and *P. falciparum* chloroquine-resistant (S20), respectively^[1].

In Vivo: Nepodin (Musizin) (orally administration; 2-10 mg/kg; 4 weeks) improves the impaired glucose tolerance of db/db mice, also decreases an increase in plasma insulin concentration of db/db mice in a dose-dependent manner^[2].

References:

[1]. Lee KH, et al. Antimalarial activity of nepodin isolated from *Rumex crispus*. *Arch Pharm Res.* 2013 Apr;36(4):430-5.

[2]. Ha BG, et al. Antidiabetic effect of nepodin, a component of *Rumex* roots, and its modes of action in vitro and in vivo. *Biofactors.* 2014 Jul-Aug;40(4):436-47.

CAIndexNames:

Ethanone, 1-(1,8-dihydroxy-3-methyl-2-naphthalenyl)-

SMILES:

CC(C1=C(C)C=C2C=CC=C(O)C2=C1O)=O

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

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