

PRODUCT DATA SHEET

Mitorubrinic acid

Code No.: BIA-M2969

Pack sizes: 1 mg, 5 mg

Synonyms :

Specifications

CAS # : 58958-07-9 Molecular Formula : $C_{21}H_{16}O_{9}$ Molecular Weight : 412.4

Source : Talaromyces sp.

Appearance : Orange solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Mitorubrinic acid was isolated from the phytotoxic fungus, Penicillium funiculosum. Mitorubrinic acid was patented in Japan in 1996 as a dihydrofolate reductase inhibitor for the treatment of protozoal diseases. Mitorubrinic acid shows weak inhibitory activity against Plasmodium falciparum dihydroorotate dehydrogenase (PfDHODH). Mitorubrinic acid inhibits trypsin with an IC50 41 µmol/l.

References

- 1. Mitorubrinic acid and related compounds from a strain of Penicillium funiculosum. Locci R. et al. Gioron Microbiol. 1967, 15, 92.
- 2. Dihydrofolate reductase inhibitors containing mitorubrin compounds for protozoiasis. Hayashi K. et al. JP08217673 A 1996-08-27.
- 3. Microbial inhibitors active against Plasmodium falciparum dihydroorotate dehydrogenase derived from an Indonesian soil fungus, Talaromyces pinophilus BioMCC-f.T.3979. Pramisandi A. et al. J Gen Appl Microbiol. 2020, 66, 273.
- 4. Factors affecting the production of (-)-mitorubrinic acid by Penicillium funiculosum. Lesová K. et al. J Basic Microbiol. 2000, 40, 369.

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