

PRODUCT DATA SHEET

Code No.: BIA-F3066

Pack sizes: 1 mg, 5 mg

Synonyms : Funiculosine

Specifications

Funiculosin

CAS # : 11055-06-4 Molecular Formula : $C_{27}H_{41}NO_7$ Molecular Weight : 491.6

Source : Penicillium sp.

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol and DMSO.

Application Notes

Funiculosin is a neutral lipophilic 4-hydroxypyridone metabolite first isolated by Ando and colleagues at University of Tokyo in 1969 as an antiviral. Funiculosin exhibits broad spectrum antifungal activity by inhibition of mitochondrial electron transport. More recently, derivatives of funiculosin have been identified as promoting innate immune responses via the Toll-like receptor 4/myeloid differentiation factor 2 complex. NOTE, this metabolite is not the red pigment described by Hisano in 1939 as the anthracycline islandin, also named as funiculosin.

References

- Ando K. et al. (1969). Funiculosin, a new antibiotic. I. Isolation, biological activity and chemical properties. J. Antibiot., XXII, 189.
- 2. Nelson B. et al. (1977). Funiculosin: an antibiotic with antimycin-like inhibitory properties. Biochim. Biophys. Acta, 460, 157.
- 3. Okamoto N. et al. (2017). Funiculosin variants and phosphorylated derivatives promote innate immune responses via the Toll-like receptor 4/myeloid differentiation factor-2 complex. J. Biol. Chem., 292, 15378.
- 4. Hisano I. (1939). Metabolic products of Penicillium funiculosum Thom. I. A new red coloring matter, funiculosin. Nippon Nogei Kagaku Kaishi, 15, 225.

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