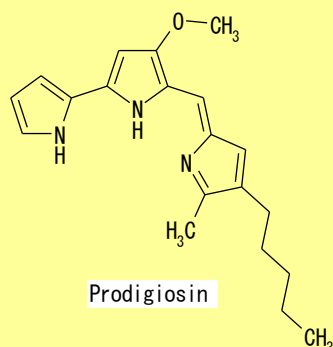


Prodigiosin

Cat.# BLK0560

Structure



Origin: *γ-Proteobacterium hahella*

CAS Registry Number: 82-89-3

CA Index Name: 4-Methoxy-5-[(5-methyl-4-pentyl-2H-pyrrol-2-ylidene)methyl]-2,2'-bi[1H-pyrrol]

Appearance: Dark red solid

Molecular Formula/ Weight: C₂₀H₂₅N₃O=323.46

Melting Point: 120-122°C **Purity:** 95>% by HPLC

Solubility: Sol. in MeOH, Chloroform, EtOH, EtOAc, Hexane, Acetone, Acetonitrile
Insoluble in water

pKa:

log P:

Background Information:

A marine bacterium, *γ-proteobacterium* strain MS-02-063 produces prodigiosins. The prodigiosins showed multibiological activities, antibacterial¹⁾, antifungal²⁾, cytotoxic³⁾, antialgal activities^{4),5)}, and inhibition of NADPH oxidase activation in macrophage⁶⁾. The prodigiosin induces apoptosis by phosphorylation of p38 MAP kinase. In addition, the prodigiosins inhibit the association of p47phox and Rac, which are NADPH oxidase cytosolic components, to the plasma membrane in macrophages.

Handling and Storage:

Store at -20°C. **Protect from light**

References:

1. T. Nakashima, et al., Microbiol Immunol., **49**, 407 (2005).
2. T. Nakashima, et al., Infect Chemother, **11**, 123 (2005).
3. T. Nakashima, et al., Biological & Pharmaceutical Bulletin. **28**, 2289 (2005).
4. T. Nakashima, et al., Appl. Microbiol.Biotechnol. **73**, 684 (2006).
5. T. Nakashima, et al., Aquat. Microb.Ecol. **45**, 255 (2006).
6. T. Nakashima, et al., J.Biochem. **143**, 107 (2008).

Manufactured with Cortesy strain from T. Nakashima, PhD.

(ID#: MS-02-063)