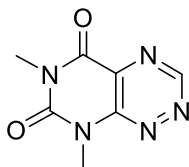


## Fervenulin

Code No.: **BIA-F2448**

Pack sizes: **1 mg, 5 mg**



Synonyms : Fervenuline, NSC 68158, Planomycin, U 7118

## Specifications

CAS #	: <b>483-57-8</b>
Molecular Formula	: <b>C<sub>7</sub>H<sub>7</sub>N<sub>5</sub>O<sub>2</sub></b>
Molecular Weight	: <b>193.16</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>Yellow solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in methanol or DMSO</b>

## Application Notes

Fervenulin, structurally related to caffeine, was first isolated from *Streptomyces fervens* in 1959 and reported as a broad spectrum antibiotic, with antineoplastic properties. Fervenulin inhibits egg hatch and increases juvenile mortality of the root-knot nematode *Meloidogyne incognita* in vitro, killing up to 100% of second-stage nematode juveniles when applied at a concentration of 250 µg/mL.

## References

1. Fervenulin, a new crystalline antibiotic I. Discovery and biological activities. Deboer C. et al. *Antibiot Ann.* 1959 – 1960, 7, 227.
2. Free radical mechanisms of action of pyrimidotriazine antibiotics. Orlov V.S. et al. *Bioorganicheskaya Khimiya* 1983, 9, 556.
3. Nematicidal activity of fervenulin isolated from a nematicidal actinomycete, *Streptomyces* sp. CMU-MH021, on *Meloidogyne incognita*. Ruanpanun P. et al. *World J Microbiol Biotech.* 2011, 27, 1373.
4. Pyrimidines. XXXIII. Synthesis and properties of new fervenulin derivatives. Werner-Simon S. et al. *Heterocyclic Chem.* 1996, 33, 949.