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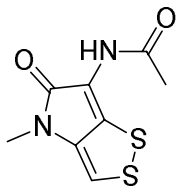
PRODUCT DATA SHEET

Thiolutin

Code: **BIA-T1138**

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



Synonyms : **N-Acetylpyrrothine, Farcinicine, Acetopyrrothine**

Specifications

CAS #	:	**87-11-6**
Molecular Formula	:	**$C_8H_8N_2O_2S_2$**
Molecular Weight	:	**228.3**
Source	:	***Streptomyces* sp. MST-AS4782**
Appearance	:	**Yellow orange solid**
Purity	:	**> 98% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**DMSO and DMF, partially soluble in methanol and ethanol while poorly soluble in water**

Application Notes

Thiolutin is an antibiotic first described by Tanner and co-workers in America 1950. Resurgent interest in this class of microbial metabolites was stimulated by the discovery of their selective antitumor activity. Thiolutin has been shown to be a potent inhibitor of bacterial and yeast RNA polymerases and inhibitor of mannan and glucan formation in fungi. Studies have shown that thiolutin suppresses tumor cell-induced angiogenesis *in vivo*.

References

1. Studies on a common hydrolysis product of thiolutin and aureothricin. Celmer W.D. and Solomons I.A. *Antibiotics Annual* **1953**, 622.
2. Anticancer property of dithiolopyrrolones Webster J. M. et. al. **2000**, US Patent 6,020,360
3. Thiolutin inhibits yeast ribonucleic acid polymerases. Tipper DJ. *J. Bacteriol.* **1973**, 116, 245.
4. Thiolutin, an inhibitor of HUVEC adhesion to vitronectin, reduces paxillin in HUVECs and suppresses tumor cell-induced angiogenesis. Minamiguchi K. *Int. J. Cancer* **2001**, 93, 307.
5. Thiolutin, an inhibitor of macromolecular synthesis in *Saccharomyces cerevisiae*. Mode of action. *Antimicrob Agents Chemother.* **1973,** 3, 729.

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