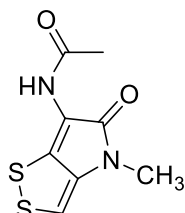


Thiolutin

Code No.: **BIA-T1138**

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



Synonyms : N-acetylpyrrothine, Farcinicine, Acetopyrrothine

Specifications

CAS #	: 87-11-6
Molecular Formula	: C₈H₈N₂O₂S₂
Molecular Weight	: 228.3
Source	: <i>Streptomyces</i> sp.
Appearance	: Yellow orange solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in DMF or DMSO. Moderately soluble in methanol or ethanol. Poor water solubility.

Application Notes

Thiolutin is an antibiotic first described by Tanner and co-workers in 1950. Resurgent interest in this class of microbial metabolites was stimulated by the discovery of their selective antitumor activity. Thiolutin is a potent inhibitor of bacterial and yeast RNA polymerases, and also inhibits mannan and glucan formation in fungi. 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 dithiopyrrolones. Webster J.M. et al., 2000, US Patent 6,020,360.
3. Thiolutin inhibits yeast ribonucleic acid polymerases. Tipper D.J. 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. Jimenez A. Antimicrob Agents Chemother. 1973, 3, 729.