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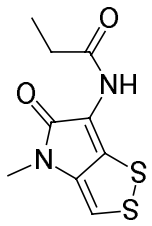
PRODUCT DATA SHEET

Aureothricin

Code: **BIA-A1120**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : **Propionylpyrrothione, Farcinicin**

Specifications

CAS #	:	**574-95-8**
Molecular Formula	:	**$C_9H_{10}N_2O_2S_2$**
Molecular Weight	:	**242.3**
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

Aureothricin is an antibiotic first described by Umezawa and co-workers in Japan in 1949. Resurgent interest in this class of microbial metabolites was stimulated by the discovery of their selective antitumor activity. Aureothricin is a more hydrophobic analogue of thiolutin but has received only limited attention. Members of this class, notably, thiolutin, have been shown to potent inhibitors of bacterial and yeast RNA polymerases and inhibitors of mannan and glucan formation in fungi. Studies have shown that thiolutin inhibits 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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