

Product Name: Aureothricin

Product Number: A135

CAS Number: 574-95-8

Molecular Formula: $C_9H_{10}N_2O_2S_2$

Molecular Weight: 242.3

Appearance: Yellow orange solid

Storage Conditions: -20°C

Description: 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, are potent inhibitors of bacterial and yeast RNA polymerases, inhibitors of mannan and glucan formation in fungi, and inhibitors of tumor-cell induced angiogenesis in vivo.

Aureothricin is soluble in DMF and DMSO and is moderately soluble in methanol and ethanol.

References: Studies on a common hydrolysis product of thiolutin and aureothricin. Celmer W. D. and Solomons I.A. Antibiotics Annual 1953, 622.

Anticancer property of dithiolopyrrolones. Webster J.M. et al. 2000, US Patent 6,020,360.

Thiolutin inhibits yeast ribonucleic acid polymerases. Tipper D.J. J. Bacteriol. 1973, 116, 245.

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.

Thiolutin, an inhibitor of macromolecular synthesis in *Saccharomyces cerevisiae*. Mode of action. L133 Antimicrob Agents Chemother. 1973, 3, 729.