

# Thiostrepton, Antibiotic and FOXM1 inhibitor

Catalog	Unit
TBI2108 - 1G	1 g
TBI2108 - 5G	5 g

### **Product Details**

Formal Name: Fermentation product from Streptomyces azureus.

Molecular Formula: C<sub>72</sub>H<sub>85</sub>N<sub>19</sub>O<sub>18</sub>S<sub>5</sub>.

**Formula Weight:** 1664.91. **CAS Number:** 1393-48-2.

**Purity:** ≥98%

Formulation: Powder.

**Solubility:** Soluble in DMSO (up to 15 mg/ml), or in Chloroform (up to 5 mg/ml).

**Storage:**  $-20^{\circ}$ C. **Stability:**  $\geq 2$  years.

## **Applications**

Antibiotic and FOXM1 inhibitor.

# **Eunctions**

Thiostrepton (1393-48-2) is a novel cyclopeptide antibiotic. Blocks bacterial protein synthesis by inhibition of mRNA-tRNA translocation by GTPase elongation factor G (EF-G), EF-TU(GTP)-catalyzed aa-tRNA delivery as well as the activity of initiation factor-1 (IF-2). Displays antitumor activity. Thiostrepton induces apoptosis and cell cycle arrest in various tumor cells via downregulation of FOXM1 expression.

# **Application Procedures**

First dissolved in DMSO (up to 15 mg/ml) or in Chloroform (up to 5 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or Chloroform may be stored at -20°C for up to 2 months.

#### **Relative Products**

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabline
TBI2058	Aphidicolin, DNA polymerase Inhibitor

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