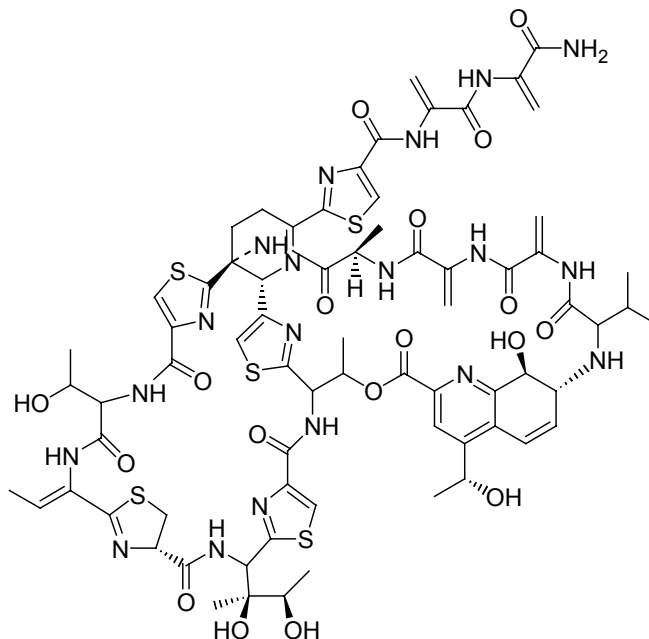


**Siomycin A**

Code: **BIA-S1136**

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



Synonyms : **Mutabilycin, Sporangiomycin, Antibiotic 6741-21, Mutabillicin**

**Specifications**

CAS # : **12656-09-6**  
Molecular Formula : **C<sub>71</sub>H<sub>81</sub>N<sub>19</sub>O<sub>18</sub>S<sub>5</sub>**  
Molecular Weight : **1648.9**  
Source : ***Streptomyces* sp. MST-AS4617**  
Appearance : **White solid**  
Purity : **> 95% by HPLC**  
Long Term Storage : **4°C**  
Solubility : **DMSO and DMF, partially soluble in methanol and ethanol while poorly soluble in water**

**Application Notes**

Siomycin is a macrocyclic thiazole antibiotic with potent and selective antibacterial activity discovered in 1969. Recently, siomycin was discovered to be a potent inhibitor of the oncogenic transcription factor, forkhead box M1, FoxM1 (previously known as HFH-11B, Trident, WIN or MPP2). The reduced transcription activity was reflected in the down regulation of protein and mRNA levels of FoxM1 and effects on down stream genes – Cdc25B, Survivin and CENPB. *In vitro*, siomycin was demonstrated to inhibit FoxM1 induced cell growth on soft agar and selectively kill transformed but not normal cells.

**References**

1. Studies on Siomycin. I Physicochemical properties of siomycin A, B and C. Ebata, M. et al., J. Antibiot., Ser. A, **1969**, 22, 364
2. Identification of a chemical inhibitor of the oncogenic transcription factor Forkhead Box M1. Radhakrishnan et. al. , Cancer Res. **2006**, 19, 9731.