

#### PRODUCT DATA SHEET

# Chromomycin A3

Code: **BIA-C1240** 

Pack sizes: 1 mg, 5 mg

Synonyms : Aburamycin B, Toyomycin, NSC 58514, Antibiotic B599-III, SR 1768E, Antibiotic

**SR 1768E** 

### Specifications

CAS # : 7059-24-7 Molecular Formula :  $C_{57}H_{82}O_{26}$  Molecular Weight : 1183.3

Source : Streptomyces griseus

Appearance : Yellow powder
Purity : > 98% by HPLC

Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

## **Application Notes**

Chromomycin A3 is the major component of the chromomycin complex of the aureolic acid class, isolated from several *Streptomyces* species and first reported in 1960. Chromomycin A3 exhibits a broad biological profile as an antibacterial, antifungal and antitumor agent. It binds reversibly to GC-specific DNA ligand in the minor groove which inhibits transcription, DNA gyrase and topoisomerase II. The intense UV spectrum and strong fluorescence makes chromomycin a useful stain for DNA.

#### References

- 1. Studies on *streptomycetes*. On a new antibiotic, chromomycin. Shibata M. et al. J. Antibiotics Ser. B, 1960, 13, 1.
- 2. Aureolic acid group of anti-tumour antibiotics. Berlin Y. A. Nature 1968, 218, 193.
- 3. Transcriptional regulation of differentiation, selective toxicity and ATGCAAAT binding of bisbenzimidazole derivatives in human melanoma cells. Wong S. et al. Biochem. Pharmacol. 1994, 47, 827.
- 4. Specific staining of DNA with the fluorescent antibiotics, mithramycin, chromomycin, and olivomycin. Crissman H. A. & Tobey R. A. Methods. Cell Biol. 1990, 33, 97.