



# Certificate of analysis

Productname: Actinomycin D

Cas number: 50-76-0

Molecular Formula:  $C_{62}H_{86}N_{12}O_{16}$ 

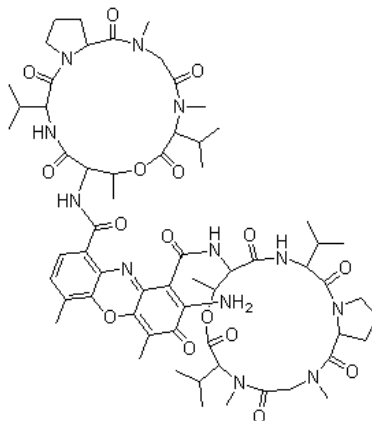
Molecular Weight: 1255.43

Date of production: Oct. 28, 2017

Batch NO: 20171028

Exp Date: Oct. 27, 2019

Chemical structure:



Items	Specifications	Results
Appearance	Red crystalline powder	Conforms
Assay	≥95.0%	99.01%
Melting point	243-248 °C	246°C
Specific rotation	-292~ -317 °	[α] <sub>28 D</sub> : -315 ° (c = 0.25% in methanol)
Loss on drying(2 h at 105°C)	≤5.0%	1.70%
Heavy metal	≤20 ppm	Conforms
Aerobic bacteria	≤500cfu/g (Total plate count)	Conforms
Molds and Yeasts	≤100cfu/g (Total plate count)	Conforms
Ratio: A 240 / A 445	1.30~1.50%	1.42%
Potency(U/mg)	≥900	917
Residual on ignition	≤0.1%	0.09%
Pseudomonas aeruginosa/presence	None detected in 1g	Conforms
Staphylococcus aureus/presence	None detected in 1g	Conforms
Escherichia coli/presence	None detected in 1g	Conforms
Salmonella Spp/presence	None detected in 1g	Conforms
Endotoxin	≤100EU / mg	80EU / mg

**Conclusion: It complies with Enterprise Standard.**

Analyst:Zhao

Checker:Liu

Q.C Director. Fang F