



CERTIFICATE OF ANALYSIS

Product Name: **G418 Sulfate**
Catalog Number: G030 Molecular Formula: $C_{20}H_{40}O_{10}N_4 \cdot 2H_2SO_4$
Lot Number: 03162002 Formula Weight: 692.70
CAS Number: 108321-42-2 Storage: 2 to 8°C
Source: China, Fermentation Retest Date: 30-JUN-2020
(*Micromonospora rhodorangea*)

<u>Test</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White Powder	PASS
Identity Test	Passes Test	PASS
Potency (as is)	≥ 616 U/mg	705.6 U/mg
Potency (on dried basis)	≥ 700 U/mg	762 U/mg
Purity	Report	91.6 %
Absorbance		
280 nm (1 mg/mL)	≤ 0.015	0.001
570 nm (100 mg/mL)	≤ 0.10	0.007
Ammonia (NH ₃)	≤ 1.0 %	< 1.0 %
Heavy Metals (as Pb)	≤ 20 ppm	< 20 ppm
Loss on Drying	≤ 12.0 %	7.4 %
Solubility (100mg/mL, H ₂ O)	Clear, Colorless Solution	PASS
pH (100 mg/mL)	5.0 - 6.0	5.11
Specific Rotation	+104° to +121°	+119°
Functionality Testing	Inhibits Growth of <i>Agrobacterium tumefaciens</i> <i>LBA4404</i> , <i>Staphylococcus epidermidis</i> and <i>Bacillus subtilis</i>	PASS
	No inhibitory effect on growth of <i>Agrobacterium tumefaciens</i> GV3101.	

This product meets or exceeds the quality standards established by Caisson Laboratories, Inc.

This product is intended for Laboratory Use Only

Prepared by:

Reviewed by:

Weston Christensen
Quality Control

14-JUN-2019