



## Certificate of Analysis

### G-418 Disulfate Salt

**Catalog Number:** DS1002  
**Lot Number:** 1116601  
**CAS Number:** 108321-42-2  
**Synonym(s):** Geneticin  
**Molecular Formula:**  $C_{20}H_{40}N_4O_{10} \cdot 2H_2SO_4$   
**Molecular Weight:** 692.70  
**Storage:** 2°C – 8°C  
**Retest Date:** June 1, 2018

Test	Specification	Result
Appearance	White powder	Conforms
Activity (Dry Basis)	$\geq 700U/mg$	767U/mg
Optical rotation (@25°C)	+104°C to +121°C	+119°C
Purity (TLC)	$\geq 98\%$ ( $\leq 3$ spot)	> 98% (1 spot)
Purity (HPLC)	Report	90.40%
Solubility (100mg/mL)	Clear & colorless solution	Conforms
pH	5.0 – 6.0	5.2
Water (KF)	$\leq 12.0\%$	7.9%
Absorbance: A570nm	$\leq 0.10$	0.003
A280nm	$\leq 0.015$	0.000
Heavy Metals (as Pb)	$\leq 20$ ppm	< 20ppm
Ammonia	$\leq 1.0\%$	< 1.0%

Approved by:

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