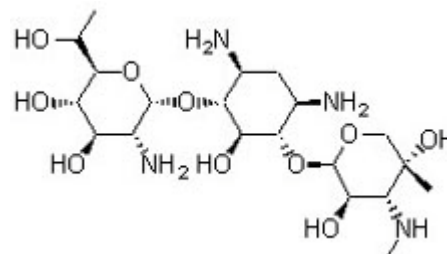


Product Information Sheet

G810 G418 Sulfate

Synonyms: Geneticin®
 CAS: 108321-42-2
 Formula: C₂₀H₄₀N₄O₁₀ • 2H₂SO₄
 Mol. Weight: 692.7



Properties

Form: Powder
 Appearance: White to off-white powder
 Application: Plant Tissue Culture Antibiotic
 Solubility: Soluble in Water
 Storage Temp: 2 to 6 °C
 Protect from Light.

Application Notes

G418 is an aminoglycoside antibiotic. Unlike other aminoglycoside, G418 is more potent because it contains a hydroxyl function at C-6' position rather than an amino function. It binds directly to the 80S ribosomal subunit and inhibits protein synthesis of eukaryotic cells.¹ G418 is effective against aerobics and facultative Gram-negative bacilli, and some Gram-positive bacteria.

In molecular biology application, G418 sulfate is often used as a selection agent.²⁻⁴

Please Note: It is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References

1. Marie-Paule Mingeot-Leclercq, Yuri Glupczynski, and Paul M. Tulkens. 1999. Aminoglycosides: Activity and Resistance. *Antimicrob Agents Chemother.* Vol 43(4). Pp. 727-737.
2. Xie, D. and Y. Hong. 2002. *Agrobacterium*-mediated genetic transformation of *Acacia mangium*. *Plant Cell Reports.* Vol 20(10). Pp. 917-922.
3. P. A. Lazzeri, R. Brettschneider, R. Lührs, and H. Lörz. 1991. Stable transformation of barley via PEG-induced direct DNA uptake into protoplasts. *Theoretical and Applied Genetics.* Vol 81(4). Pp. 437-444.
4. Christine Lang-Hinrichs, Dietmar Berndorff, Carsten Seefeldt, and Ulf Stahl. 1989. G418 resistance in the yeast *Saccharomyces cerevisiae*: comparison of the neomycin resistance genes from Tn5 and Tn903. *Applied Microbiology and Biotechnology.* Vol 30(4). Pp. 388-394.

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