Product Information

G-418 Sulfate Solution, 100 % Activity (50 mg/ml)
Cat. No. G418-H (10 ml), G418-B (100 ml), G418-10X (10x10 ml)

General Information

G-418 is used in the selection and maintenance of eukaryotic cells, stable transfected with neomycin resistance genes. G-418 is an aminoglycoside antibiotic, related to Gentamicin, and exhibits toxicity towards both eukaryotic and prokaryotic cells. It is produced by *Micromonospora rhodorangea* and acts by binding the ribosome, thus inhibiting protein synthesis in both prokaryotic and eukaryotic cells.

Product Specifications

Appearance	Clear frozen liquid
CAS No.	108321-42-2
Storage and shelf life	Store at ≤-15°C. Avoid repeated freeze-thaw cycles. Preparation of aliquots recommended. Once opened, store at +4°C and use within 4-6 weeks.
Shipping conditions	Frozen (Dry Ice)
Thawing	Overnight at +2°C to +8°C. Swirl gently to homogenize.
Working concentration	Recommended final concentration (0.1 – 1.0 mg/ml) depending on the cell type: • HeLa: 200 – 600 µg/ml • 3T3 cells: 500 – 1000 µg/ml • CHO: 200 – 400 µg/ml • HEK 293: 500 – 800 µg/ml • Jurkat cells: 600 – 700 µg/ml

Instructions for Use

- Do not use G-418 with antibiotic/antifungal preparations (e.g. Pen/Strep). These agents are competitive inhibitors of G-418. Other antibiotics are potentially cross-reactive as well.
- Good laboratory practice requires optimal concentration of biologically active G-418 to select and maintain cells. This must be determined for each set of growth conditions. G-418 is used in the concentration range of 100 – 200 µg /ml for bacteria, or 200 – 500 µg /ml for most mammalian cells. Concentrations of G-418 required for maintenance of selected cell lines are typically ≤ 50% compared to selection.
- It is recommended, whenever experimental conditions are altered, the optimal concentration of the product should be re-evaluated.

Precautions and Disclaimer

This product is for research use and further manufacturing only.

Help Needed?

If you have any further questions regarding this product, please do not hesitate to contact our cell culture experts by email (techservice@capricorn-scientific.com) or phone (+49 6424 944640).