

**Neo G-418 Sulfate, Powder**

#Cat: NB-58-0124R    Size: 10g

#Cat: NB-58-0124Q    Size: 5g

**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**

<b>Appearance</b>	White to off-white powder
<b>CAS No</b>	108321-42-2
<b>Storage and shelf life</b>	Store at +2°C to +8°C. Please refer to product label for expiration date.
<b>Shipping conditions</b>	Ambient
<b>Working concentration</b>	Recommended final concentration (0.1 – 1.0 mg/ml) depending on the cell type: <ul style="list-style-type: none"><li>• HeLa: 200 – 600 µg/ml</li><li>• 3T3 cells: 500 – 1000 µg/ml</li><li>• CHO: 200 – 400 µg/ml</li><li>• HEK 293: 500 – 800 µg/ml</li><li>• Jurkat cells: 600 – 700 µg/ml</li></ul>

**Instructions for Use**

- Before application in cell culture, prepare a sterile filtered stock solution of 10 – 50 mg/ml in water. Refer to lot certificate of analysis for microbiological potency.
- Once reconstituted, stock solutions are stable for approx. 8 weeks at +4°C and approx. 2 years when frozen (-20°C). Avoid repeated freeze/thaw cycles.
- 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 only.

**Help Needed?**

If you have any further questions regarding this product, please do not hesitate to contact our cell culture experts by email ([info@neo-biotech.com](mailto:info@neo-biotech.com)) or phone (+33 9 77 40 09 09).