

90 × 190mm サイズ

< for Research Use Only >

Code No. 071-06431 (20 mL)
077-06433 (100 mL)

Wako

**50 mg/mL G-418 Sulfate Solution,
Animal-derived-free**

50 mg/mL G-418 硫酸塩溶液, 動物由来物フリー

G-418 is an aminoglycoside antibiotic similar in structure to gentamicin, toxic to bacteria, yeast, protozoans, helminthes, plant and mammalian cells. G-418 interferes with the function of ribosomes and blocks protein synthesis in both eukaryotic and prokaryotic cells. Resistance to G-418 is conferred by the neomycin resistance genes, which are dominant and are located on both transposons Tn5 (aminoglycoside 3'-phosphotransferase II (APH3' II)) and Tn601 (aminoglycoside 3'-phosphotransferase I (APH3' I)).

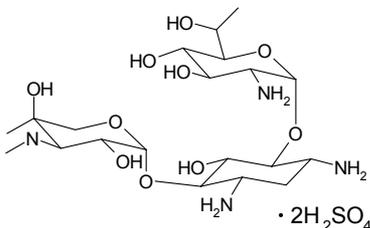
G-418 is commonly used as a selective antibiotic in molecular genetics experiments.

Molecular formula : $C_{20}H_{40}N_4O_{10} \cdot 2H_2SO_4$

Molecular weight : 692.71

CAS No. 108321-42-2

Structure :



Concentration : 50 mg/mL (as G-418). Dissolved in sterile water.

[Precaution for use]

- Do not use G-418 with antibiotic and/or antifungal reagents to avoid a microbe contamination. (e. g. penicillin and/or streptomycin)
- The optimal concentration for resistant clones selection in mammalian cells depends on the cell line used as well as on the plasmid carrying the resistant genes.

It is recommended that whenever experimental conditions are altered, the optimal concentration of the product should be evaluated.

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[Procedure for evaluation of G-418 concentration]

1. In microwell plates (for culture grade), plate 50-200 cells/well of non-transfected cells in 200 μ L culture medium containing several amounts of G-418 (50-1,000 μ g/mL).
2. After 5-7 days, replace the culture medium in each well with fresh culture medium containing the same concentration of G-418.
3. Check cellular viability after 5-7 days.
4. The incubation is required for 10-14 days totally. Detect an appropriate concentration of G-418 that completely inhibits growth of sensitive non-transfected cells.

[Expiration date] Indicated on the label.

[Storage] Store at 2-10 $^{\circ}$ C.

[Package]

Code No.	Packaging
071-06431	20 mL
077-06433	100 mL

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