

## G-418 (Geneticin) Solution

**CAT N°** : L0015

**Colour** : Clear to very slightly hazy liquid

**Storage conditions** : - 20°C

**Shelf life** : 24 months

**Sterility tests** :

- bacteria in aerobic and anaerobic conditions
- fungi and yeast

**Composition** : 50 mg/ml G-418 in water

**Recommended use** : Dilute with buffer or cell culture medium

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- In order to preserve all product qualities, it is recommended to thaw out the flask, to aliquote, then to re-freeze the produced flasks rather than to thaw out and re-freeze the flask at each use.
- It is recommended to use the product immediately after its thaw out.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

**Application** :

Antibiotic G418 is an aminoglycoside antibiotic similar in structure to gentamycin. It exhibits toxicity towards both eukaryotic and prokaryotic cells. The optimal concentration for selection and maintenance must be determined for each cell line. For bacteria and algae, concentrations of 5µg/ml or less are recommended. Animal cells may require up to 300-500 µg/ml. Typically, resistance is conferred by one of two dominant genes of bacterial origin, which can be expressed in eukaryotic cells. Cells that are multiplying will be affected sooner than those that are not. Cells in log phase may require three to seven days for selection. In general, concentrations of approximately 400 µg/ml for selection and 200 µg/ml for maintenance are required for mammalian cells.