

G-418

CAT NO.: APL-0035

DESCRIPTION

G-418 is an aminoglycoside antibiotic, which is produced by *Micromonospora rhodorangea* NRRL 5326 strain. It has a broad range of antibacterial activity both in vivo and in vitro. It also shows activity against protozoa, cecal amoebiasis, and helminthes. It is commonly known as geneticin selective antibiotic. It is toxic to both prokaryotic and eukaryotic cells, as it blocks protein elongation during translation. G-418 is commonly used for the selection of cells that are genetically engineered with a plasmid containing the neo (neor) gene, which provides resistance to G-418.

CONTENT

APL-0035

G-418 disulfate salt

5 g

STORAGE

The product is stable for two years when stored at 2-8°C. Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

APPLICATION

G418 disulfate salt is an aminoglycoside antibiotic similar in structure to gentamicin used for selection and maintenance of prokaryotic and eukaryotic cells transfected with a iNOS promoter construct and neomycin resistance gene†. Optimal concentrations for selection and maintenance vary by cell lines. Bacteria and algae require 5 µg/mL or less while animal cells may require 300-500 µg/mL.

Biochem/physiol Actions

G-418 inhibits protein synthesis at the early stages of elongation, post-initiation, at the initiation stage of translation as well as just before the initiation stage of translation.

Preparation Note

G418 powder is soluble in water at 100 mg/mL.

PRODUCT USE LIMITATION

Research use only.