

★ Storage

Store at 2-8°C.
Shelf life: 12 months

Contents

- Product Manual
- G-418 Sulfate, 100mg/ml, Sterile Filtered Solution

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Shipping Condition

Ship with ice pack.

★ Introduction

Antibiotic G-418 Sulfate is an aminoglycoside antibiotic, related to Gentamicin, toxic to bacteria, yeast, protozoans and helminthes, and higher plant and mammalian cells. Antibiotic G-418 Sulfate is produced by the bacterium *Micromonospora rhodorangea* and acts by binding the ribosome, thus inhibiting protein synthesis in both prokaryotic and eukaryotic cells. Antibiotic G-418 Sulfate is used as a selective agent in molecular genetics experiments. Resistance to G-418 Sulfate is conferred by the neomycin resistance genes, which are dominant and are located on both transposons aminoglycoside phosphotransferase 3'[I], and aminoglycoside phosphotransferase 3'[II].

★ Important information

- Do not use Antibiotic G-418 Sulfate with other antibiotic/antifungal preparations. These agents are competitive inhibitors of G-418. Other antibiotics are potentially cross-reactive as well.
- Liquid Antibiotic G-418 Sulfate is presolubilized in cell culture grade water.
- Antibiotic G-418 Sulfate powder is soluble in water. Stock solutions should be filter sterilized prior to storage at 2-8°C. Refer to individual bottle label or lot certificate of analysis for microbiological potency.
- G-418 Sulfate solution is stable for 8-10 days at 30°C.

★ Use

The amount of G-418 Sulfate solution required for selection of resistant cells varies with a number of factors including cell type. For users who have traditionally used g-418 Sulfate (liquid or powder) on the basis of microbiological potency, no change in the effective dose range is required when using either liquid or powder. simply dilute to the proper concentration in culture medium. For users who have established the concentrations used for selection and maintenance based on the weight of powdered G-418 Sulfate 20-30% reduction in the amount of G-418 Sulfate needed should be realized when switching to liquid G-418 Sulfate.

Good laboratory practice required that the optimal concentration of biologically active G-418 Sulfate required to select and maintain cells must be determined for each set of growth conditions. G-418 Sulfate is used in the concentration range of 100-200 ug/ml for bacteria, or 200-500 ug/ml for most mammalian cells. Concentrations of G-418 Sulfate required for maintenance of selected cell lines are typically <50% that required for selections. It is recommended that whenever experimental conditions are altered, the optimal

★ Related Products

Product Name	Cat No
Albumin, (IgG, Fattu Acid and Protease Free)	A0100
AffiSelect Cox IV Loading Control Antibody	A0017
AffiSelect GAPDH Loading Control Antibody, 100ug	A0039
AffiSelect Beta-Actin Loading Control Antibody, 100ug	A0042
AffiSelect a-Tubulin Loading Control Antibody, 100ug	A0050
NP-40 Lysis Buffer (2X)	N1200
Affiselect Total Protein Extraction Solution	A0710
RIPA Cell Lysis Buffer (1X) with EDTA	R4100
Xert Protease Inhibitor Cocktail Solution (100X)	P3100
Xpert Prestained Protein Marker (6.5-240 kDa)	P8502
Xpert 2 Prestained Protein Marker (10-240 kDa)	P8503
TBS Buffer, 20X, pH 7.4	T8054
West-Ez Stripping buffer	S2100
Goat anti-Rabbit IgG(H+L)-HRP, 1mg/ml	SA002
Rabbit anti-Goat IgG(H+L)-HRP, 1mg/ml	SA007
Tween 20, Molecular Biology Grade	T9100
West-Q Pico Dura ECL Solution	W3653
West-Q Femto ECL Solution	W3700
West-Ez Blocker, 5% Non-Fat Kit	W3710