

**储运**

室温下运输, 干粉在室温下储存, 溶液于-20℃储存。

**使用**

G-418是一种氨基糖苷类抗生素, 它通过干扰核糖体功能而阻断蛋白质的合成, 它对原核细胞和真核细胞均具有毒性, 在分子生物学实验中常用于抗性筛选。

由于各真核细胞系对G-418敏感度不同, 各新细胞系或株稳定转染时杀死非稳定转染细胞所需用量需要通过实验优化。最适用量通过建立细胞死亡曲线来建立。

仅供用于科学研究实验。勿用于人和药用。

**质量指标**

CAS: 108321-42-2

外观: 白色粉末

比旋:  $+104^{\circ}-+121^{\circ}$

水分:  $\leq 10\%$

吸光值:  $\leq 0.015$  (280nm, 1mg/ml),  $\leq 0.1$  (570nm, 100mg/ml)

效价:  $> 700$  ug/mg

**G-418 Sulfate**

G-418 sulfate is an aminoglycosidic antibiotic, it acts by interfering with protein synthesis and is usually used as an agent for selection of cultured cells expressing a gene that confers resistance to G-418. It is toxic to both prokaryotic and eukaryotic cells. G-418 is white powder, is shipped at room temperature, dry powder should be stored at RT and solution at -20°C.

For research use only. Not for human or drug use.

**Specification**

CAS No. : 108321-42-2

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

Molecular weight: 692.71

Appearance: white powder

Specific Rotation:  $+104^{\circ}-+121^{\circ}$

Moisture:  $\leq 10\%$

Absorbance:  $\leq 0.015$  (280nm, 1mg/ml),  $\leq 0.1$  (570nm, 100mg/ml)

Potency:  $> 700$  ug/mg



厦门太阳马生物工程有限公司  
Sunma Biotech Co., Ltd.

Tel: +86-592-6535 930

[Http://www.sunmabio.com](http://www.sunmabio.com)

[email:sales@sunmabio.com](mailto:sales@sunmabio.com)

Add: 厦门市海沧新阳工业区翁角路289号  
科创大厦316室

**G-418 硫酸盐**

Catalog No. 12101 100 mg

Catalog No. 12102 200 mg

Catalog No. 12105 500 mg

Catalog No. 12110 1 g

Catalog No. 12120 2 g

Catalog No. 12150 5 g

Catalog No. 12152 25 g

**[简介]**

G-418为白色粉末, 融点138—144℃, 溶于水, 甲醇。

CAS No.: 108321-42-2

分子式:  $C_{20}H_{40}N_4O_{10} \cdot 2H_2SO_4$

分子量: 692.71

**Kill Curve Assay:**

1. Dissolve G-418 in fully supplemented growth medium without antibiotic, concentration of 5 mg/ml and filter using a 0.22 micron filter.
2. Prepare 6-well cell culture plates by adding G-418 to the growth medium. Concentrations: A range from 100-1,200 µg/ml in 100 µg increments is recommended.
3. Treat cells with trypsin and dilute to a concentration of 4000 cells/ml.
4. Add 100 µl of cell suspension to each well and incubate plates in a humidified CO<sub>2</sub> atmosphere.
5. At 10 to 14 days, aspirate the supernatant and wash the cells with phosphate buffered saline with 0.5% methylene blue and 50% methanol for 20 minutes.
6. Score the plates by calculating percentage of survival by number of individual colonies .
7. Calculate the percentage of survival in the presence of each dilution of G-418 Selective and the percentage of survival in the absence of G-418.
8. Generate a dose response curve by plotting the percentage of survival on the y axis versus G-418 in µg/ml on the x axis for both the sensitive and resistant.

