cyagen | OriCell™

User Manual

OriCell™ Puromycin (10mg/mL)

Catalog No. PUAT-10001

We help you discover life

Introduction

Puromycin, derived from Streptomyces alboniger, is an aminonucleoside antibiotic commonly used to select eukaryotic or prokaryotic polyclonal or monoclonal cells that express the pac gene (puro) through plasmid transfection/transformation or viral infection. Puromycin is used not only for the selection of stable cell lines but also for their maintenance.

OriCell™ Puromycin, meticulously developed by the R&D team, is specifically designed for cell experiments to select cells harboring the puromycin resistance gene. It effectively kills and suppresses wild-type cells within mixed populations transfected by viral or plasmid vectors

Note: **This product is intended for research use only and is not suitable for clinical treatment or other purposes.**

When citing our products in academic journals, please indicate "OriCell™ + Catalog Number, from Cyagen Biosciences (Guangzhou) Inc."

Product Information

Components	Catalog Number	Volume
OriCell™ Puromycin (10mg/mL)	PUAT-10001	1 mL
OriCell™ Puromycin (10mg/mL)	PUAT-10001	5 mL

QC

- Tested negative for bacteria, fungi, mycoplasma and endotoxins.
- Performance verified. Pass the detection of product quality.

Please reference "COA" for details.

Product Stability and Storage Conditions

1. Unopened reagent should be stored at -20°C in a dark place, with a shelf life of 2 years. If stored at 4°C in a dark place, the shelf life is 1 year. If opened, store at -20°C in a dark place with a shelf life of 8 months; if stored at 4°C in a dark place, the shelf life is 2 months.
2. If it cannot be used up in a short period, please aliquot it and store. Avoid repeated freeze-thaw cycles.
3. Please use it within the shelf life. Expired reagent may significantly affect its performance.

Instructions

1. Take OriCell™ Puromycin from the -20°C freezer and thaw completely in a 4°C refrigerator.
2. he working concentration of Puromycin for cell selection is typically 1 μg/mL, with a selection period of approximately 1–3 days (depending on the cell type). During this time, change the medium once every 2–3 days to remove dead cells.
3. Calculate the total volume of culture medium needed based on the number of cells to be selected.
4. According to the total volume of culture medium required and the determined puromycin concentration, mix this product thoroughly and add the appropriate volume to regular complete

medium to prepare the selection medium.

5. Set up the experimental group: mixed cells transfected with viral or plasmid vectors; control group: wild-type cells confirmed to lack the puromycin resistance gene. Seed both groups at the same cell density. Add regular complete medium and culture under normal conditions.
6. When both groups of cells reach approximately 80% confluence, replace the medium with the selection medium to start drug selection.
7. After about 2–3 days, cell death will begin to appear; replace with fresh selection medium.
8. Subsequently, change the selection medium every 2–3 days. If there are excessive dead cells, the medium change frequency can be increased accordingly.
9. Continue until all wild-type cells in the control group have died, at which point the wild-type cells in the experimental group should also be eliminated. Replace the selection medium in the experimental group with regular complete medium and continue culturing until the cells recover. (If a large number of cells in the experimental group die and show poor condition during selection, the drug selection should be terminated early).

   Note: **Cell condition usually deteriorates noticeably after drug selection. Some cell death within 1–2 days after switching to regular medium is normal.**
10. Cells that have undergone thorough drug selection exhibit a high purity of the resistance gene. It is not recommended to continuously use low concentrations of puromycin during subsequent culture.
11. For cell lines requiring long-term passaging, it is advisable to repeat the drug selection process every 10 to 15 passages to maintain a high purity of the exogenous gene or optimal drug resistance.