

Gentamicin 50 mg/ml EZ-Pak™ Protocol

Introduction

Gentamicin is a broad-spectrum aminoglycoside antibiotic effective against gram-negative and gram-positive species. In addition, gentamicin exhibits antimicrobial properties against species resistant to tetracycline, colistin, kanamycin, and chloramphenicol.

Aminoglycoside antibiotics are composed of amino groups attached to glycosides. They bind the 30s ribosomal subunit, causing misreading of the mRNA sequence and inhibition of translocation. Consequently, protein synthesis is inhibited.

The Gentamicin EZ Pak™ is the fastest and easiest way to make a set amount of sterile gentamicin solution. The kit includes pre-weighed gentamicin powder, a sterile filter and a sterile container for the filtered solution. No need to calculate, simply add the stated amount of deionized H₂O, filter, and pour into the labeled bottle for easy usage. The EZ Pak™ includes high quality GoldBio gentamicin and the sterile solution is ready for tissue culture, bacterial media, or any number of uses.

Materials

- 1 Bottle of Gentamicin Sulfate powder
- 1 Sterile empty bottle for solution
- 1 Sterile Filter (and syringe for EZ10)

Method

Reconstitution Protocol

1. Warm Gentamicin powder bottle to Room Temperature.
2. Add specified volume of dH₂O to Gentamicin powder bottle.

Product Catalog #	Volume of H ₂ O to Add	Final Volume
G-400-EZ10	9.8 ml	10 ml
G-400-EZ25	24.0 ml	25 ml
G-400-EZ50	49.0 ml	50 ml
G-400-EZ100	98.0 ml	100 ml

3. Mix until all product goes into solution.

4. Sterile Filter:

a. For G-400-EZ10 -

- i. Remove syringe from packaging.
- ii. Carefully remove top of sterile filter packaging.
- iii. Suck up as much solution as possible into syringe.
- iv. Screw the Leur end of the syringe into the top of the sterile filter.
- v. Carefully place the filter assembly above the empty bottle, and slowly depress the syringe plunger. Allow all solution to flow through the filter.
- vi. Once all solution has been filtered, close the top of the solution bottle and store at -20°C. Make aliquots if desired. Discard filter and syringe.

b. For G-400-EZ25, EZ50, and EZ100 -

- i. Remove vacuum filter from packaging.
- ii. Attach vacuum hose according to instructions on filter packaging.
- iii. Add solution to the upper cup of the filter.
- iv. Apply vacuum pressure and let all the solution in the top cup flow through the filter into the bottom cup. Stop vacuum when all solution is filtered.
- v. Remove vacuum attachment from filter and close bottle with provided sterile cap.
- vi. Tightly seal solution bottle and store at -20°C. Make aliquots if desired. Discard filter.