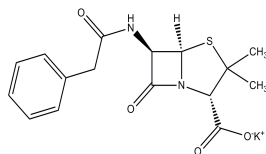


**Product: Penicillin G potassium, USP****ALTERNATE NAME:** Benzylpenicillin potassium salt**CATALOG #:** 2504-25, 100**AMOUNT:** 25 MU, 100 MU**STRUCTURE:****MOLECULAR FORMULA:** C<sub>16</sub>H<sub>17</sub>KN<sub>2</sub>O<sub>4</sub>S**MOLECULAR WEIGHT:** 372.49**CAS No.** 113-98-4**APPEARANCE:** White to off-white powder**SOLUBILITY:** H<sub>2</sub>O**POTENCY:** 1440-1680 u/mg**STORAGE:** Store at +4°C. Protect from air and moisture

**DESCRIPTION:** Penicillin is a member of the  $\beta$ -lactam antibiotics.  $\beta$ -Lactams interfere with PBP (penicillin binding protein) activity involved in the final phase of peptidoglycan synthesis. PBP's are enzymes which catalyze a pentaglycine crosslink between alanine and lysine residues providing additional strength to the cell wall. Without a pentaglycine crosslink, the integrity of the cell wall is severely compromised and ultimately leads to cell lysis and death. Resistance to  $\beta$ -lactams is commonly due to cells containing plasmid encoded  $\beta$ -lactamases. Penicillin can be used as a selective agent in several types of isolation media.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:**

Amphotericin B (Cat. No. 2497-250, 1G, 5G)  
Ampicillin trihydrate (Cat. No. 2483-1 G, 5G, 25 G)  
Ampicillin sodium (Cat. No. 2484-1G, 5G, 25G)  
Betulinic Acid (Cat. No. 1552-25)  
Bexarotene (Cat. No. 1575-5, 50)  
Blasticidin S, Hydrochloride (Cat. No. 1859-25,100)  
Capecitabine (Cat. No. 1741-100, 1000)  
Carboplatin (Cat. No. 1553-100)  
Chloramphenicol (Cat. No. 2486-25G, 100G, 500G)  
Cisplatin (Cat. No. 1550-100,1000)  
Cycloheximide (Cat. No. 1041-1G, 5G)  
Cycloheximide (100 mM) (Cat. No. 1041-1)  
Daunorubicin.HCl (1524-10,50,500)  
Doxorubicin HCl (Cat. No. 1527-5)  
Fludarabine Phosphate (Cat. No. 1763-10, 50)  
G-418 Sulfate (Cat. No. 1557-100, 5G, 25G)  
Gemcitabine Hydrochloride (Cat. No. 1759-25, 100)  
Genistein (Cat. No. 1533-10)  
Nedaplatin (Cat. No. 1576-5)  
Oxaliplatin (Cat. No. 1577-25)  
Paclitaxel (Cat. No. 1567-25)  
Penicillin G sodium (Cat. No. 2503-100, 500)  
Polymyxin B Sulfate (Cat. No. 2496-10, 50, 100)  
Puromycin DiHydrochloride (Cat. No. 1860-25, 100, 250, 500,1000)  
EZSolution™ Puromycin Dihydrochloride (Cat. No. 1861-100)  
Streptozocin (Cat. No. 1930-100, 500, 1000)  
Tamoxifen Citrate (Cat. No. 1551-1000)

**FOR RESEARCH USE ONLY! Not to be used in humans.**