

## Ampicillin, Sodium Salt Solution

Contains 50 mg/mL ampicillin, sodium salt  
in Ultra Pure Water

DNase, RNase and protease – none detected

Catalog Number **ML 003-01**

Storage Temperature -5~-20°C

### Product Description

Ampicillin is a β-lactam antibiotic with an amino group side chain attached to the penicillin structure. Ampicillin, which is a semi-synthetic derivative of penicillin, inhibits cell wall biosynthesis by inhibiting peptidoglycan cross-linking and is bactericidal only to growing cells. Cleavage of the β-lactam ring of ampicillin by β-lactamase results in bacterial resistance to this antibiotic.

**ML 003-01** contains 50 mg/mL ampicillin, sodium salt in Ultra Pure Water (**ML 019-02**). Working concentration is 20~50 µg/mL.

### Storage/Stability

Ampicillin solution should be stored at -5~-20°C. Deterioration of the liquid may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. Product label bears expiration date.

### Precautions

For *In Vitro* Use Only

Product Profile	
Appearance	Clear colorless solution
DNase, RNase and protease	None detected
Sterility	Sterilized by 0.2 µm filtration system. Sterility tests are performed in accordance with protocols described in USP.

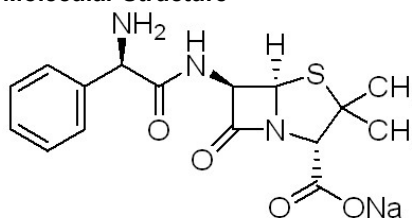
### Molecular Weight

371.4 g/mole

### Molecular Formula

C<sub>16</sub>H<sub>18</sub>N<sub>3</sub>O<sub>4</sub>SNa

### Molecular Structure



### References

- Wright, A.J., The penicillins. *Mayo Clin. Proc.*, **74**, 290-307 (1999).  
 Kirby, W.M., and Bulger, R.J., The new penicillins and cephalosporins. *Annu. Rev. Med.*, **15**, 393-412 (1964).  
 Rolinson, G.N., Forty years of beta-lactam research. *J. Antimicrob. Chemother.*, **41**, 589-603 (1998).  
 Perlman, D., et al., Use of antibiotics in cell culture. *Meth. Enzymol.*, **58**, 110-116 (1979).