



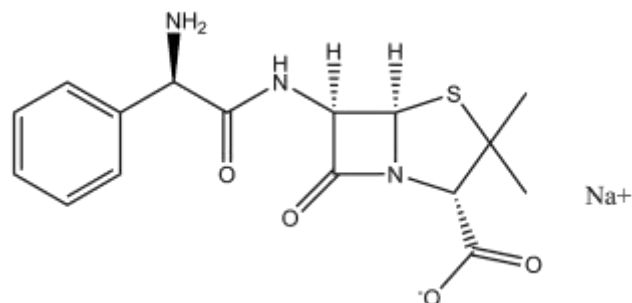
## Product Information Sheet

### A116 Ampicillin, Sodium Salt

Synonyms: D(-)- $\alpha$ -Aminobenzylpenicillin, Sodium Salt  
CAS: 69-52-3  
Formula:  $C_{16}H_{18}N_3NaO_4S$   
Mol. Weight: 371.39 g/mol

#### Properties:

Form: Powder  
Appearance: White to Off-White  
Solubility: Soluble in Water and DMSO  
Application: Molecular Biology  
Storage Temp: 2-8°C



#### Application Notes:

Ampicillin is broad-spectrum  $\beta$ -lactam antibiotic. It is a semi-synthetic derivative of penicillin and has a similar mode of action to that of benzylpenicillin against gram-positive organisms; however, it is more effective against gram-negative. Ampicillin is most often used as a selection agent for cloning in *E.coli* and its resistance gene is generally denoted as  $amp^r$ , which contains a  $\beta$ -lactamase (*bla*) from the pBR322 plasmid (Sutcliffe 1978).

Please Note: It is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

#### References:

- Merck **13**, 591  
Sutcliffe JG (1978) Nucleotide sequence of the ampicillin resistance gene of *Escherichia coli* plasmid pBR322. *PNAS* Vol. 75(8):3737-3741.  
Sweetman SC (2007) *Martindale: The Complete Drug Reference*, 35<sup>th</sup> Ed., p. 181-182