

PhytoTechnology Laboratories®

Helping to Build a Better Tomorrow through Plant Science™

Product Information Sheet

A116 Ampicillin, Sodium Salt

Synonyms: D(-)-α-Aminobenzylpenicillin, Sodium Salt

CAS: 69-52-3

 $\begin{array}{ll} Formula: & C_{16}H_{18}N_3NaO_4S \\ Mol. \ Weight: & 371.39 \ g/mol \end{array}$

Properties:

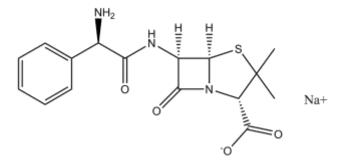
Form: Powder

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 β -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 β -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, 35th Ed., p. 181-182

PhytoTechnology Laboratories®

P.O. Box 12205; Shawnee Mission, KS 66282-2205
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442
Web Site: www.phytotechlab.com © 2018 *Phyto*Technology Laboratories®

A116-Info Page 1 of 1