

Ampicillin Sodium Salt

Cat. # P8030-5, P8030-25, P8030-100, P8030-500

Cas#	69-52-3
Molecular Weight	371.4 g/mol
Formula	$\text{NaC}_{16}\text{H}_{18}\text{N}_3\text{O}_4\text{S}$
Source	Synthetic
Physical Appearance	Powder
Solubility	Soluble in water up to 50 mg/ml, much less solubility in ethanol.
Stock Solution	Prepare 500 - 1000X stock in water at 50 mg/ml, aliquot and stock at -20°C up to six months (see procedure below).
Working Concentration	50 - 100 µg/ml
Quality Assurance	>85% by HPLC; Tested by colony formation assay.
Description	Ampicillin is a semi-synthetic bactericidal antibiotic in the penicillin family. It primarily acts on Gram-negative bacteria by inhibiting bacterial cell-wall synthesis via inactivating transpeptidases on the inner surface of the bacterial cell membranes.
Preparation of Stock	Preparation of 500 - 1000X stock at 50 mg/ml: 1) Dissolve 5 grams Ampicillin sodium salt in 100 ml distilled water. 2) Mix to ensure completely soluble. 3) Sterile by filtering through a 0.2 µm filter. 4) Aliquot and store at -20°C up to six months.
Shipping & Storage	Eligible for room temperature shipping. Store powder desiccated at -20°C upon receiving up to 12 months.