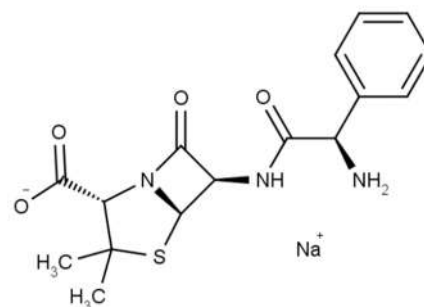




## Ampicillin, sodium salt

<b>Catalog No:</b>	01503
<b>Lot No:</b>	XXXXX
<b>Cas No:</b>	69-52-3
<b>Formula:</b>	C <sub>16</sub> H <sub>18</sub> N <sub>3</sub> O <sub>4</sub> S · Na
<b>MW:</b>	371.39
<b>Supplied as:</b>	solid
<b>Stability:</b>	store at 4°C, protect from moisture



### Background

Belonging to the penicillin group of beta-lactam antibiotics, ampicillin is able to penetrate Gram-positive and some Gram-negative bacteria. It differs from penicillin G, or benzylpenicillin, only by the presence of an amino group. That amino group helps the drug penetrate the outer membrane of Gram-negative bacteria. Ampicillin acts as an irreversible inhibitor of the enzyme transpeptidase, which is needed by bacteria to make their cell walls. It inhibits the third and final stage of bacterial cell wall synthesis in binary fission, which ultimately leads to cell lysis; therefore ampicillin is bacteriocidal.

### Tests

<b>Appearance:</b>	white powder
<b>Solution (10% in H<sub>2</sub>O):</b>	clear, colorless
<b>Assay (HPLC):</b>	≥91%
<b>pH (10% in H<sub>2</sub>O):</b>	8.0 – 10.0
<b>Water (K.F.):</b>	≤2.0%
<b>Specific optical rotation:</b>	+258.0 – +287.0°
<b>Bacterial endotoxins:</b>	≤0.15 E.U/mg
<b>Retalted substances:</b>	
Ampicillin dimer	≤4.5%
any other impurity	≤2.0%
<b>N,N-Dimethylaniline</b>	≤20.0 ppm
<b>2-Ethylhexanoic acid:</b>	≤0.8% m/m

### Specifications

### Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.