

Product Data Sheet

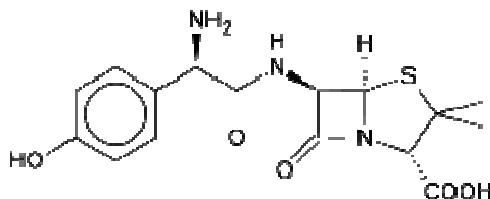
Cat # ABT-020-05  
Cat # ABT-020-50

**Amoxicillin (Pharma Grade)**  
**Amoxicillin (Pharma Grade)**

**Size: 5 g**  
**Size: 50 g (Bulk & Custom)**

General Information

**Amoxicillin** formerly amoxycillin (BAN), abbreviated AMOX, TORMOXIN (in India), is a moderate-spectrum, bacteriolytic,  $\beta$ -lactam antibiotic used to treat bacterial infections caused by susceptible microorganisms. It is usually the drug of choice within the class because it is better absorbed, following oral administration, than other  $\beta$ -lactam antibiotics. It is also a treatment for cystic acne. Amoxicillin is susceptible to degradation by  $\beta$ -lactamase-producing bacteria, and so may be given with clavulanic acid to decrease its susceptibility. Amoxicillin acts by inhibiting the synthesis of bacterial cell wall. It inhibits cross-linkage between the linear peptidoglycan polymer chains that make up a major component of the cell walls of both Gram-positive and Gram-negative bacteria



**Molecular Formula:**  
(C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>O<sub>5</sub>S)  
**Molecular Weight:**  
365.4 g/mol

Side effects are as those for other beta-lactam antibiotics. Side effects include nausea, vomiting, rashes and antibiotic associated colitis. Loose bowel movements (diarrhea) also may occur. The onset of an allergic reaction to amoxicillin can be very sudden and intense - emergency medical attention must be sought as quickly as possible. The initial onset of such a reaction often starts with a change in mental state; skin rash with intense itching (often beginning in fingertips and around groin area and rapidly spreading) and sensations of fever, nausea and vomiting. Any other symptoms that seem even remotely suspicious must be taken very seriously.

A typical Certificate of Analyses

Analysis Test	Specification	Results
Description	White crystalline powder	White crystalline powder
Identification-UV	Maxim absorption in the range of 229nm to 274nm	Maxim absorption at 254nm
Identification 2 Acidity	3.5~5.5	4.7
Identification 3 (thin layer chromatography )	Should comply	Complies
Specific optical rotation	+290°~+310°	Complies
Melting point	195°C	195°C
Solubility (mg/ml)	H <sub>2</sub> O 4.0, Methanol 7.5, Ethanol 3.4	Complies
[ $\alpha$ ] D <sub>20</sub> (C=0.1, H <sub>2</sub> O)	+246°	Complies
Polymer content	≤0.15% counts by Amoxicillin	Complies
Assay	≥98%	99.0%
Conclusion	QC Passed	

**Usage:** This item is for LABORATORY ESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

**ABT-020-05**

**110105A**

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