



Version:24.10d (Release date:2024-10-28)

Search ?

☒ Contains ☐ Exact Match ☐ Begins With

☒ Name ☐ Code ☐ Property ☐ Relationship

Advanced Search

Hierarchy | Value Sets | Maps Help

Quick Links

[View in Hierarchy](#) | [View History](#) | [View Graph](#) | [Add to Cart](#) | [Suggest Changes](#)

Ampicillin (Code C239)

Terms & Properties Synonym Details Relationships Mappings View All

Terms & Properties

Preferred Name: Ampicillin

Definition: A broad-spectrum, semi-synthetic, beta-lactam penicillin antibiotic with bactericidal activity. Ampicillin binds to and inactivates penicillin-binding proteins (PBP) located on the inner membrane of the bacterial cell wall. Inactivation of PBPs interferes with the cross-linkage of peptidoglycan chains necessary for bacterial cell wall strength and rigidity. This interrupts bacterial cell wall synthesis and results in the weakening of the bacterial cell wall and causes cell lysis. Ampicillin is stable against hydrolysis by a variety of beta-lactamases, therefore, can be used in wide range of gram-positive and -negative infections.

Label: Ampicillin

NCI Thesaurus Code: C239 [\(Search for linked caDSR metadata\)](#) [\(search value sets\)](#)

NCI Metathesaurus Link: C0002680 [\(see NCI Metathesaurus info\)](#)

Synonyms & Abbreviations: [\(see Synonym Details\)](#)

(2S,5R,6R)-6-((R)-2-Amino-2-phenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo(3.2.0)heptane-2-carboxylic Acid
Ampicillin
AMPICILLIN

External Source Codes:

CAS Registry Number	69-53-4 (see NLM ChemIDplus info)
FDA UNII Code	7C782967RD
ChEBI ID	CHEBI:28971 (see ChEBI info)
UMLS CUI	C0002680

Other Properties:

Name	Value (qualifiers indented underneath)
Chemical_Formula	C16H19N3O4S
code	C239
Contributing_Source	FDA
Contributing_Source	HemOnc
Legacy Concept Name	Ampicillin
NSC Number	528986
Semantic_Type	Antibiotic
Semantic_Type	Organic Chemical
Semantic_Type	Pharmacologic Substance

Additional Concept Data:

Defined Fully by Roles: No

URL:https://ncithesaurus.nci.nih.gov/ncitbrowser/ConceptReport.jsp?dictionary=NCI_Thesaurus&ns=ncit&code=C239