



Carbenicillin Disodium Salt

Catalog number

C1100

Supplier

United States Biological

Carbenicillin (alpha-carboxybenzylpenicillin) is a synthetic penicillin derivative used as a selection agent for carbenicillin-resistant plasmids (amp).

Synonyms

(2S,5R,6R)-6-[(2-Carboxy-2-phenylacetyl)amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid Sodium Salt;
N-(2-Carboxy-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]hept-6-yl)-2-phenylmalonamic Acid Disodium Salt; Anabactyl; BRL 2064; Carbapen; Carbecin; Carbenicillin Sodium; Carbenicilline Disodium; Carboxybenzylpenicillin Sodium; Disodium (α -Carboxybenzyl)penicillin; Disodium Carbenicillin; Fugacillin; Geocillin; Geopen; Gripenin; Hyoper; Microcillin; NSC 111071; Piopen; Pyopen; Pyopene; Sodium carbenicillin; α -Carboxybenzylpenicillin Sodium Salt

CAS Number

4800-94-6

Molecular Formula

C₁₇H₁₆N₂O₆Na₂

Molecular Weight

422.4

Antibiotic activity spectrum

Gram-negative bacteria

Purity

≥90%

Potency

≥770ug/mg

Appearance

White to slightly yellow powder

Solubility

DMSO (Slightly), Methanol (Slightly). Clear, colorless, complete

pH

6.5-8.0

Water



≤5%

Benzylpenicillin

≤5%

Iodine Absorbing Substances

≤8%

Endotoxin

≤0.05EU/mg

Working Concentration

30-50ug/ml for E. coli

Storage and Stability

May be stored at 4°C. Do not freeze. Stable for 6 months after receipt. For maximum recovery of product, centrifuge the original vial prior to removing the cap.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications without the expressed written authorization of United States Biological.

Toxicity and Hazards

All products should be handled by qualified personnel only, trained in laboratory procedures.

Formulation

White to slightly yellow powder

Purity

≥90%

Grade

Molecular Biology Grade

Storage

4°C

MW

422.4

Formula

C₁₇H₁₆N₂O₆Na₂

Reference

1. Baggett, J.J. et al., (2003) Genetics 65:1661-1674.
2. Meek, L. et al., (2008) J. Plant Growth Regulation 27:192-201.
3. Lee, J. and Kim, S.-H. (2009) Protein Expression and Purification 63:58-61.
4. Volkert, M.R. et al., (2008) Methods Mol Biol. 477:331-342.
1. Merck Index: Index 11, 1,796 (1989).
2. Payne, D. J. and Aymes, S. G., J. Med. Microbiology 38: 114 (1993).
3. De Sutter, K., et al., Mol. Microbiol. 6: 2,201 (1992).
4. Moinraie, D., et al., FEBS Lett. 306: 108 (1992).
5. Sakurai, Y., et al., J.



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