

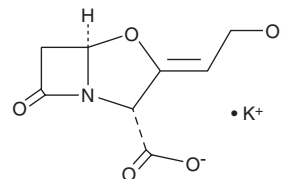
PRODUCT INFORMATION



Clavulanate (potassium salt)

Item No. 19456

CAS Registry No.: 61177-45-5
Formal Name: (2R,3Z,5R)-3-(2-hydroxyethylidene)-7-oxo-4-oxa-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, monopotassium salt
Synonym: BRL 14151K
MF: C₈H₈NO₅ • K
FW: 237.3
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Clavulanate (potassium salt) is supplied as a crystalline solid. Aqueous solutions of clavulanate (potassium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of clavulanate (potassium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Clavulanate is a β -lactamase inhibitor that is effective against Ambler class A β -lactamases (IC₅₀ values range from 12 to 60 nM).¹ While it is not an effective antibiotic by itself, clavulanate is commonly used with other antibiotics that would be inactivated by β -lactamases secreted by bacteria. It is often combined with amoxicillin (Item No. 19188) and other penicillin-based antibiotics.¹⁻³

References

1. Drawz, S. M. and Bonomo, R. A. Three decades of β -lactamase inhibitors. *Clin. Microbiol. Rev.* **23**(1), 160-201 (2010).
2. Chang, K. C., Yew, W. W., Tam, C. M., *et al.* WHO group 5 drugs and difficult multidrug-resistant tuberculosis: A systematic review with cohort analysis and meta-analysis. *Antimicrob. Agents Chemother.* **57**(9), 4097-4104 (2013).
3. Huang, R. L., Huang, Y. L., Ou, J. C., *et al.* Screening of 25 compounds isolated from *Phyllanthus* species for anti-human hepatitis B virus *in vitro*. *Phytother. Res.* **17**(5), 449-453 (2003).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/15/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM