# Clavulanate potassium

**Cat. No.:** HY-A0256A

**CAS No.:** 61177-45-5

**Molecular Formula:** $C_8H_8KNO_5$

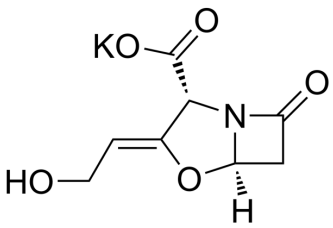
**Molecular Weight:** 237.25

**Target:** Bacterial; Antibiotic; Beta-lactamase

**Pathway:** Anti-infection

**Storage:** 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)




## BIOLOGICAL ACTIVITY

| | |
|---|---|
| **Description** | Clavulanate potassium is a potent β-lactamase inhibitor and acts as an antibiotic[1][2]. |
| **$IC_{50}$ & Target** | β-lactam |
| **In Vitro** | Clavulanate potassium has weak antibacterial activity against most organisms when administered alone, but given in combination with beta-lactam antibiotics prevents antibiotic inactivation by microbial lactamase[1].<br>?Clavulanate potassium (0.25 mg/L, 0.5 mg/L) causes a relatively slow inhibition of growth, and a higher concentration (1 mg/L) is only marginally more effective than 0.5 mg/L[2].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## CUSTOMER VALIDATION

- Nat Commun. 2022 Mar 2;13(1):1116.
- Int J Mol Sci. 2023 Oct 27, 24(21), 15657.
- Genomics. 2022: 110527.
- Biomed Res Int. 2018 Jul 2;2018:3579832.

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## REFERENCES

[1]. Reading C, et al. Clavulanic Acid: a Beta-Lactamase-Inhibiting Beta-Lactam from Streptomyces clavuligerus. Antimicrob Agents Chemother. 1977 May; 11(5): 852–857.

[2]. Stokes DH, et al. Bactericidal effects of amoxycillin/clavulanic acid against intracellular Legionella pneumophila in tissue culture studies. J Antimicrob Chemother. 1989 Apr;23(4):547-56.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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