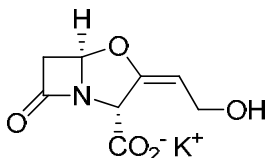


## Clavulanate potassium

Code: **BIA-C1243**

Pack sizes: **5 mg, 25 mg**



Synonyms : **Clavubactam potassium, BRL 14151**

### Specifications

CAS # : **61177-45-5**  
Molecular Formula : **C<sub>8</sub>H<sub>8</sub>NO<sub>5</sub>K**  
Molecular Weight : **237.25**  
Source : ***Streptomyces sp.***  
Appearance : **White to off-white powder**  
Purity : **> 98% by HPLC**  
Storage : **-20°C**  
Solubility : **Soluble in water, DMSO, limited methanol solubility.**

### Application Notes

Clavulanic acid is a beta-lactam antibiotic produced by several species of the genus *Streptomyces*. The free acid degrades and is isolated and maintained as either the sodium or potassium salt. Clavulanate is a weak antibiotic but is a potent inhibitor of beta-lactamases. In combination with penicillin and cephalosporins it shows potent synergistic activity. Clavulanic acid is a suicide inhibitor, covalently binding to a serine residue in the active site of the beta-lactamase.

### References

1. Clavulanic acid and its derivatives. Structure elucidation of clavulanic acid and the preparation of dihydroclavulanic acid, isoclavulanic acid, esters and related oxidation products. Brown A. G. et al. J. Chem. Soc. Perkin Trans. I 1984, 635.
2. Naturally occurring beta-lactamase inhibitors with antibacterial activity. Brown A. G. J. Antibiot. 1976, 29, 668.