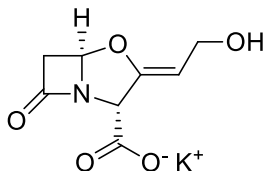


## Clavulanate potassium

Code No.: **BIA-C1243**

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



Synonyms : Clavubactam potassium, BRL 14151

## Specifications

CAS #	: <b>61177-45-5</b>
Molecular Formula	: <b>C<sub>8</sub>H<sub>8</sub>NO<sub>5</sub>K</b>
Molecular Weight	: <b>237.3</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>White to off-white powder</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.</b>

## Application Notes

Clavulanic acid is a  $\beta$ -lactam antibiotic produced by several species of *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.