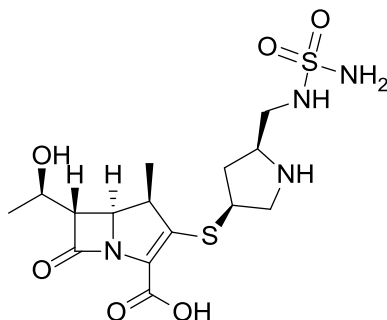


## Doripenem

Code No.: **BIA-D1664**

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



Synonyms : S 4661, Doribax, Finibax

### Specifications

CAS #	: 148016-81-3
Molecular Formula	: C <sub>15</sub> H <sub>24</sub> N <sub>4</sub> O <sub>6</sub> S <sub>2</sub>
Molecular Weight	: 420.5
Source	: Synthetic
Appearance	: White to off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

### Application Notes

Doripenem, a semi-synthetic carbapenem antibiotic featuring an unusual sulfamoylamino terminus, was commercially developed in the early 1990s by Shionogi Co., Japan. Doripenem acts by preventing bacterial cell wall growth by binding to penicillin-binding proteins. Doripenem possesses a broad antibacterial spectrum of action against Gram positive and Gram negative bacteria, including Pseudomonas, and is stable to most β-lactamases. Dorapenem is supplied as the hydrate.

### References

1. Pyrrolidylthiocarbapenem derivative. Nishitani Y. et al., US patent 5317016, 1993.
2. 1-β-Methylcarbapenem antibiotic, S-4661, synthesis and structure-activity relationships of 2-(5-Substituted Pyrrolidin-3-ylthio)-1-β-methylcarbapenens. Iso Y. et al., J. Antibiot. 1996, 49, 199.