



## Product Information

Product ID M1769

CAS No. 119478-56-7

Chemical Name

Synonym

Formula  $C_{17}H_{25}N_3O_5S \cdot 3H_2O$

Formula Wt. 437.51

Melting Point

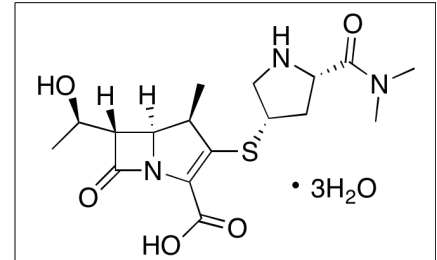
Purity  $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

**Description** Meropenem is a  $\beta$ -lactam antibiotic that belongs to the family of carbapenems, active against all bacteria, with the most significant antibacterial activity against gram-negative species. Meropenem is somewhat resistant to degradation by  $\beta$ -lactamases and is used to treat bacterial meningitis, skin infections, and febrile neutropenia. This compound inhibits bacterial cell wall synthesis by binding penicillin-binding proteins 2 and 3 (PBP2/3), preventing formation of peptidoglycan.



**Bulk quantities available upon request**

Product ID	Size
M1769	10 mg
M1769	50 mg
M1769	100 mg

**References** Mallick M, Odedra D, Vidyarthi AS, et al. Meropenem: a potent drug against superbug as unveiled through bioinformatics approaches. *Int J Bioinform Res Appl.* 2013;9(2):109-20. PMID: 23467058.

Pernot L, Frénois F, Rybkine T, et al. Crystal structures of the class D beta-lactamase OXA-13 in the native form and in complex with meropenem. *J Mol Biol.* 2001 Jul 20;310(4):859-74. PMID: 11453693.

Sumita Y, Fukasawa M. Potent activity of meropenem against *Escherichia coli* arising from its simultaneous binding to penicillin-binding proteins 2 and 3. *J Antimicrob Chemother.* 1995 Jul;36(1):53-64. PMID: 8537284.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.