



Imipenem Monohydrate

A member of carbapenem class inhibiting cell-wall synthesis.

Strong carbapenem antibiotic Imipenem Monohydrate Powder exhibits broad-spectrum action against a variety of microorganisms.

It is useful in microbiological research labs. Imipenem Monohydrate Powder works by deactivating penicillin-binding proteins (PBPs) to prevent bacteria from forming cell walls. These PBPs are vital enzymes that bacteria need to form their cell walls. Imipenem Monohydrate Powder effectively weakens the bacterial cell wall, causing cell lysis, by blocking PBPs.

It works effectively against a broad variety of bacteria, including types that are both aerobic and anaerobic, Gram-positive, and Gram-negative, and include *Pseudomonas aeruginosa* and *Enterococcus*.

Cat. Number	AS-2012
CAS Number	74431-23-5
Additional CAS	64221-86-9
MDL Number	MFCD09753321
Molecular Weight	317.36 g/mol
Molecular Formula	$C_{12}H_{19}N_3O_5S$
Storage Temperature	-20°C
Form and Color	Powder, white to light yellow to yellow brown
Assay (on dry basis)	Min. 95%
pH (0.5% in water)	4.5 – 7.5
Water content	Max. 8%
Sulphated ash	$\leq 0.2\%$
Synonym	MK-787