

## **Certificate of Analysis**

Catalog Number	BP22569
Product Name	Ertapenem sodium

## **Physical and Chemical Properties**

Synonyms	L-749345; MK-826
CAS No.	153773-82-1
Chemical Formula	C22H24N3NaO7S
Molecular Weight	497.5
	DMSO: 10 mg/mL (27.82 mM, Need ultrasonic) H2O: 1 mg/mL (2.78 mM, Need ultrasonic and warming and heat to 80°C)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	HO H H OH

## **Product Information**

Description	Ertapenem sodium (L-749345) is a broad spectrum and long acting $\beta$ -lactam antibiotic. Ertapenem sodium has a broad-spectrum anti-anaerobic activity against a variety of anaerobes with a mode MIC of 0.12 $\mu$ g/mL. Ertapenem sodium can be used for the research of severe infections caused by bacteria in the skin, lungs, stomach, pelvis, and urinary tract.
In vitro	Ertapenem sodium (0-100 $\mu$ g/mL approximately, 48 h) is active against 99.1% of all anaerobes with a mode MIC of 0.12 $\mu$ g/mL and MIC90 of 1 $\mu$ g/mL, and MIC's $\geq$ 8 $\mu$ g/mL for B.fragilis and B.vulgatus species, respectively.
In vivo	Ertapenem sodium (Subcutaneous injection, 0-10 mg/kg, 0-120 h after infection, S. aureus thigh tissue infection model) shows > 3 log10 CFU reduction of organism at 10 mg/kg, and maintains the activity with 3.3 and 4.4 log10 CFU eliminated at 2 mg/kg.Ertapenem sodium (Subcutaneous injection, 4h after infection, systemic infection model) is active against all gram-positive organisms, and is also active against gram-negative organisms tested with ED50s of

## **Analytical Data**

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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v2 Revision on 12/28/2022