

## Polymyxin B

Cat. No.:	HY-149179		
CAS No.:	1404-26-8		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month

# Polymyxin B

### SOLVENT & SOLUBILITY

In Vitro	H <sub>2</sub> O : 33.33 mg/mL (ultrasonic and adjust pH to 2 with HCl)
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### BIOLOGICAL ACTIVITY

Description	Polymyxin B is an antibiotic. Polymyxin B inhibits Gram-negative infections by binding to the LPS of the bacterial wall with high affinity. Polymyxin B neutralizes the effect of endotoxin. Polymyxin B induces bacterial death by increasing its permeability. Polymyxin B is used in endotoxemia research <sup>[1][3]</sup> .
In Vitro	Polymyxin B (10 µg/mL, 6 h) decreases the TNF-α and IL-10 production in Human peripheral blood mononuclear cells (PBMC) <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Polymyxin B (5-20 mg/kg for i.v; once daily for seven days) reaches the nephrotoxicity endpoint at 20 mg/kg instead of 5 mg/kg in Sprague-Dawley rats model <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Biomed Pharmacother. 2023 Nov 8:115856.
- Prince of Songkla University. 2023 Dec.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

[1]. Martin EL, et al. Endotoxin removal: how far from the evidence? The EUPHAS 2 Project. Contrib Nephrol. 2010;167:119-125.

[2]. Manchandani P, et al. Role of Renal Drug Exposure in Polymyxin B-Induced Nephrotoxicity. Antimicrob Agents Chemother. 2017 Mar 24;61(4):e02391-16.

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[3]. Cardoso LS, et al. Polymyxin B as inhibitor of LPS contamination of Schistosoma mansoni recombinant proteins in human cytokine analysis. Microb Cell Fact. 2007 Jan 3;6:1.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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