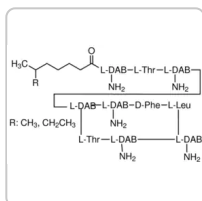


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## Documents

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📄 [Fiche des caractéristiques](#)

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**P1004** ▶ **Sigma-Aldrich.**

# Polymyxin B sulfate salt

★★★★★ (0)

Empirical Formula (Hill Notation):

$C_{55}H_{96}N_{16}O_{13} \cdot 2H_2SO_4$

Numéro CAS: **1405-20-5**

Poids moléculaire: 1385.61

Numéro EC: **215-774-7**

Numéro MDL: **MFCD00131991**

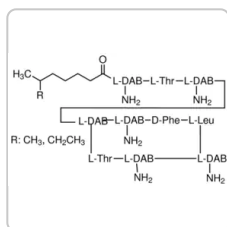
Référence	Conditionnement	Disponibilité	Prix	Quantité	
P1004-1MU	1000000 UNITS	✔ Disponible pour expédition le 10 octobre 2022	<a href="#">Détails...</a> 55,20 €	<input type="text" value="-"/> <input type="text" value="+"/>	<a href="#">i</a>
P1004-5MU	5000000 UNITS	✔ Only 6 left in stock (more on the way)	<a href="#">Détails...</a> 195,00 €	<input type="text" value="-"/> <input type="text" value="+"/>	<a href="#">i</a>
P1004-10MU	10000000 UNITS	✔ Only 1 left in stock (more on the way)	<a href="#">Détails...</a> 284,00 €	<input type="text" value="-"/> <input type="text" value="+"/>	<a href="#">i</a>
P1004-25MU	25000000 UNITS	✔ Disponible pour expédition le 10 octobre 2022	<a href="#">Détails...</a> 564,00 €	<input type="text" value="-"/> <input type="text" value="+"/>	<a href="#">i</a>
P1004-50MU	50000000 UNITS	✔ Disponible pour expédition le 10 octobre 2022	<a href="#">Détails...</a> 970,00 €	<input type="text" value="-"/> <input type="text" value="+"/>	<a href="#">i</a>

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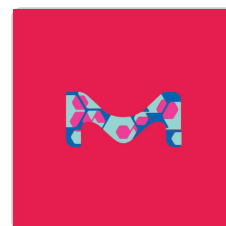

## PRODUITS RECOMMANDÉS



Sigma-Aldrich

**P4932****Polymyxin B sulfate salt**

powder, BioReagent, suitable for cell culture

[Consulter le prix et la disponibilité](#)


Sigma-Aldrich

**5291****Polymyxin B Sulfate - CAS 1405-20-5 - Calbiochem**

Polymyxin B Sulfate, CAS 1405-20-5, is an antibiotic that is effective against Gram-positive bacteria. Inhibits...

[Consulter le prix et la disponibilité](#)

## PROPRIÉTÉS

Forme	powder
Niveau de qualité	200
Solubilité	H <sub>2</sub> O: soluble 50 mg/mL
Spectre d'activité de l'antibiotique	Gram-negative bacteria fungi

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InChI

1S/C48H82N16O13.H2O4S/c1-27(2)24-37-47(76)59-32(11-19-52)41(70)56-31(10-18-51)43(72)61-35(14-22-65)39(68)54-21-13-34(45(74)57-33(12-20-53)44(73)64-38(48(77)63-37)25-28-6-4-3-5-7-28)60-42(71)30(9-17-50)58-46(75)36(15-23-66)62-40(69)29(8-16-49)55-26-67;1-5(2,3)4/h3-7,26-27,29-38,65-66H,8-25,49-53H2,1-2H3,(H,54,68)(H,55,67)(H,56,70)(H,57,74)(H,58,75)(H,59,76)(H,60,71)(H,61,72)(H,62,69)(H,63,77)(H,64,73);(H2,1,2,3,4)

InChI key

HNDFYNOVSOOGDU-UHFFFAOYSA-N

Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

**Catégories apparentées****Antibiotics****DESCRIPTION****Description générale**

Chemical structure: peptide

**Application**

Polymyxin B sulfate is a strongly cationic cyclic polypeptide antibiotic that is derived from fermentation of *Bacillus polymyxa*. It is a mixture of B1 and B2 sulfate. The product has been used clinically to treat infections of the urinary tract, meninges and blood stream caused by susceptible strains of *Pseudomonas aeruginosa*†. It also has uses studying multidrug-resistant pathogens††, as

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- in human aortic endothelial cells (HAEC) cell culture to exclude potential endotoxin contamination in recombinant adiponectin
- in the analysis of the isolates
- in endotoxin-neutralizing activity of  $\alpha$ -amylase (Amyl-1)-18 (LAL assay)

## Conditionnement

1000000, 5000000, 10000000, 25000000, 50000000 units in poly bottle

## Actions biochimiques/physiologiques

Polymyxin B is one of the most important antibiotics used to treat gram-negative bacterial infections, including infections caused by carbapenem-resistant non-fermenters and carbapenem-resistant Enterobacteriaceae.

Mode of Action: Polymyxin B Sulfate binds to the lipid A portion of bacterial lipopolysaccharides†, disrupting the cytoplasmic membrane by inducing pores large enough to permit nucleotide leakage in bacterial walls. This disrupts the permeability of the cytoplasmic membrane.

Antimicrobial spectrum: Has bactericidal action on most gram-negative bacilli††, including *E. Coli* and on most fungi and gram-positive bacteria.

## Attention

As supplied, the product should be stored at 2-8°C in the dark. No change was observed in retained samples after three years' of storage in these conditions. Stock solutions should be sterile filtered and stored at 2-8°C. They are stable at 37°C for 5 days.

## Notes préparatoires

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**Autres remarques**

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

**INFORMATIONS SUR LA SÉCURITÉ****Pictograms**

**GHS07**

**Mention d'avertissement**

Warning

**Mentions de danger**

**H302**

**Conseils de prudence**

**P264 - P270 - P301 + P312 - P501**

**Classification des risques**

Acute Tox. 4 Oral

**Code de la classe de stockage**

11 - Combustible Solids

**WGK**

WGK 3

**Flash Point(F)**

Not applicable

**Point d'éclair C**

Not applicable

**Équipement de protection individuelle**

dust mask type N95 (US),  
Eyeshields, Gloves

**DOCUMENTATION****Certificat d'analyse**

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

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Rechercher

## Certificat d'origine

Saisir un numéro de lot pour rechercher un certificat d'origine (COO).

Numéro de lot

e.g. 023J5431

## Comment saisir un numéro de lot (COO)

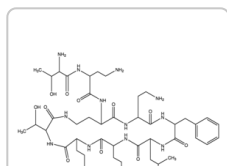
Rechercher

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[Structure Search](#)

[FDS](#)

## LES CLIENTS ONT ÉGALEMENT CONSULTÉ

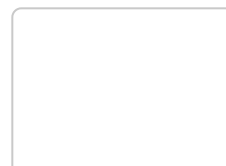


Sigma-Aldrich

**P2076**

**Polymyxin B nonapeptide hydrochloride**

cationic cyclic peptide



Sigma-Aldrich

**C4461**

**Colistin sulfate salt**

≥19,000 IU/mg

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## ARTICLES REVUS PAR DES PAIRS

### Endotoxin-neutralizing activity and mechanism of action of a cationic alpha-helical antimicrobial octadecapeptide derived from alpha-amylase of rice

Taniguchi M, et al.

*Peptides*, 101-108 (2016)

### Globular adiponectin counteracts VCAM-1-mediated monocyte adhesion via AdipoR1/NF-kappaB/COX-2 signaling in human aortic endothelial cells

Addabbo F, et al.

*American Journal of Physiology. Endocrinology and Metabolism*, 301(6), E1143-E1143 (2011)

### Dosing and pharmacokinetics of polymyxin B in patients with renal insufficiency

Thamlikitkul V, et al.

*Antimicrobial Agents and Chemotherapy*, e01337-e01316 (2017)

### Biochemical and toxic diversity of *Bacillus cereus* in a pasta and meat dish associated with a food-poisoning case

Pirhonen T I, et al.

*Food Microbiology*, 22(1), 87-91 (2005)

### Ureaplasma spp. lipid-associated membrane proteins induce human monocyte U937 cell cycle arrest through p53-independent p21 pathway.

Xucheng Huang et al.

*International journal of medical microbiology : IJMM*, 308(7), 819-828 (2018-07-24)

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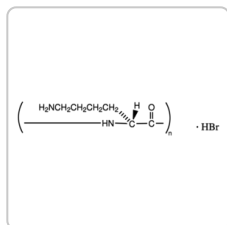


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## PRODUITS CONSULTÉS RÉCEMMENT



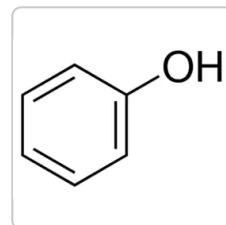
Sigma-Aldrich

**P1024**

**Poly-D-lysine hydrobromide**

mol wt ≥300,000

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

**P1037**

**Phenol**

for molecular biology

[Consulter le prix et la disponibilité](#)

## Évaluations



[Soyez le premier à donner votre avis sur ce produit](#)

## Questions



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