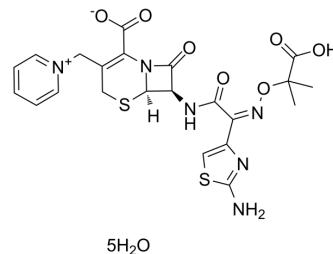


## Ceftazidime pentahydrate

<b>Cat. No.:</b>	HY-B0593A		
<b>CAS No.:</b>	78439-06-2		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>32</sub> N <sub>6</sub> O <sub>12</sub> S <sub>2</sub>		
<b>Molecular Weight:</b>	636.65		
<b>Target:</b>	Bacterial; Antibiotic		
<b>Pathway:</b>	Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (157.07 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.5707 mL	7.8536 mL	15.7072 mL
	5 mM	0.3141 mL	1.5707 mL	3.1414 mL
	10 mM	0.1571 mL	0.7854 mL	1.5707 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: 2.5 mg/mL (3.93 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (3.93 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Ceftazidime pentahydrate (GR20263 pentahydrate) is a third generation cephalosporin administered intravenously or intramuscularly. Ceftazidime pentahydrate has a broad spectrum of in vitro activity against Gram-positive and Gram-negative aerobic bacteria. Ceftazidime pentahydrate is particularly active against Enterobacteriaceae (including beta-lactamase-positive strains) and is resistant to hydrolysis by most beta-lactamases<sup>[1]</sup>.

### CUSTOMER VALIDATION

- 
- Adv Sci (Weinh). 2020 Jul 21;7(17):2001374.
  - J Antimicrob Chemother. 2020 Sep 1;75(9):2609-2615.
  - J Antimicrob Chemother. 2020 Jul 1;75(7):1850-1858.
  - Antimicrob Agents Chemother. 2018 Jul 27;62(8). pii: e00414-18.
  - Int J Antimicrob Agents. 2018 Aug;52(2):269-271.

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

## REFERENCES

---

- [1]. Richards DM, et al. Ceftazidime. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Drugs. 1985 Feb;29(2):105-61.
- 

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA