

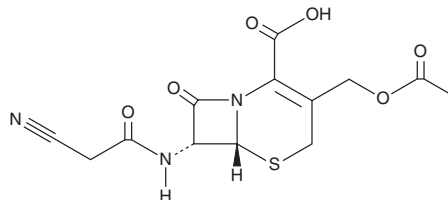
# PRODUCT INFORMATION



## Cephacetrile

Item No. 36269

**CAS Registry No.:** 10206-21-0  
**Formal Name:** (6R,7R)-3-[(acetyloxy)methyl]-7-[(2-cyanoacetyl)amino]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid  
**Synonyms:** Cefacetrile, 7-Cyanoacetamidocephalosporanic Acid  
**MF:**  $C_{13}H_{13}N_3O_6S$   
**FW:** 339.3  
**Purity:**  $\geq 95\%$   
**Supplied as:** A solid  
**Storage:**  $-20^{\circ}\text{C}$   
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Cephacetrile is supplied as a solid. A stock solution may be made by dissolving the cephacetrile in the solvent of choice, which should be purged with an inert gas. Cephacetrile is slightly soluble in methanol, DMSO, and dimethyl formamide.

### Description

Cephacetrile is a cephalosporin antibiotic.<sup>1</sup> It is active against numerous Gram-positive and Gram-negative bacteria, including clinical isolates of *S. aureus*, *S. epidermidis*, *S. pyogenes*, *E. coli*, and *Klebsiella* (MICs = 0.64, 0.64, 0.16, 6.25 and 3.12  $\mu\text{g/ml}$ , respectively). Cephacetrile (30  $\mu\text{g/disc}$ ) is also active against veterinary isolates of *S. aureus* from bovine mastitis.<sup>2</sup> Formulations containing cephacetrile have been used in the treatment of bovine mastitis.

### References

1. Neu, H.C. and Winshell, E.B. *In vitro* evaluation of cephacetrile, a new cephalosporin antibiotic. *J. Antibiot. (Tokyo)* **25**(7), 400-404 (1972).
2. Costa, E.O., Benites, N.R., Guerra, J.L., *et al.* Antimicrobial susceptibility of *Staphylococcus* spp. isolated from mammary parenchymas of slaughtered dairy cows. *J. Vet. Med. B Infect. Dis. Vet. Public Health* **47**(2), 99-103 (2000).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)