# Product Specification Sheet

**Product Name:** Cefdinir  
**Catalog Number:** C2333

## Technical information:

- **Chemical Formula:** $C_{14}H_{13}N_{5}O_{5}S_{2}$
- **CAS #:** 91832-40-5
- **Molecular Weight:** 395.41
- **Purity:** > 98%
- **Appearance:** white solid
- **Solubility:** Soluble in DMSO up to 100 mM
- **Chemical Name:** (6R,7R)-7-[(2Z)-2-(2-amino-1,3-thiazol-4-yl)-2-(N-hydroxyimino)acetamido]-3-ethenyl-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
- **Shelf Life:** In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

## Handling:
- To make 10 mM stock solution, add 0.253mL of DMSO for each mg of Cefdinir.
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

## Biological Activity:

Cefdinir is an orally-available, β-lactam antibiotic that binds to penicillin-susceptible Staphylococcus aureus 2132 at an MIC of 25 nM (1) and E. Coli C11 at an MIC of 63 nM (ED50 of 1.32 mg/kg) (2). In contrast to other oral cephalosporins, cefdinir retains substantial activity against a panel of bacterial strains and is found to be extremely stable against numerous β-lactamases. Additionally, cefdinir inhibits the adherence of type-1 fimbriated E. coli to uroepithelial cells. (3)

In clinical studies, cefdinir has been shown to be superior to pencillin V and comparable to cephalaxin and amoxicillin/clavulanate in the treatment of both pediatric and adult bacterial infection. (4)

## Reference:


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To reorder: [http://www.cellagentech.com/Cefdinir/](http://www.cellagentech.com/Cefdinir/)  
For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*