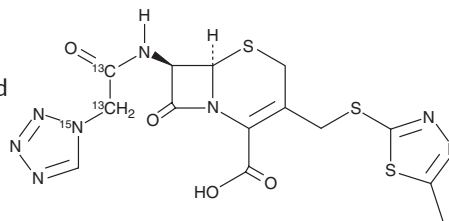


PRODUCT INFORMATION



Cefazolin-¹³C₂, ¹⁵N Item No. 25319

CAS Registry No.: 2101505-58-0
Formal Name: (6R,7R)-7-(2-(1H-tetrazol-1-yl-1-¹⁵N)acetamido-¹³C₂-¹³C₂)-3-(((5-methyl-1,3,4-thiadiazol-2-yl)thio)methyl)-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid
MF: C₁₂[¹³C]₂H₁₄N₇[¹⁵N]O₄S₃
FW: 457.5
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Cefazolin-¹³C₂, ¹⁵N is supplied as a solid. A stock solution may be made by dissolving the cefazolin-¹³C₂, ¹⁵N in the solvent of choice, which should be purged with an inert gas. Cefazolin-¹³C₂, ¹⁵N is soluble in dimethyl formamide.

Description

Cefazolin-¹³C₂, ¹⁵N is intended for use as an internal standard for the quantification of cefazolin (Item No. 15776) by GC- or LC-MS. Cefazolin is a broad-spectrum cephalosporin antibiotic that is active *in vitro* against various Gram-positive and Gram-negative bacteria (MICs = 0.2-12.5 µg/ml).¹ It also inhibits the growth of clinical isolates of *S. aureus*, *E. coli*, *P. mirabilis*, and *K. pneumoniae* (MICs = 0.1-25 µg/ml). *In vivo*, cefazolin protects against *S. aureus*, *E. coli*, and *P. mirabilis* infection in mice (ED₅₀s = <0.09-1.78, 0.44-3.63, and 2.31-5.2 mg/animal, respectively). Formulations containing cefazolin have been used to treat a variety of bacterial infections.

Reference

1. Nishida, M., Matsubara, T., Murakawa, T., *et al.* Cefazolin, a new semisynthetic cephalosporin antibiotic. II. *In vitro* and *in vivo* antimicrobial activity. *J. Antibiot. (Tokyo)* **23(3)**, 137-148 (1970).

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.

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