

# PRODUCT INFORMATION



## Cefadroxil-d<sub>4</sub> (trifluoroacetate salt)

Item No. 33380

**Formal Name:** (6R,7R)-7-[[[(2R)-2-amino-2-(4-hydroxyphenyl-2,3,5,6-d<sub>4</sub>)acetyl]amino]-3-methyl-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid

**MF:** C<sub>16</sub>H<sub>13</sub>D<sub>4</sub>N<sub>3</sub>O<sub>5</sub>S • CF<sub>3</sub>COOH

**FW:** 481.4

**Chemical Purity:** ≥95% (Cefadroxil)

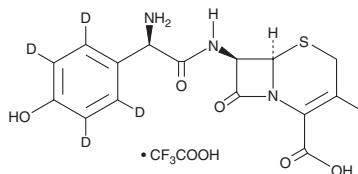
**Deuterium**

**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>

**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

Cefadroxil-d<sub>4</sub> (trifluoroacetate salt) is intended for use as an internal standard for the quantification of cefadroxil (Item No. 20365) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Cefadroxil-d<sub>4</sub> (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the cefadroxil-d<sub>4</sub> (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Cefadroxil-d<sub>4</sub> (trifluoroacetate salt) is soluble in methanol and DMSO. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

### Description

Cefadroxil is a semisynthetic cephalosporin antibiotic.<sup>1</sup> It is active against a variety of Gram-positive and Gram-negative bacteria, including *B. anthracis*, *V. cholerae*, and *P. multocida* strains (MICs = 1, 2, and 4 µg/ml, respectively), among others. Cefadroxil is protective against infection by strains of *S. pyogenes*, *S. pneumoniae*, or *S. aureus* in mice with 50% protective dose (PD<sub>50</sub>) values of 0.6-2.4, 18-24, and 0.3-29 mg/kg, respectively. Formulations containing cefadroxil have been used in the treatment of a variety of bacterial infections.

### Reference

1. Buck, R.E. and Price, K.E. Cefadroxil, a new broad-spectrum cephalosporin. *Antimicrob. Agents Chemother.* **11**(2), 324-330 (1977).

#### 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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