

Cefditoren Pivoxil (Cas No 33817-20-8)



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CAS number 33817-20-8

Systematic (IUPAC) name

2,2-dimethylpropanoyloxymethyl (2S,5R,6R)-6-[[[(2R)-2-amino-2-phenyl-acetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate

Identifiers

CAS number 33817-20-8
ATC code J01CA02
PubChem 33478

Chemical data

Formula C₂₂H₂₉N₃O₆S Mol. mass 463.548 g/mol

cefditoren pivoxil, a semi-synthetic cephalosporin antibiotic for oral administration. It is a prodrug which is hydrolyzed by esterases during absorption, and the drug is distributed in the circulating blood as active cefditoren.

Chemically, cefditoren pivoxil is (-)-(6R,7R)-2,2-dimethylpropionyloxymethyl 7-[(Z)-2-(2-aminothiazol-4-yl)-2-methoxy-iminoacetamido]-3-[(Z)-2-(4-methylthiazol-5-yl)ethenyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate. The empirical formula is C₂₅H₂₈N₆O₇S₃ and the molecular weight is 620.73.

The amorphous form of cefditoren pivoxil developed for clinical use is a light yellow powder. It is freely soluble in dilute hydrochloric acid and soluble at levels equal to 6.06 mg/mL in ethanol and < 0.1 mg/mL in water.

