

2018



头孢类，青霉素类，培南类聚合物专辑

Catalogue of Cephalosporin, Penicillin and Penem Polymers

广州牌牌生物科技有限公司 Guangzhou PI & PI Biotech Inc. Ltd.



Editor: Charles Zhang

2018/6/6



牌牌生物公众号

公司简介

广州牌牌生物科技有限公司成立于 2009 年。公司现有超过 50 位员工，都是本科及以上学历，且都是药学，化学和生物相关专业的人才。公司管理层多为博士和 MBA/EMBA 的高等人才。公司曾获省级和市级多项项目支持，并在 2017 年申请国家高新技术企业认证。

公司在广州有两个共 1,500 平方米的研发场地。包括质控部、合成部、纯化部、中试反应区等，配备了国际一流的研发设备，包括 37 台高效液相色谱仪 HPLC，其中 1 台 UPLC，3 台 UHPLC 三双元，1 台 CAD 检测器，3 台 DAD 检测器，1 台 LC-ESI-LCQ-MS(11)，1 台 Orbitrap-Q Exactive Focus MSMS，1 台 BR-TSQ Altis QQQ MS-ZH, 1MWUV 和 6UV 检测器。公司还配备真空干燥箱，多种真空/循环泵，精密天平，多种分析和检测仪器等。

更多公司及产品信息可关注公众号或官网：www.paypaytech.com 或 www.pipitech.com（英文）

Company Profile

Guangzhou Pi & Pi Biotech Inc. was set up in 2009. Currently, the company employs more than 50 full time staff. All the employees have bachelor degree or above, and they are professionals in pharmacology, chemistry and biology related majors. The company management team consists of PHD, MBA and EMBA. Guangzhou PI & PI has got many sci-tech project grants awarded by the province and the city. In 2017, the company applied for the certification of "National New High-tech Enterprise".

The company operating in 1,500 square meters of facilities in Guangzhou, containing the quality control department, the synthesis department, the purification department, the pilot-scale test reaction area etc. Equipped with advanced R&D equipment including 37 HPLCs (1 UPLC; 3 UHPLCs; 1 CAD detector; 3 DAD detectors; 1 LC-ESI-LCQ-MS(11); 1 Orbitrap-Q Exactive Focus MSMS; 1 BR-TSQ Altis QQQ MS-ZH; 1MWUV - 6UV detector). The company is also equipped with vacuum drying oven, various vacuum/circulating pump, precision balance and detecting instrument etc.

For more information of the company and products, please refer to: www.pipitech.com (English) OR www.paypaytech.com (Chinese).



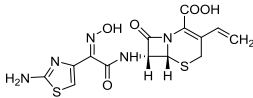
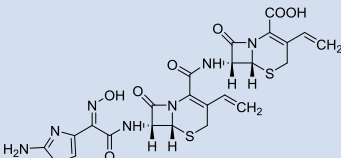
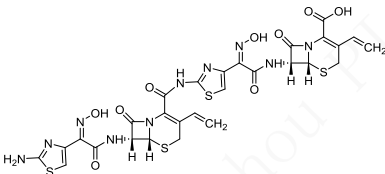
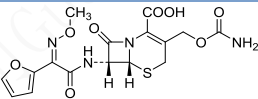
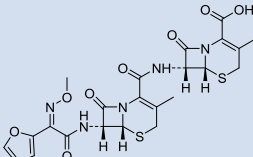
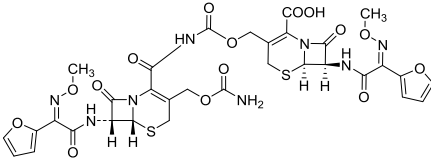
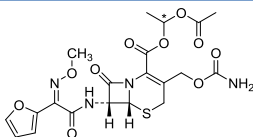
Official Website

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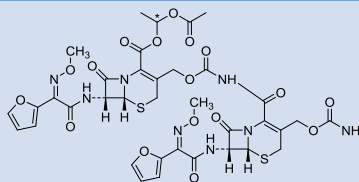
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原料药 API	产品名称 Product name	结构式 Structure	结构信息 Structure information
头孢菌素类 Cephalosporins			
头孢地尼	Cefdinir	 Chemical Formula: $C_{14}H_{13}N_5O_5S_2$ Exact Mass: 395.03581 Molecular Weight: 395.40800	Chemical Formula: C14H13N5O5S2 Exact Mass: 395.03581 Molecular Weight: 395.40800
	Cefdinir Double Parents	 Chemical Formula: $C_{23}H_{21}N_7O_7S_3$ Exact Mass: 603.06646 Molecular Weight: 603.64300	Chemical Formula: C23H21N7O7S3 Exact Mass: 603.06646 Molecular Weight: 603.64300
	*Cefdinir Dimer	 Chemical Formula: $C_{28}H_{24}N_{10}O_9S_4$ Exact Mass: 772.06106 Molecular Weight: 772.80100	Chemical Formula: C28H24N10O9S4 Exact Mass: 772.06106 Molecular Weight: 772.80100
头孢呋辛钠	Cefuroxime Sodium	 Chemical Formula: $C_{16}H_{16}N_4O_6S$ Exact Mass: 424.06888 Molecular Weight: 424.38400	Chemical Formula: C16H16N4O6S Exact Mass: 424.06888 Molecular Weight: 424.38400
	*Cefuroxime Sodium Double Parents	 Chemical Formula: $C_{23}H_{23}N_5O_8S_2$ Exact Mass: 561.09880 Molecular Weight: 561.58400	Chemical Formula: C23H23N5O8S2 Exact Mass: 561.09880 Molecular Weight: 561.58400
	Cefuroxime Sodium Dimer	 Chemical Formula: $C_{32}H_{30}N_8O_{15}S_2$ Exact Mass: 830.12720 Molecular Weight: 830.75300	Chemical Formula: C32H30N8O15S2 Exact Mass: 830.12720 Molecular Weight: 830.75300
头孢呋辛酯	Cefuroxime Axetil	 Chemical Formula: $C_{20}H_{22}N_4O_{10}S$ Exact Mass: 510.10566 Molecular Weight: 510.47400	Chemical Formula: C20H22N4O10S Exact Mass: 510.10566 Molecular Weight: 510.47400

Cefuroxime Axetil Dimer



Chemical Formula: $C_{36}H_{36}N_8O_{17}S_2$
Exact Mass: 916.16398
Molecular Weight: 916.84300

Chemical Formula:

C36H36N8O17S2

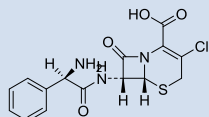
Exact Mass: 916.16398

Molecular Weight: 916.84300

6

头孢克洛

Cefaclor



Chemical Formula: $C_{15}H_{14}ClN_3O_4S$
Exact Mass: 367.03935
Molecular Weight: 367.80400

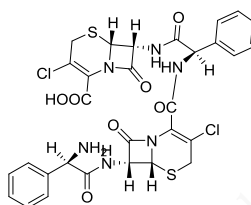
Chemical Formula:

C15H14ClN3O4S

Exact Mass: 367.03935

Molecular Weight: 367.80400

***Cefaclor Dimer**



Chemical Formula: $C_{30}H_{26}Cl_2N_6O_7S_2$
Exact Mass: 716.06814
Molecular Weight: 717.59300

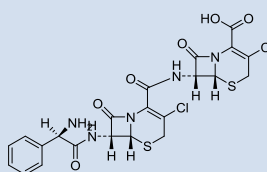
Chemical Formula:

C30H26Cl2N6O7S2

Exact Mass: 716.06814

Molecular Weight: 717.59300

Cefaclor Double Parents



Chemical Formula: $C_{22}H_{19}Cl_2N_5O_6S_2$
Exact Mass: 583.01538
Molecular Weight: 584.44300

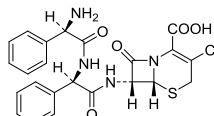
Chemical Formula:

C22H19Cl2N5O6S2

Exact Mass: 583.01538

Molecular Weight: 584.44300

***Cefaclor Impurity H (EP)**



Chemical Formula: $C_{23}H_{21}ClN_4O_5S$
Exact Mass: 500.09212
Molecular Weight: 500.95400

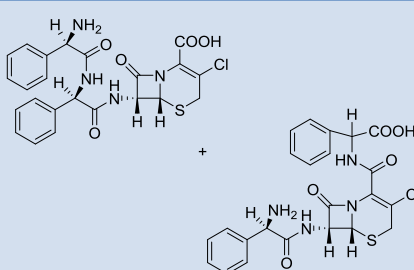
Chemical Formula:

C23H21ClN4O5S

Exact Mass: 500.09212

Molecular Weight: 500.95400

***Mixture of Impurity H (EP)
& Cefaclor Phenylglycine
Isomers**



Chemical Formula:

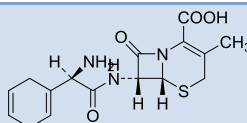
C46H42Cl2N8O10S2

Exact Mass: 1000.18424

Molecular Weight: 1001.90800

头孢拉定

Cephadrine



Chemical Formula: $C_{16}H_{19}N_3O_4S$
Exact Mass: 349.10963
Molecular Weight: 349.40500

Chemical Formula:

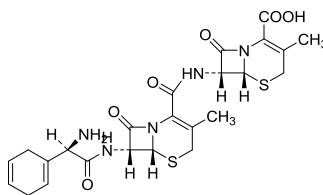
C16H19N3O4S

Exact Mass: 349.10963

Molecular Weight: 349.40500

Cephadrine Double

Parents



Chemical Formula: $C_{24}H_{27}N_5O_6S_2$
Exact Mass: 545.14028
Molecular Weight: 545.62900

Chemical Formula:

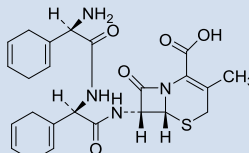
C24H27N5O6S2

Exact Mass: 545.14028

Molecular Weight: 545.62900

***Cephadrine**

Bilateral Chain 1



Chemical Formula: $C_{24}H_{28}N_4O_5S$
Exact Mass: 484.17804
Molecular Weight: 484.57100

Chemical Formula:

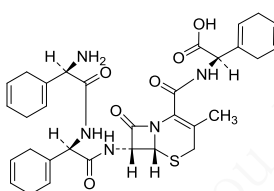
C24H28N4O5S

Exact Mass: 484.17804

Molecular Weight: 484.57100

Cephadrine

Bilateral Chain 2



Chemical Formula: $C_{32}H_{37}N_5O_6S$
Exact Mass: 619.24645
Molecular Weight: 619.73700

Chemical Formula:

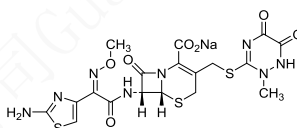
C24H28N4O5S

Exact Mass: 484.17804

Molecular Weight: 484.57100

头孢曲松钠

Ceftriaxone Sodium



Chemical Formula: $C_{18}H_{17}N_5NaO_7S_3$
Exact Mass: 576.02800
Molecular Weight: 576.55277

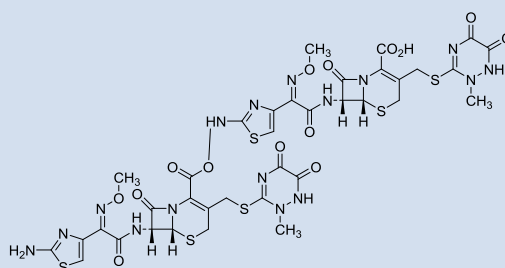
Chemical Formula:

C18H17N5NaO7S3

Exact Mass: 576.02800

Molecular Weight: 576.55277

Ceftriaxone Dimer



Chemical Formula: $C_{36}H_{34}N_{10}O_{14}S_6$
Exact Mass: 1106.07646
Molecular Weight: 1107.12600

Chemical Formula:

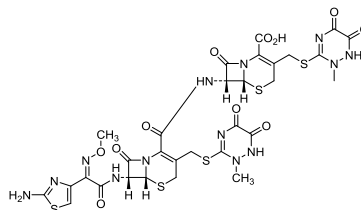
C36H34N10O14S6

Exact Mass: 1106.07646

Molecular Weight: 1107.12600

Ceftriaxone

Double Parents



Chemical Formula: $C_{30}H_{29}N_{13}O_{11}S_5$
Exact Mass: 907.07130
Molecular Weight: 907.94200

Chemical Formula:

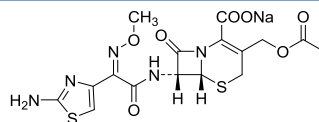
C30H29N13O11S5

Exact Mass: 907.07130

Molecular Weight: 907.94200

头孢噻肟钠

Cefotaxime Sodium



Chemical Formula: $C_{16}H_{16}N_3NaO_7S_2$
Exact Mass: 477.03888
Molecular Weight: 477.44177

Chemical Formula:

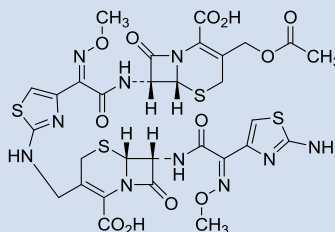
$C_{16}H_{16}N_3NaO_7S_2$

Exact Mass: 477.03888

Molecular Weight: 477.44177

*Cefotaxime Sodium

Impurity F (EP)



Chemical Formula: $C_{30}H_{30}N_{10}O_{12}S_4$
Exact Mass: 850.09275
Molecular Weight: 850.86800

Chemical Formula:

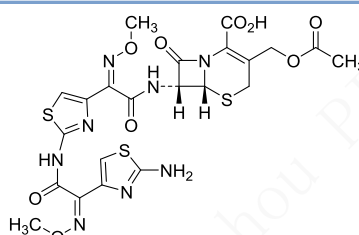
$C_{30}H_{30}N_{10}O_{12}S_4$

Exact Mass: 850.09275

Molecular Weight: 850.86800

*Cefotaxime Sodium

Impurity G (EP)



Chemical Formula: $C_{22}H_{22}N_8O_9S_3$
Exact Mass: 638.06719
Molecular Weight: 638.64500

Chemical Formula:

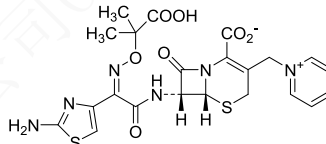
$C_{22}H_{22}N_8O_9S_3$

Exact Mass: 638.06719

Molecular Weight: 638.64500

头孢他啶

Ceftazidime



Chemical Formula: $C_{22}H_{22}N_6O_7S_2$
Exact Mass: 546.10
Molecular Weight: 546.57

Chemical Formula:

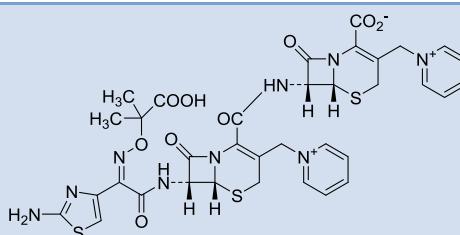
$C_{22}H_{22}N_6O_7S_2$

Exact Mass: 546.10

Molecular Weight: 546.57

Ceftazidime

Double Parents 1



Chemical Formula: $C_{35}H_{34}N_9O_9S_3^+$
Exact Mass: 820.16361
Molecular Weight: 820.89045

Chemical Formula:

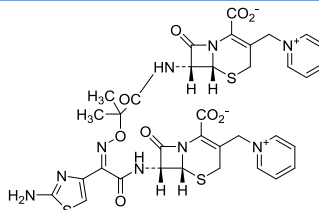
$C_{35}H_{34}N_9O_9S_3^+$

Exact Mass: 820.16361

Molecular Weight: 820.89045

Ceftazidime

Double Parents 2



Chemical Formula: $C_{35}H_{33}N_9O_9S_3$
Exact Mass: 819.15634
Molecular Weight: 819.88300

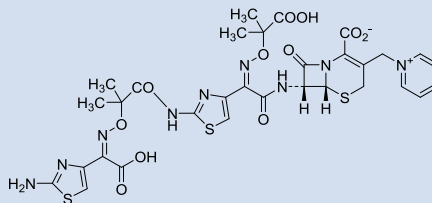
Chemical Formula:

$C_{35}H_{34}N_9O_9S_3^+$

Exact Mass: 820.16361

Molecular Weight: 820.89045

Ceftazidime
Bilateral Chain 1



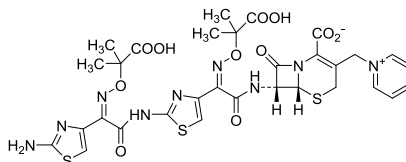
Chemical Formula: $C_{31}H_{31}N_9O_{11}S_3$
Exact Mass: 801.13051
Molecular Weight: 801.82100

Chemical Formula:
C31H31N9O11S3

Exact Mass: 801.13051

Molecular Weight: 801.82100

Ceftazidime
Bilateral Chain 2



Chemical Formula: $C_{31}H_{31}N_9O_{11}S_3$
Exact Mass: 801.13051
Molecular Weight: 801.82100

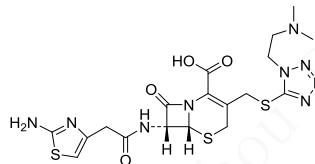
Chemical Formula:
C31H31N9O11S3

Exact Mass: 801.13051

Molecular Weight: 801.82100

头孢替安

Cefotiam



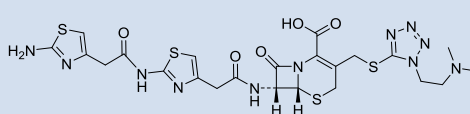
Chemical Formula: $C_{18}H_{23}N_9O_4S_3$
Exact Mass: 525.10351
Molecular Weight: 525.62100

Chemical Formula:
C18H23N9O4S3

Exact Mass: 525.10351

Molecular Weight: 525.62100

Cefotiam Bilateral Chain



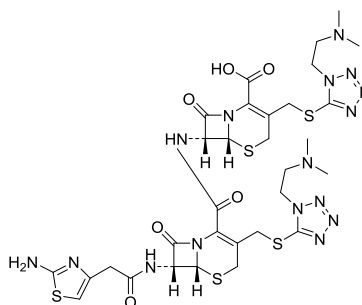
Chemical Formula: $C_{23}H_{27}N_{11}O_5S_4$
Exact Mass: 665.10795
Molecular Weight: 665.78100

Chemical Formula:
C23H27N11O5S4

Exact Mass: 665.10795

Molecular Weight: 665.78100

Cefotiam Double Parents



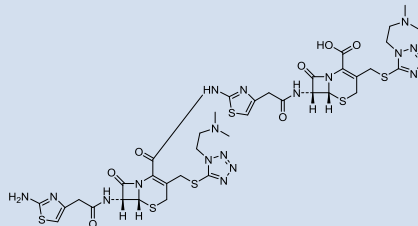
Chemical Formula: $C_{31}H_{40}N_{16}O_6S_5$
Exact Mass: 892.19203
Molecular Weight: 893.06700

Chemical Formula:
C31H40N16O6S5

Exact Mass: 892.19203

Molecular Weight: 893.06700

Cefotiam Dimer



Chemical Formula: $C_{36}H_{44}N_{18}O_7S_6$
Exact Mass: 1032.19646
Molecular Weight: 1033.22700

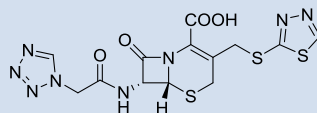
Chemical Formula:
C36H44N18O7S6

Exact Mass: 1032.19646

Molecular Weight: 1033.22700

头孢替唑

Ceftezole



Chemical Formula: $C_{13}H_{12}N_8O_4S_3$
Exact Mass: 440.01436
Molecular Weight: 440.47100

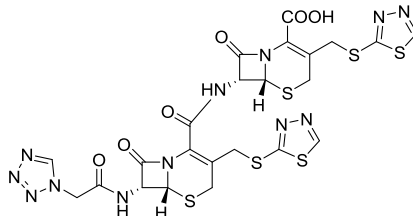
Chemical Formula:

$C_{13}H_{12}N_8O_4S_3$

Exact Mass: 440.01436

Molecular Weight: 440.47100

Ceftezole Double Parents



Chemical Formula: $C_{23}H_{20}N_{12}O_6S_6$
Exact Mass: 751.99530
Molecular Weight: 752.85100

Chemical Formula:

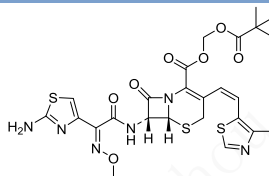
$C_{23}H_{20}N_{12}O_6S_6$

Exact Mass: 751.99530

Molecular Weight: 752.85100

头孢妥仑匹酯

Cefditoren Pivoxil



Chemical Formula: $C_{25}H_{28}N_6O_7S_3$
Exact Mass: 620.11816
Molecular Weight: 620.71400

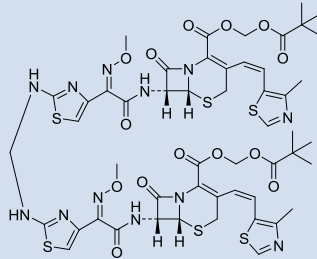
Chemical Formula:

$C_{25}H_{28}N_6O_7S_3$

Exact Mass: 620.11816

Molecular Weight: 620.71400

*Cefditoren Pivoxil Dimer



Chemical Formula: $C_{51}H_{56}N_{12}O_{14}S_6$
Exact Mass: 1252.23632
Molecular Weight: 1253.43900

Chemical Formula:

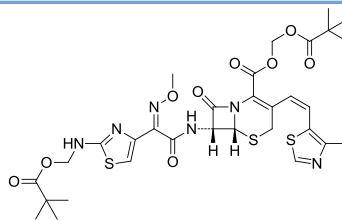
$C_{51}H_{56}N_{12}O_{14}S_6$

Exact Mass: 1252.23632

Molecular Weight: 1253.43900

*Cefditoren Pivoxil Dual

Ester



Chemical Formula: $C_{31}H_{38}N_6O_9S_3$
Exact Mass: 734.18624
Molecular Weight: 734.86322

Chemical Formula:

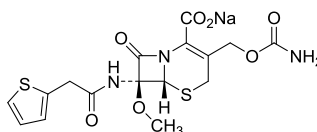
$C_{31}H_{38}N_6O_9S_3$

Exact Mass: 734.18624

Molecular Weight: 734.86322

头孢西丁

Cefoxitin



Chemical Formula: $C_{16}H_{16}N_3NaO_7S_2$
Exact Mass: 449.03274
Molecular Weight: 449.42777

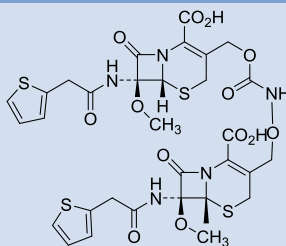
Chemical Formula:

$C_{16}H_{16}N_3NaO_7S_2$

Exact Mass: 449.03274

Molecular Weight: 449.42777

Cefoxitin Impurity G



Chemical Formula: $C_{32}H_{33}N_5O_{13}S_4$
Exact Mass: 823.09577
Molecular Weight: 823.87800

Chemical Formula:

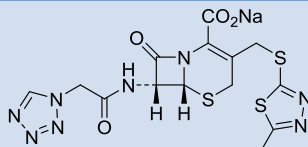
$C_{32}H_{33}N_5O_{13}S_4$

Exact Mass: 823.09577

Molecular Weight: 823.87800

头孢唑林钠

Cefazolin Sodium



Chemical Formula: $C_{14}H_{13}N_8NaO_4S_3$
Exact Mass: 476.01196
Molecular Weight: 476.47977

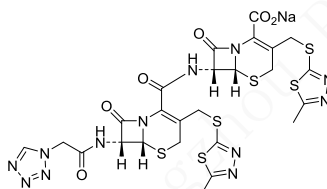
Chemical Formula:

$C_{14}H_{13}N_8NaO_4S_3$

Exact Mass: 476.01196

Molecular Weight: 476.47977

Cefazolin Double Parents



Chemical Formula: $C_{25}H_{23}N_{12}NaO_6S_6$
Exact Mass: 802.00855
Molecular Weight: 802.88677

Chemical Formula:

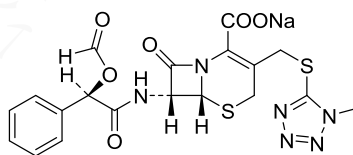
$C_{25}H_{23}N_{12}NaO_6S_6$

Exact Mass: 802.00855

Molecular Weight: 802.88677

头孢孟多酯钠

Cefamandole Nafate Sodium



Chemical Formula: $C_{19}H_{17}N_6NaO_6S_2$
Exact Mass: 512.05487
Molecular Weight: 512.49077

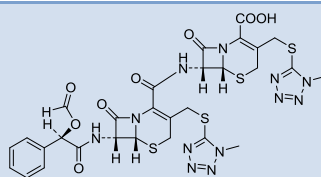
Chemical Formula:

$C_{19}H_{17}N_6NaO_6S_2$

Exact Mass: 512.05487

Molecular Weight: 512.49077

Cefamandole Nafate Double Parents



Chemical Formula: $C_{29}H_{28}N_{12}O_8S_4$
Exact Mass: 800.10359
Molecular Weight: 800.85900

Chemical Formula:

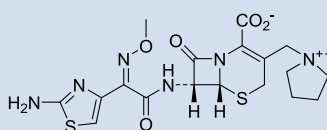
$C_{29}H_{28}N_{12}O_8S_4$

Exact Mass: 800.10359

Molecular Weight: 800.85900

头孢吡肟

Cefepime



Chemical Formula: $C_{19}H_{24}N_6O_5S_2$
Exact Mass: 480.12496
Molecular Weight: 480.55800

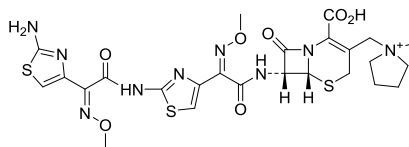
Chemical Formula:

$C_{19}H_{24}N_6O_5S_2$

Exact Mass: 480.12496

Molecular Weight: 480.55800

***Cefepime Impurity B (EP)**



Chemical Formula: $C_{25}H_{30}N_9O_7S_3^+$
Exact Mass: 664.14248
Molecular Weight: 664.75045

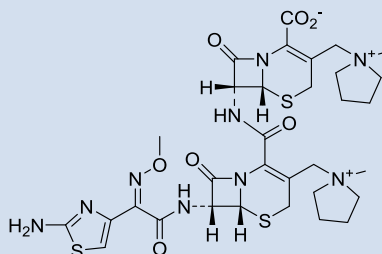
Chemical Formula:

$C_{25}H_{30}N_9O_7S_3^+$

Exact Mass: 664.14248

Molecular Weight: 664.75045

***Cefepime Impurity F (EP)**



Chemical Formula: $C_{32}H_{42}N_9O_7S_3^+$
Exact Mass: 760.23638
Molecular Weight: 760.92345

Chemical Formula:

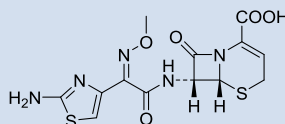
$C_{32}H_{42}N_9O_7S_3^+$

Exact Mass: 760.23638

Molecular Weight: 760.92345

头孢唑肟钠

Ceftizoxime



Chemical Formula: $C_{13}H_{13}N_5O_5S_2$
Exact Mass: 383.03581
Molecular Weight: 383.39700

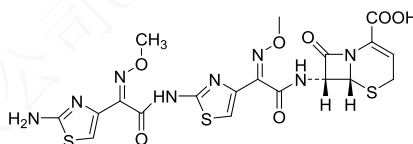
Chemical Formula:

$C_{13}H_{13}N_5O_5S_2$

Exact Mass: 383.03581

Molecular Weight: 383.39700

***Ceftizoxime TSM1
Impurity**



Chemical Formula: $C_{19}H_{18}N_8O_7S_3$
Exact Mass: 566.04606
Molecular Weight: 566.58200

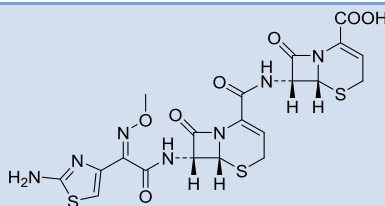
Chemical Formula:

$C_{19}H_{18}N_8O_7S_3$

Exact Mass: 566.04606

Molecular Weight: 566.58200

***Ceftizoxime TSM2
Impurity**



Chemical Formula: $C_{20}H_{19}N_7O_7S_3$
Exact Mass: 565.05
Molecular Weight: 565.59

Chemical Formula:

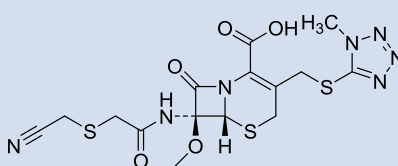
$C_{20}H_{19}N_7O_7S_3$

Exact Mass: 565.05

Molecular Weight: 565.59

头孢美唑

Cefmetazole



Chemical Formula: $C_{15}H_{17}N_7O_5S_3$
Exact Mass: 471.04533
Molecular Weight: 471.52500

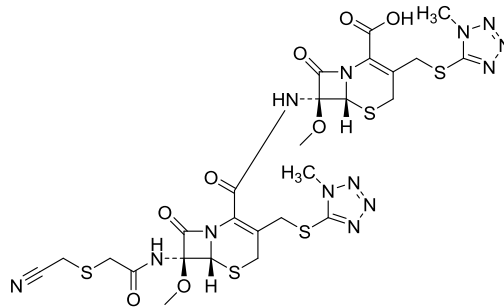
Chemical Formula:

$C_{15}H_{17}N_7O_5S_3$

Exact Mass: 471.04533

Molecular Weight: 471.52500

Cefmetazole
Double Parents

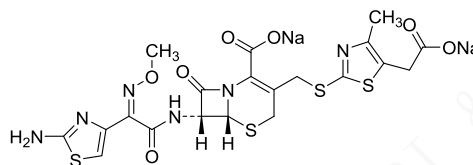


Chemical Formula: $C_{26}H_{29}N_{13}O_8S_5$
Exact Mass: 811.08656
Molecular Weight: 811.90100

Chemical Formula:
 $C_{26}H_{29}N_{13}O_8S_5$
Exact Mass: 811.08656
Molecular Weight: 811.90100

头孢地嗪钠

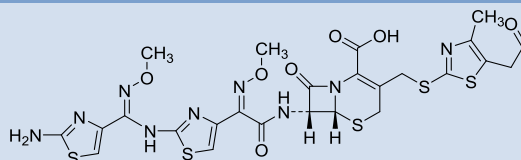
Cefodizime Sodium



Chemical Formula: $C_{20}H_{18}N_6Na_2O_7S_4$
Exact Mass: 627.99152
Molecular Weight: 628.61854

Chemical Formula:
 $C_{20}H_{18}N_6Na_2O_7S_4$
Exact Mass: 627.99152
Molecular Weight: 628.61854

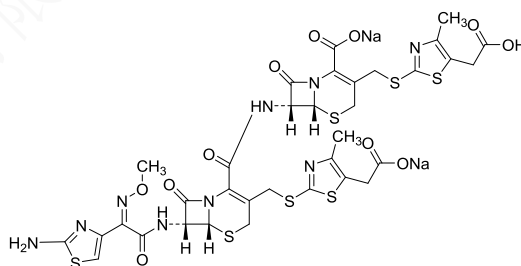
Cefodizime Bilateral Chain



Chemical Formula: $C_{25}H_{25}N_9O_8S_5$
Exact Mass: 739.04296
Molecular Weight: 739.83000

Chemical Formula:
 $C_{25}H_{25}N_9O_8S_5$
Exact Mass: 739.04296
Molecular Weight: 739.83000

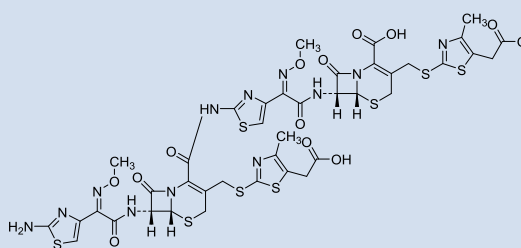
Cefodizime
Double Parents



Chemical Formula: $C_{34}H_{31}N_9Na_2O_{11}S_7$
Exact Mass: 1010.99834
Molecular Weight: 1012.07354

Chemical Formula:
 $C_{34}H_{31}N_9Na_2O_{11}S_7$
Exact Mass: 1010.99834
Molecular Weight: 1012.07354

Cefodizime
Dimer 1

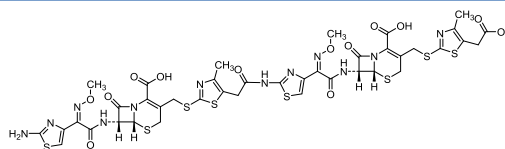


Chemical Formula: $C_{40}H_{38}N_{12}O_{13}S_8$
Exact Mass: 1150.04469
Molecular Weight: 1151.29500

Chemical Formula:
 $C_{40}H_{38}N_{12}O_{13}S_8$
Exact Mass: 1150.04469
Molecular Weight: 1151.29500

Cefodizime

Dimer 2



Chemical Formula: $C_{40}H_{38}N_{12}O_{13}S_8$
Exact Mass: 1150.04469
Molecular Weight: 1151.29500

Chemical Formula:

C40H38N12O13S8

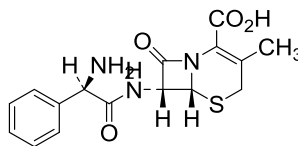
Exact Mass: 1150.04469

Molecular Weight: 1151.29500

14

头孢氨苄

Cephalexin



Chemical Formula: $C_{16}H_{17}N_3O_4S$
Exact Mass: 347.09398
Molecular Weight: 347.38900

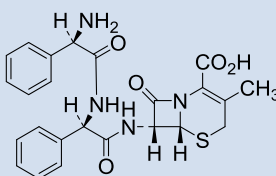
Chemical Formula:

C16H17N3O4S

Exact Mass: 347.09398

Molecular Weight: 347.38900

***Cephalexin
Impurity C (EP)**



Chemical Formula: $C_{24}H_{24}N_4O_5S$
Exact Mass: 480.14674
Molecular Weight: 480.53900

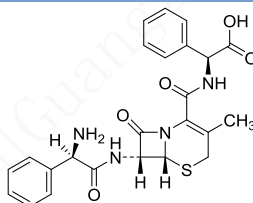
Chemical Formula:

C24H24N4O5S

Exact Mass: 480.14674

Molecular Weight: 480.53900

***Cephalexin Impurity C2**



Chemical Formula: $C_{24}H_{24}N_4O_5S$
Exact Mass: 480.14674
Molecular Weight: 480.53900

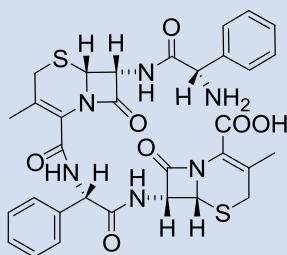
Chemical Formula:

C24H24N4O5S

Exact Mass: 480.14674

Molecular Weight: 480.53900

***Cephalexin Dimer**



Chemical Formula: $C_{32}H_{32}N_6O_7S_2$
Exact Mass: 676.17739
Molecular Weight: 676.76300

Chemical Formula:

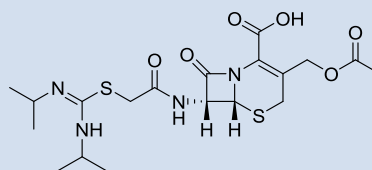
C32H32N6O7S2

Exact Mass: 676.17739

Molecular Weight: 676.76300

头孢硫脒

Cefathiamidine



Chemical Formula: $C_{19}H_{28}N_4O_6S_2$
Exact Mass: 472.14503
Molecular Weight: 472.57500

Chemical Formula:

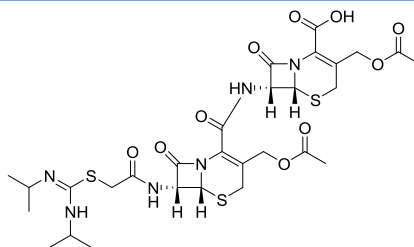
C19H28N4O6S2

Exact Mass: 472.14503

Molecular Weight: 472.57500

***Cefathiamidine Double**

Parents



Chemical Formula: $C_{29}H_{38}N_6O_{10}S_3$

Exact Mass: 726.18115

Molecular Weight: 726.83500

Chemical Formula:

C29H38N6O10S3

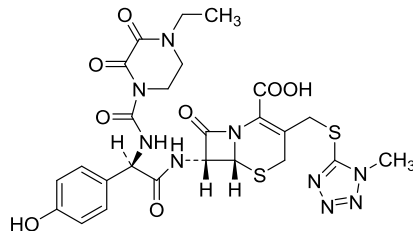
Exact Mass: 726.18115

Molecular Weight: 726.83500

15

头孢哌酮

Cefoperazone



Chemical Formula: $C_{25}H_{27}N_9O_8S_2$

Exact Mass: 645.14240

Molecular Weight: 645.66600

Chemical Formula:

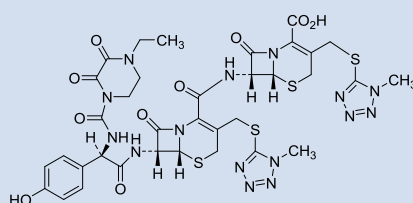
C25H27N9O8S2

Exact Mass: 645.14240

Molecular Weight: 645.66600

Cefoperazone

Double Parents



Chemical Formula: $C_{35}H_{37}N_{15}O_{10}S_4$

Exact Mass: 955.17307

Molecular Weight: 956.01600

Chemical Formula:

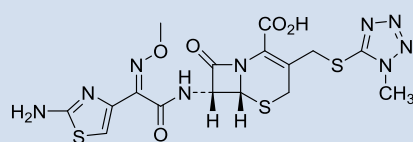
C35H37N15O10S4

Exact Mass: 955.17307

Molecular Weight: 956.01600

头孢甲肟

Cefmenoxime



Chemical Formula: $C_{16}H_{17}N_9O_5S_3$

Exact Mass: 511.05148

Molecular Weight: 511.55000

Chemical Formula:

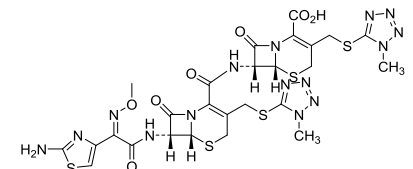
C16H17N9O5S3

Exact Mass: 511.05148

Molecular Weight: 511.55000

Cefmenoxime

Double Parents



Chemical Formula: $C_{26}H_{27}N_{15}O_7S_5$

Exact Mass: 821.08214

Molecular Weight: 821.90000

Chemical Formula:

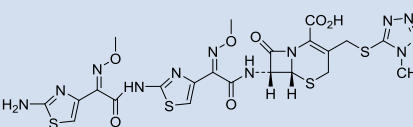
C26H27N15O7S5

Exact Mass: 821.08214

Molecular Weight: 821.90000

Cefmenoxime

Bilateral Chain



Chemical Formula: $C_{22}H_{22}N_{12}O_7S_4$

Exact Mass: 694.06172

Molecular Weight: 694.73500

Chemical Formula:

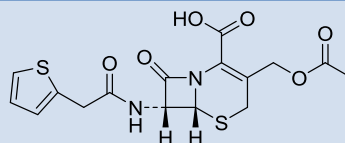
C22H22N12O7S4

Exact Mass: 694.06172

Molecular Weight: 694.73500

头孢噻吩

Cephalothin



Chemical Formula: $C_{32}H_{32}N_4O_{12}S_4$
Exact Mass: 792.08996
Molecular Weight: 792.86400

Chemical Formula:

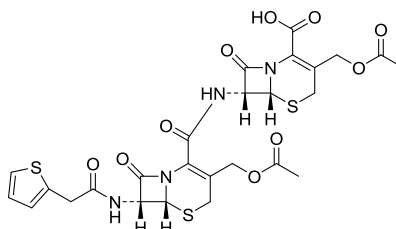
$C_{32}H_{32}N_4O_{12}S_4$

Exact Mass: 792.08996

Molecular Weight: 792.86400

16

Cephalothin
Double Parents



Chemical Formula: $C_{26}H_{26}N_4O_{10}S_3$
Exact Mass: 650.08111
Molecular Weight: 650.69200

Chemical Formula:

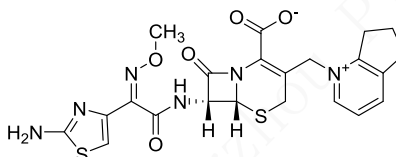
$C_{26}H_{26}N_4O_{10}S_3$

Exact Mass: 650.08111

Molecular Weight: 650.69200

头孢匹罗

Cefpirome



Chemical Formula: $C_{22}H_{22}N_6O_5S_2$
Exact Mass: 514.10931
Molecular Weight: 514.57500

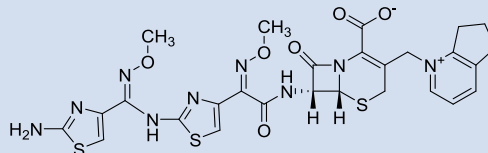
Chemical Formula:

$C_{22}H_{22}N_6O_5S_2$

Exact Mass: 514.10931

Molecular Weight: 514.57500

*Cefpirome
Bilateral Chain



Chemical Formula: $C_{27}H_{27}N_9O_6S_3$
Exact Mass: 669.12464
Molecular Weight: 669.75000

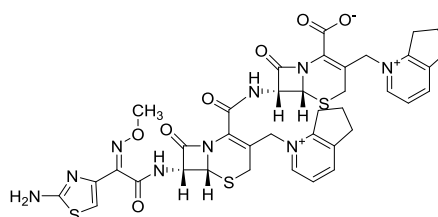
Chemical Formula:

$C_{27}H_{27}N_9O_6S_3$

Exact Mass: 669.12464

Molecular Weight: 669.75000

Cefpirome
Double Parents



Chemical Formula: $C_{38}H_{38}N_9O_7S_3^+$
Exact Mass: 828.20508
Molecular Weight: 828.95745

Chemical Formula:

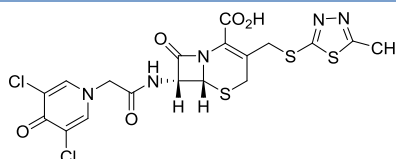
$C_{38}H_{38}N_9O_7S_3^+$

Exact Mass: 828.20508

Molecular Weight: 828.95745

头孢西酮

Cefazedone



Chemical Formula: $C_{18}H_{15}Cl_2N_5O_5S_3$
Exact Mass: 546.96124
Molecular Weight: 548.42800

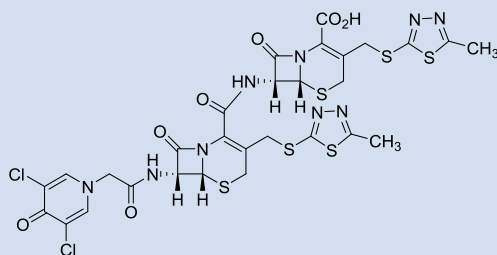
Chemical Formula:

$C_{18}H_{15}Cl_2N_5O_5S_3$

Exact Mass: 546.96124

Molecular Weight: 548.42800

*Cefazedone
Double Parents

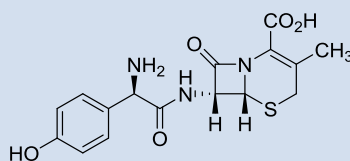


Chemical Formula: $C_{29}H_{25}Cl_2N_9O_7S_6$
Exact Mass: 872.95782
Molecular Weight: 874.83500

Chemical Formula:
C18H15Cl2N5O5S3
Exact Mass: 546.96124
Molecular Weight: 548.42800

头孢羟氨苄

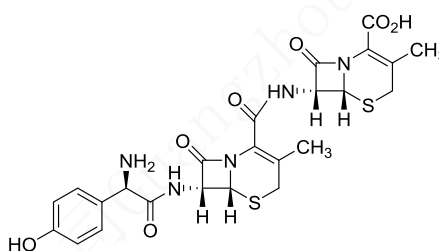
Cefadroxil



Chemical Formula: $C_{16}H_{17}N_3O_5S$
Exact Mass: 363.08889
Molecular Weight: 363.38800

Chemical Formula:
C16H17N3O5S
Exact Mass: 363.08889
Molecular Weight: 363.38800

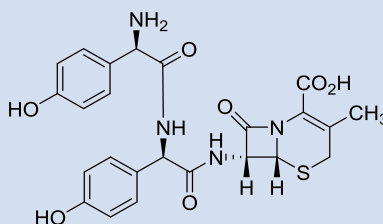
*Cefadroxil
Double Parents



Chemical Formula: $C_{24}H_{25}N_5O_7S_2$
Exact Mass: 559.11954
Molecular Weight: 559.61200

Chemical Formula:
C24H25N5O7S2
Exact Mass: 559.11954
Molecular Weight: 559.61200

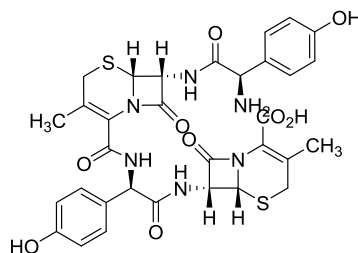
*Cefadroxil
Bilateral Chain



Chemical Formula: $C_{24}H_{24}N_4O_7S$
Exact Mass: 512.13657
Molecular Weight: 512.53700

Chemical Formula:
C24H24N4O7S
Exact Mass: 512.13657
Molecular Weight: 512.53700

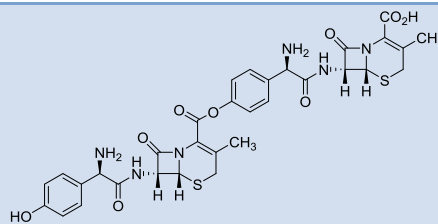
Cefadroxil
Dimer 1



Chemical Formula: $C_{32}H_{32}N_6O_9S_2$
Exact Mass: 708.16722
Molecular Weight: 708.76100

Chemical Formula:
C32H32N6O9S2
Exact Mass: 708.16722
Molecular Weight: 708.76100

Cefadroxil
Dimer 2

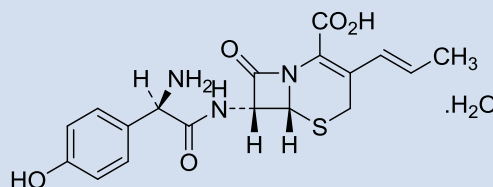


Chemical Formula: $C_{32}H_{32}N_6O_9S_2$
Exact Mass: 708.16722
Molecular Weight: 708.76100

Chemical Formula:
C32H32N6O9S2
Exact Mass: 708.16722
Molecular Weight: 708.76100

头孢丙烯

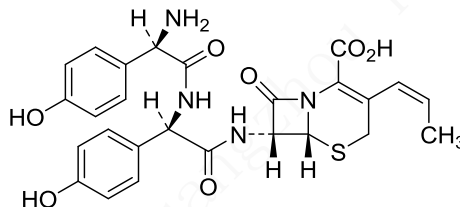
Cefprozil



Chemical Formula: $C_{18}H_{21}N_3O_6S$
Exact Mass: 407.12
Molecular Weight: 407.44

Chemical Formula:
C18H21N3O6S
Exact Mass: 407.11511
Molecular Weight: 407.44100

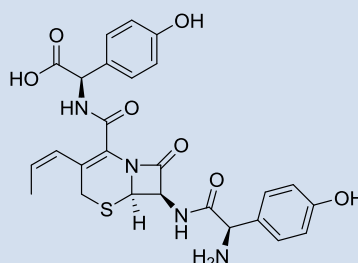
***Cefprozil Impurity H**



Chemical Formula: $C_{26}H_{26}N_4O_7S$
Exact Mass: 538.15
Molecular Weight: 538.58

Chemical Formula:
C26H26N4O7S
Exact Mass: 538.15222
Molecular Weight: 538.57500

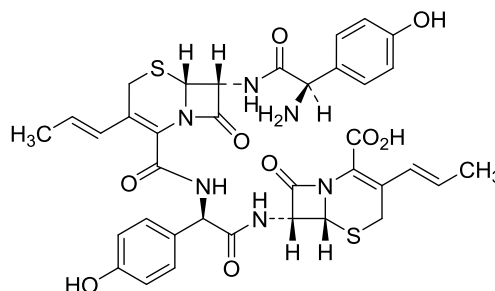
***Cefprozil Bilateral Chain**



Chemical Formula: $C_{26}H_{26}N_4O_7S$
Exact Mass: 538.15222
Molecular Weight: 538.57500

Chemical Formula:
C26H26N4O7S
Exact Mass: 538.15222
Molecular Weight: 538.57500

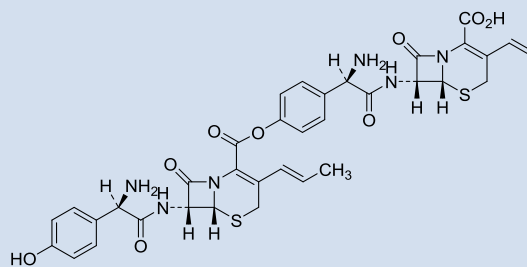
***Cefprozil**
Dimer 1



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:
C26H26N4O7S
Exact Mass: 538.15222
Molecular Weight: 538.57500

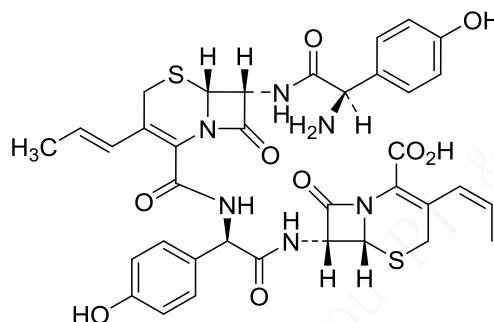
***Cefprozil**
Dimer 2



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:
C36H36N6O9S2
Exact Mass: 760.19852
Molecular Weight: 760.83700

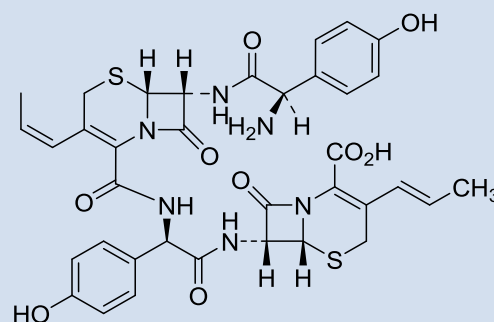
***Cefprozil**
Dimer 3



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:
C36H36N6O9S2
Exact Mass: 760.19852
Molecular Weight: 760.83700

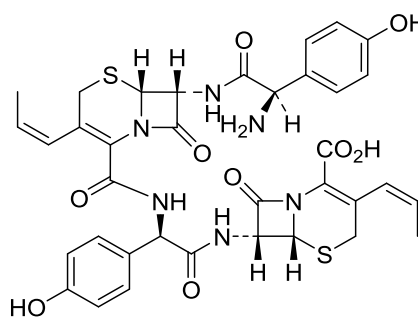
***Cefprozil**
Dimer 4



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:
C36H36N6O9S2
Exact Mass: 760.19852
Molecular Weight: 760.83700

***Cefprozil**
Dimer 5

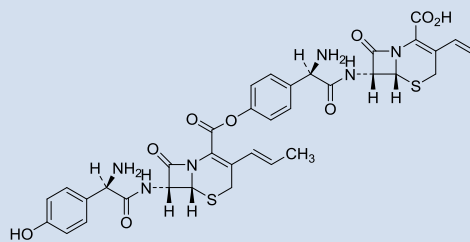


Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:
C36H36N6O9S2
Exact Mass: 760.19852
Molecular Weight: 760.83700

***Cefprozil**

Dimer 6



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:

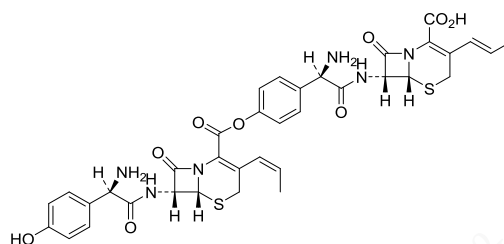
C36H36N6O9S2

Exact Mass: 760.19852

Molecular Weight: 760.83700

***Cefprozil**

Dimer 7



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:

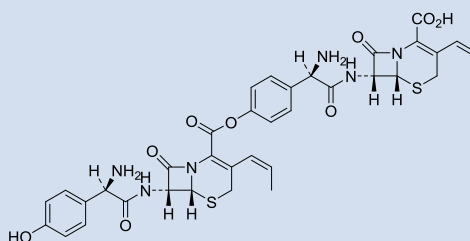
C36H36N6O9S2

Exact Mass: 760.19852

Molecular Weight: 760.83700

***Cefprozil**

Dimer 8



Chemical Formula: $C_{36}H_{36}N_6O_9S_2$
Exact Mass: 760.19852
Molecular Weight: 760.83700

Chemical Formula:

C36H36N6O9S2

Exact Mass: 760.19852

Molecular Weight: 760.83700