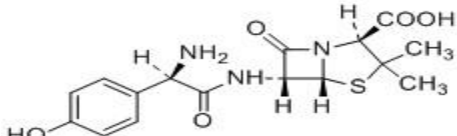
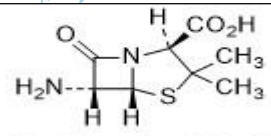
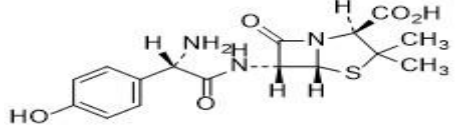
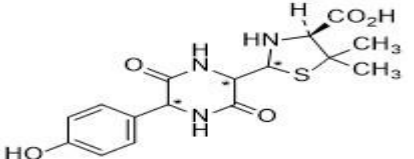
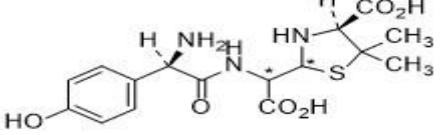




16.阿莫西林杂质 Amoxicillin impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	阿莫西林	Amoxicillin	26787-78-0	 <p>Chemical Formula: C₁₆H₁₉N₃O₅S Exact Mass: 365.10454 Molecular Weight: 365.40400</p>
1-16-01	杂质 A	Amoxicillin impurity A	551-16-6	 <p>Chemical Formula: C₈H₁₂N₂O₃S Exact Mass: 216.05686 Molecular Weight: 216.25500</p>
1-16-02	杂质 B	Amoxicillin impurity B	26889-93-0	 <p>Chemical Formula: C₁₆H₁₉N₃O₅S Exact Mass: 365.10454 Molecular Weight: 365.40400</p>
1-16-03	杂质 C	Amoxicillin impurity C	94659-47-9	 <p>Chemical Formula: C₁₆H₁₉N₃O₅S Exact Mass: 365.10454 Molecular Weight: 365.40400</p>
1-16-04	杂质 D	Amoxicillin impurity D	68728-47-2	 <p>Chemical Formula: C₁₆H₂₁N₃O₆S Exact Mass: 383.11511 Molecular Weight: 383.41900</p>



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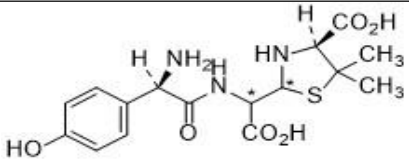
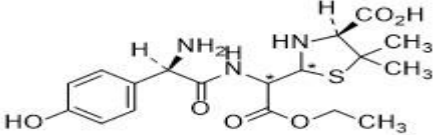
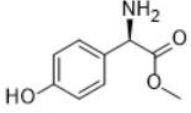
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1-16-05	杂质 F	Amoxicillin impurity F	126247-63-0	<p>Chemical Formula: $C_{10}H_8N_2O_2$ Exact Mass: 188.05858 Molecular Weight: 188.18600</p>
1-16-06	杂质 G	Amoxicillin impurity G	188112-75-6	<p>Chemical Formula: $C_{24}H_{26}N_4O_7S$ Exact Mass: 514.15222 Molecular Weight: 514.55300</p>
1-16-07	杂质 H	Amoxicillin impurity H	205826-86-4	<p>Chemical Formula: $C_{13}H_{17}NO_4$ Exact Mass: 251.11576 Molecular Weight: 251.28200</p>
1-16-08	杂质 I	Amoxicillin impurity I	22818-40-2	<p>Chemical Formula: $C_8H_9NO_3$ Exact Mass: 167.05824 Molecular Weight: 167.16400</p>
1-16-09	阿莫西林钠杂质 J	Amoxicillin impurity J	73590-06-4	<p>Chemical Formula: $C_{32}H_{38}N_8O_{10}S_2$ Exact Mass: 730.20908 Molecular Weight: 730.80800</p>



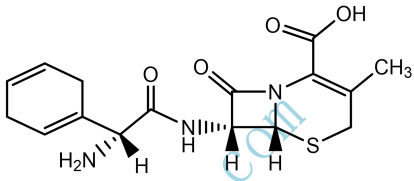
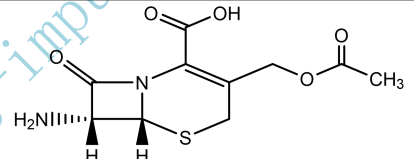
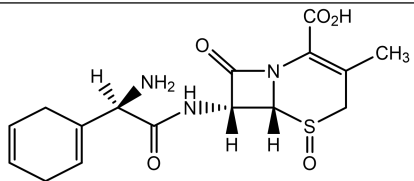
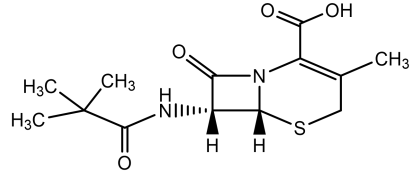
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1-16-10	阿莫西林 钠杂质 K (阿莫西林 EP 杂质 D)	Amoxicillin impurity K	68728-47-2	 <p>Chemical Formula: C₁₆H₂₁N₃O₆S Exact Mass: 383.11511 Molecular Weight: 383.41900</p>
1-16-11	阿莫西林 开环杂质 (开环乙酯)	Amoxicillin ring opening impurity	N/A	 <p>Chemical Formula: C₁₈H₂₅N₃O₆S Exact Mass: 411.14641 Molecular Weight: 411.47300</p>
1-16-12	D-对羟基 苯甘氨酸 甲酯	Amoxicillin	37763-23-8	 <p>Chemical Formula: C₉H₁₁NO₃ Exact Mass: 181.0739 Molecular Weight: 181.1885</p>



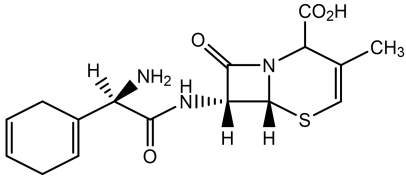
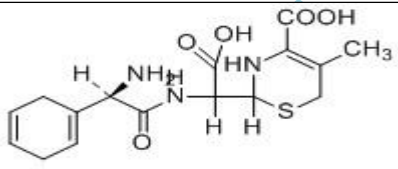
17. 头孢拉定杂质 Cefradine impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢拉定	Cefradine	38821-53-3	 <p>Chemical Formula: C₁₆H₁₉N₃O₄S Exact Mass: 349.11 Molecular Weight: 349.40</p>
1-17-1	杂质 A (7-ACA)	Cefradine impurity A	957-68-6	 <p>Chemical Formula: C₁₀H₁₂N₂O₅S Exact Mass: 272.05 Molecular Weight: 272.28</p>
1-17-2	杂质 C	Cefradine impurity C	N/A	 <p>Chemical Formula: C₁₆H₁₉N₃O₅S Exact Mass: 365.10 Molecular Weight: 365.40</p>
1-17-3	杂质 G	Cefradine impurity G	146794-70-9	 <p>Chemical Formula: C₁₃H₁₈N₂O₄S Exact Mass: 298.10 Molecular Weight: 298.36</p>



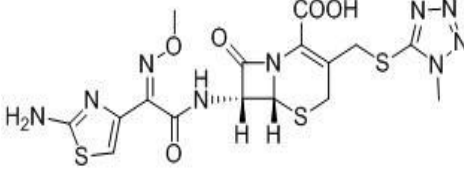
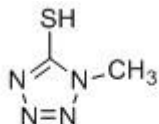
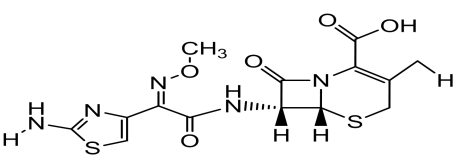
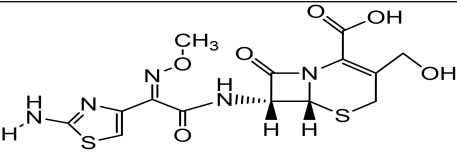
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1-17-4	头孢拉定 双键位移 杂质	δ^3 - Cefradine impurity	N/A	 <p>Chemical Formula: C₁₆H₁₉N₃O₄S Exact Mass: 349.11 Molecular Weight: 349.40</p>
1-17-5	头孢拉定 开环杂质	Cefradine ring impurity	N/A	 <p>Chemical Formula: C₁₆H₂₁N₃O₅S Exact Mass: 367.12019 Molecular Weight: 367.42000</p>



18. 头孢甲肟杂质 Cefmenoxime impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢甲肟	Cefmenoxime	65085-01-0	 <p>Chemical Formula: C₁₆H₁₇N₉O₅S₃ Exact Mass: 511.0515 Molecular Weight: 511.5500</p>
1-3-2	头孢甲肟杂质 (头孢孟多钠 EP 杂质 D, 甲巯四氮唑)	Cefmenoxime impurity	13183-79-4	 <p>Chemical Formula: C₂H₄N₄S Exact Mass: 116.01567 Molecular Weight: 116.14200</p>
1-18-2	头孢甲肟杂质 3	Cefmenoxime impurity 3	65052-69-9	 <p>Chemical Formula: C₁₄H₁₅N₅O₅S₂ Exact Mass: 397.05 Molecular Weight: 397.43</p>
1-18-3	头孢甲肟杂质	Cefmenoxime impurity	N/A	 <p>Chemical Formula: C₁₄H₁₅N₅O₆S₂ Exact Mass: 413.05 Molecular Weight: 413.43</p>



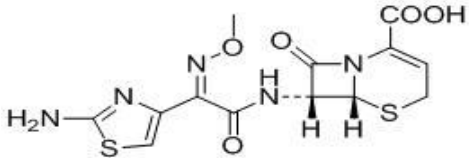
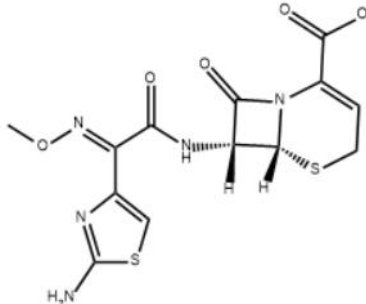
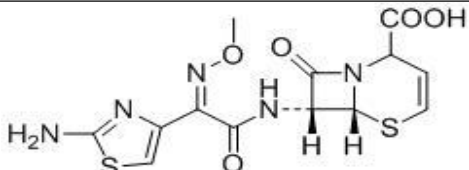
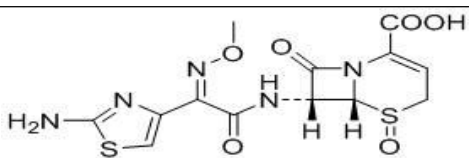
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1-7-2	头孢甲肟内酯 (头孢曲松钠 EP 杂质 B 头孢地嗪内酯 头孢噻肟钠 EP 杂质 E)	Cefmenoxime impurity	66340-33-8	<p>Chemical Formula: C₁₄H₁₃N₅O₅S₂ Exact Mass: 395.04 Molecular Weight: 395.41</p>
1-18-5	反式头孢甲肟	E-isomer Cefmenoxime impurity	N/A	<p>Chemical Formula: C₁₆H₁₇N₉O₅S₃ Exact Mass: 511.05 Molecular Weight: 511.56</p>
1-18-6	双键位移杂质	δ3-isomer Cefmenoxime impurity	126747-52-2	<p>Chemical Formula: C₁₆H₁₇N₉O₅S₃ Exact Mass: 511.0515 Molecular Weight: 511.5500</p>



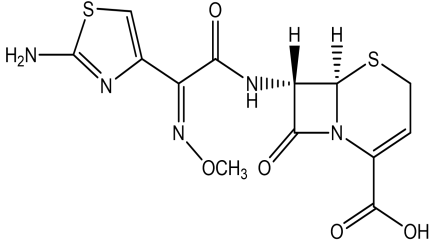
19. 头孢唑肟杂质 Ceftizoxime impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢唑肟	Ceftizoxime	68401-81-0	 <p>Chemical Formula: $C_{13}H_{13}N_5O_5S_2$ Exact Mass: 383.0358 Molecular Weight: 383.3970</p>
1-19-1	头孢唑肟反式异构体杂质	E-Ceftizoxime impurities	N/A	 <p>Chemical Formula: $C_{13}H_{13}N_5O_5S_2$ Exact Mass: 383.0358 Molecular Weight: 383.4028</p>
1-19-2	头孢唑肟双键位移杂质	δ^3 -Ceftizoxime impurities	N/A	 <p>Chemical Formula: $C_{13}H_{13}N_5O_5S_2$ Exact Mass: 383.0358 Molecular Weight: 383.3970</p>
1-19-3	头孢唑肟氧化杂质	Cefazoxime oxidizes impurities	N/A	 <p>Chemical Formula: $C_{13}H_{13}N_5O_6S_2$ Exact Mass: 399.0307 Molecular Weight: 399.3960</p>



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1-19-4	6R,7S-头孢唑肟			 <p>Chemical Formula: C₁₃H₁₃N₅O₅S₂ Exact Mass: 383.04 Molecular Weight: 383.40</p>
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20. 头孢地嗪杂质 Cefodizime impurities

序号	杂质名称	英文名称	CAS号	结构式
原料参比物质(非卖品)	头孢地嗪	Cefodizime	69739-16-8 86329-79-5 (钠盐)	<p>Chemical Formula: $C_{20}H_{20}N_6O_7S_4$ Exact Mass: 584.03 Molecular Weight: 584.67</p>
1-20-1	头孢地嗪双键位移杂质	δ 3-Cefodizime impurity	120533-30-4	<p>Chemical Formula: $C_{20}H_{20}N_6O_7S_4$ Exact Mass: 584.03 Molecular Weight: 584.67</p>
1-20-2	去乙酰基头孢地嗪	Deacetyl cefodizime	N/A	<p>Chemical Formula: $C_{14}H_{15}N_5O_6S_2$ Exact Mass: 413.05 Molecular Weight: 413.43</p>
1-20-3	反式头孢地嗪	E-Cefodizime impurity	97180-26-2	<p>Chemical Formula: $C_{20}H_{20}N_6O_7S_4$ Exact Mass: 584.03 Molecular Weight: 584.67</p>



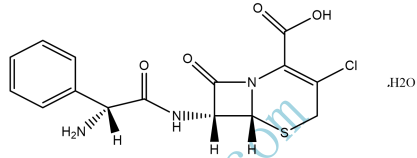
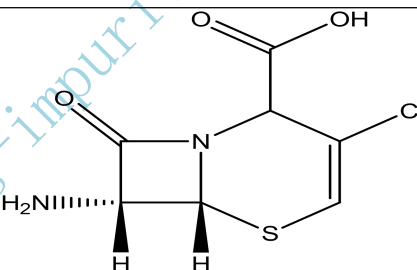
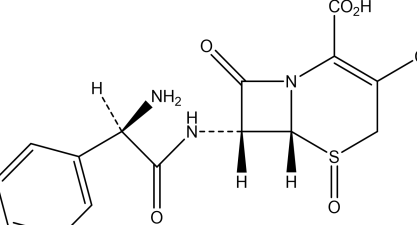
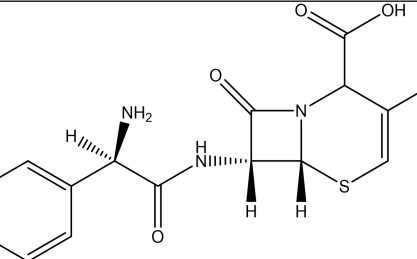
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1-20-4	头孢地嗪 3 位侧链	Cefodizime 3-position side chain	34272-64-5	 Chemical Formula: C ₆ H ₇ NO ₂ S ₂ Exact Mass: 188.99 Molecular Weight: 189.26
1-7-2	头孢地嗪 内脂	Cefodizimein ner ester	66340-33-8	 Chemical Formula: C ₁₄ H ₁₃ N ₅ O ₅ S ₂ Exact Mass: 395.04 Molecular Weight: 395.41
1-20-6	头孢地嗪 杂质 2 (氧化杂质, 亚砷)	Cefodizime impurity 2	N/A	 Chemical Formula: C ₂₀ H ₂₀ N ₆ O ₈ S ₄ Exact Mass: 600.0225 Molecular Weight: 600.6540
1-20-7	头孢地嗪 杂质 3 (氧化杂质, 砷)	Cefodizime impurity 3	N/A	 Chemical Formula: C ₂₀ H ₂₀ N ₆ O ₇ S ₄ Exact Mass: 616.02 Molecular Weight: 616.67
1-20-8	头孢地嗪 杂质 (头孢地嗪中间 体, TACT)	Cefodizime impurity (Cefdiazine intermediate impurity)	N/A	 Chemical Formula: C ₁₄ H ₁₅ N ₃ O ₅ S ₃ Exact Mass: 401.02 Molecular Weight: 401.48



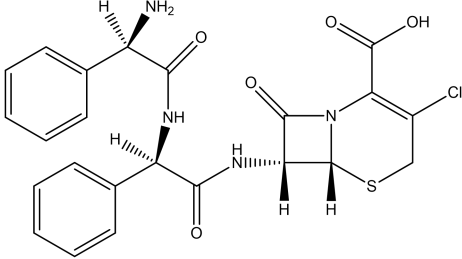
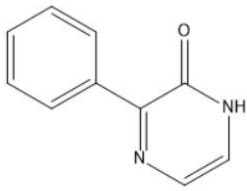
21. 头孢克洛杂质 Cefaclor impurity

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢克洛	Cefaclor	70356-03-5	 <p>Chemical Formula: $C_{15}H_{16}ClN_3O_5S$ Exact Mass: 385.05 Molecular Weight: 385.82</p>
1-21-1	7ACCA 双键位移	Δ 3-7 鹧鹑擦	53994-69-7	 <p>Chemical Formula: $C_7H_7ClN_2O_3S$ Exact Mass: 233.99 Molecular Weight: 234.66</p>
1-21-2	头孢克洛氧化杂质	Cefaclor oxidizes impurities	N/A	 <p>Chemical Formula: $C_{15}H_{14}ClN_3O_5S$ Exact Mass: 383.03 Molecular Weight: 383.81</p>
1-21-3	头孢克洛杂质 D	Cefaclor Impurity D (EP)	152575-13-8	 <p>Chemical Formula: $C_{15}H_{14}ClN_3O_4S$ Exact Mass: 367.04 Molecular Weight: 367.81</p>



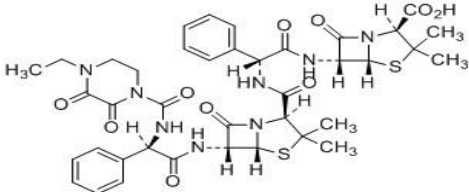
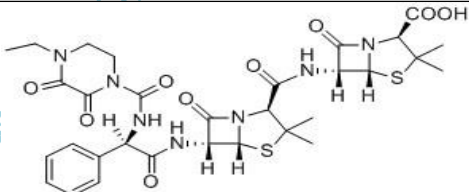
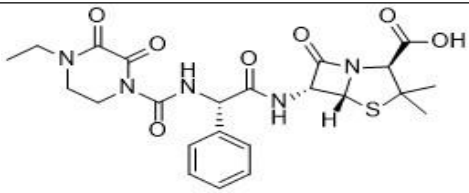
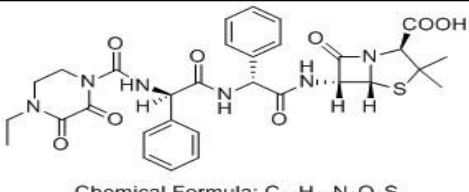
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1-21-4	头孢克洛 杂质 H	Cefaclor Impurity H (EP)	/	 <p>Chemical Formula: C₂₃H₂₁ClN₄O₅S Exact Mass: 500.09 Molecular Weight: 500.95</p>
1-21-05	1, 2-二 水和-3- 苯基吡嗪			 <p>Exact Mass: 172.0637 Molecular Weight: 172.1833</p>

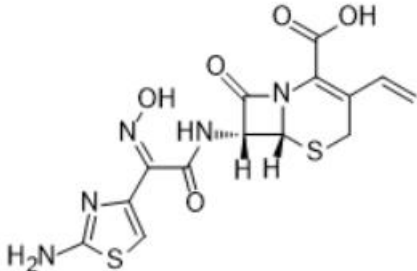
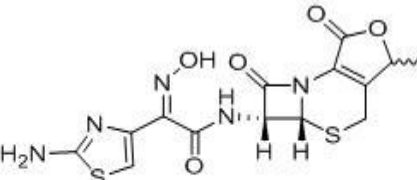
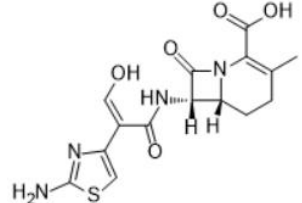


22. 哌拉西林杂质 Piperacillin impurities

序号	杂质名称	英文名称	CAS 号	化学结构
1-22-01	1303-D	1303-D	N/A	 <p>Chemical Formula: $C_{39}H_{44}N_8O_{10}S_2$ Exact Mass: 848.26218 Molecular Weight: 848.94700</p>
1-22-02	1303-N (双母核杂质)	1303-N	N/A	 <p>Chemical Formula: $C_{31}H_{37}N_7O_9S_2$ Exact Mass: 715.20942 Molecular Weight: 715.79700</p>
1-22-03	1303-U (L-哌拉西林)	1303-U	N/A	 <p>Chemical Formula: $C_{23}H_{27}N_5O_7S$ Exact Mass: 517.16312 Molecular Weight: 517.55700</p>
1-22-04	1303-01 (哌拉西林杂质 P)	1303-01	N/A	 <p>Chemical Formula: $C_{31}H_{34}N_6O_8S$ Exact Mass: 650.21588 Molecular Weight: 650.70700</p>



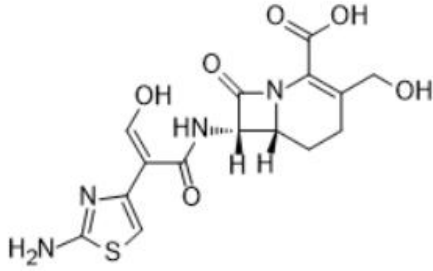
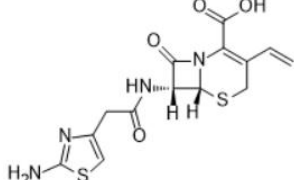
23. 头孢地尼杂质 Cefdinir impurities

序号	杂质名称	英文名称	CAS 号	化学结构
原料参比物质(非卖品)	头孢地尼	Cefdinir	91832-40-5	 <p>Chemical Formula: C₁₄H₁₃N₅O₅S₂ Exact Mass: 395.0358 Molecular Weight: 395.4135</p>
1-23-1	杂质 M	Cefdinir impurity M	946573-41-7	 <p>Chemical Formula: C₁₄H₁₃N₅O₅S₂ Exact Mass: 395.0358 Molecular Weight: 395.4080</p>
1-23-2	杂质 G	Cefdinir impurity G		 <p>Chemical Formula: C₁₅H₁₆N₄O₅S Exact Mass: 364.0841 Molecular Weight: 364.3763</p>



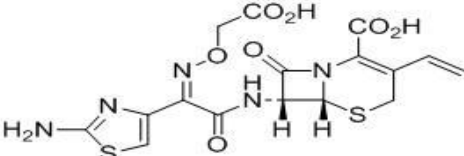
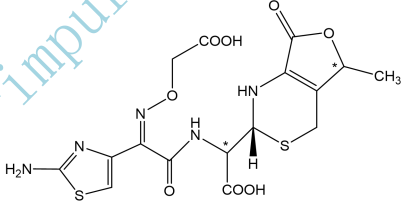
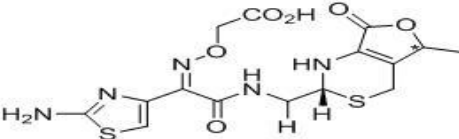
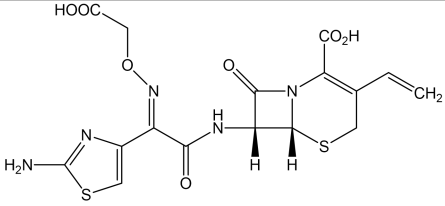
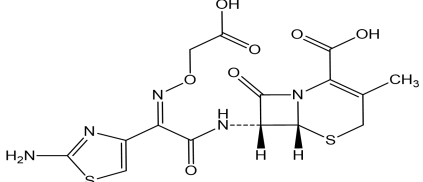
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1-23-3				 <p>Chemical Formula: C₁₅H₁₆N₄O₆S Exact Mass: 380.0791 Molecular Weight: 380.3757</p>
	杂质 O	Cefdinir impurity O		 <p>Chemical Formula: C₁₄H₁₄N₄O₄S₂ Exact Mass: 366.0456 Molecular Weight: 366.4154</p>



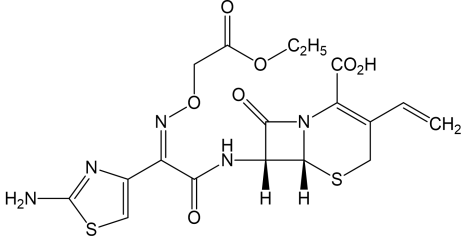
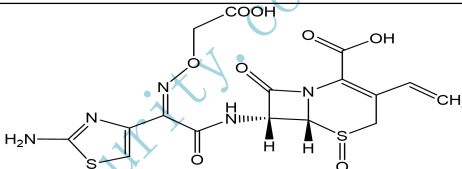
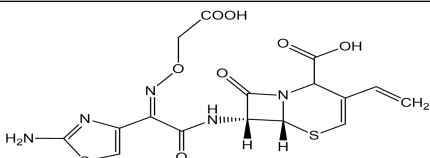
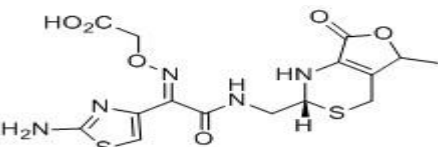
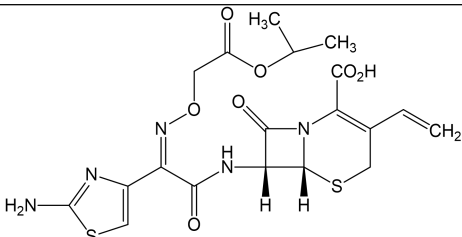
24. 头孢克肟杂质 Cefixime impurities

序号	杂质名称	英文名称	CAS 号	化学结构
原料参比物质(非卖品)	头孢克肟	Cefixime	79350-37-1	 <p>Chemical Formula: $C_{16}H_{15}N_5O_7S_2$ Exact Mass: 453.0413 Molecular Weight: 453.4440</p>
1-24-1	头孢克肟杂质 A	Cefixime impurity A	1335475-08-5	 <p>Chemical Formula: $C_{16}H_{17}N_5O_8S_2$ Exact Mass: 471.05 Molecular Weight: 471.46</p>
1-24-2	头孢克肟杂质 B (开环脱羧内酯)	Cefixime impurity B	1335475-19-8	 <p>Chemical Formula: $C_{15}H_{17}N_5O_6S_2$ Exact Mass: 427.0620 Molecular Weight: 427.4500</p>
1-24-3	头孢克肟杂质 D	Cefixime impurity D	97164-56-2	 <p>Chemical Formula: $C_{16}H_{15}N_5O_7S_2$ Exact Mass: 453.04 Molecular Weight: 453.45</p>
1-24-4	头孢克肟杂质 E	Cefixime impurity E	72701-01-0	 <p>Chemical Formula: $C_{15}H_{15}N_5O_7S_2$ Exact Mass: 441.04 Molecular Weight: 441.44</p>



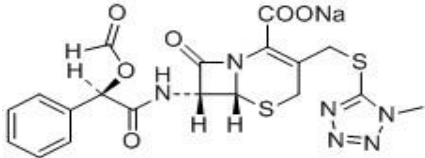
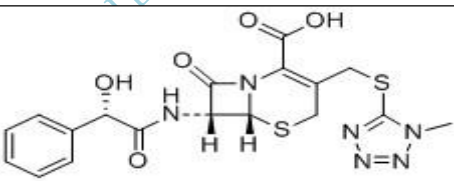
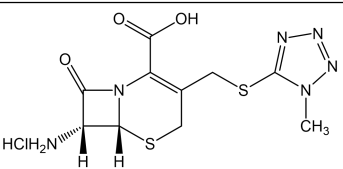
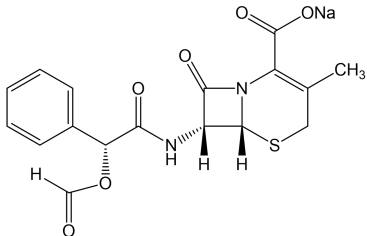
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1-24-5	头孢克肟 杂质 F	Cefixime impurityF	79368-95-9	 <p>Chemical Formula: C₁₈H₁₉N₅O₇S₂ Exact Mass: 481.07 Molecular Weight: 481.50</p>
1-24-6	头孢克肟 氧化杂质	Cefixime oxidizes impurities	1335555-87-7	 <p>Chemical Formula: C₁₆H₁₅N₅O₈S₂ Exact Mass: 469.04 Molecular Weight: 469.45</p>
1-24-7	头孢克肟 双键位移 杂质	δ ³ - Cefixime impurity	N/A	 <p>Chemical Formula: C₁₆H₁₅N₅O₇S₂ Exact Mass: 453.04 Molecular Weight: 453.45</p>
1-24-8	头孢克肟 反式杂质 B (反式开 环脱羧内 酯)	Cefixime trans- impurity B	N/A	 <p>Chemical Formula: C₁₅H₁₇N₅O₆S₂ Exact Mass: 427.06202 Molecular Weight: 427.45000</p>
1-24-9	头孢克肟 异丙酯杂 质	/	/	 <p>Chemical Formula: C₁₉H₂₁N₅O₇S₂ Exact Mass: 495.09 Molecular Weight: 495.53</p>



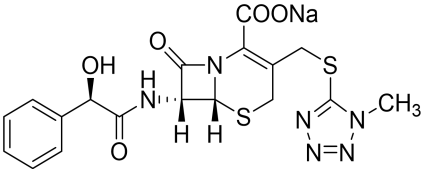
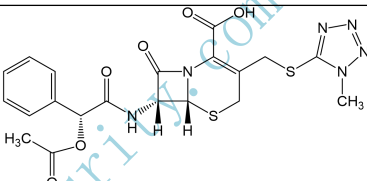
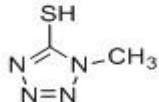
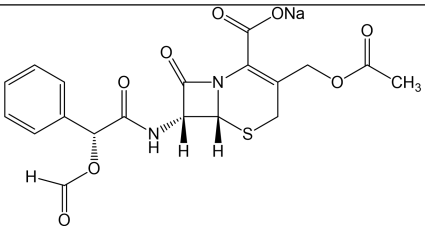
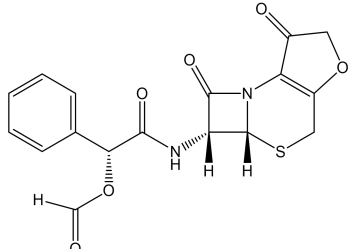
25. 头孢孟多酯钠杂质 Cefamandole Nafate impurities

序号	杂质名称	英文名称	CAS号	化学结构
原料参比物质(非卖品)	头孢孟多酯钠	Cefamandole Nafate	42540-40-9	 <p>Chemical Formula: C₁₉H₁₇N₆NaO₆S₂ Exact Mass: 512.05487 Molecular Weight: 512.49077</p>
1-25-01	头孢孟多酯6中间体	Cefamandole	34444-01-4	 <p>Chemical Formula: C₁₈H₁₈N₆O₅S₂ Exact Mass: 462.07801 Molecular Weight: 462.49900</p>
1-25-02	中间体 01	Intermediate impurity 01	N/A	 <p>Chemical Formula: C₁₀H₁₃ClN₆O₃S₂ Exact Mass: 364.02 Molecular Weight: 364.83</p>
1-25-03	头孢孟多酯钠杂质 A 头孢孟多钠 EP 杂质 A(三乙胺盐) (广州)	Cefamandole nafate impurity A	N/A	 <p>Chemical Formula: C₁₇H₁₅N₂NaO₆S Exact Mass: 398.05 Molecular Weight: 398.37</p>



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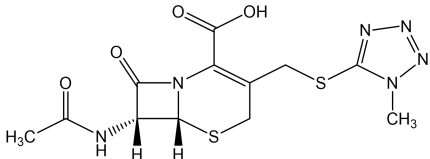
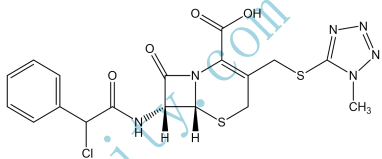
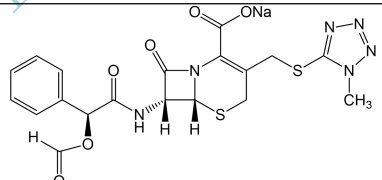
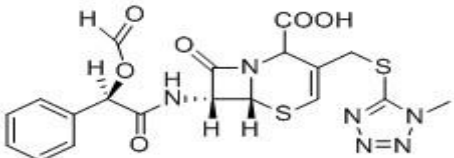
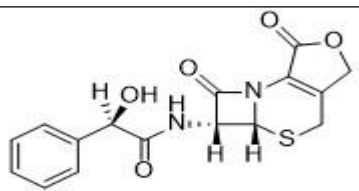
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1-25-04	头孢孟多 酯钠杂质 B	Cefamandole nafate impurity B	N/A	 <p>Chemical Formula: C₁₈H₁₇N₆NaO₅S₂ Exact Mass: 484.06 Molecular Weight: 484.48</p>
1-25-05	头孢孟多 酯钠杂质 C	Cefamandole Nafate impurity C	36922-16-4	 <p>Chemical Formula: C₂₀H₂₀N₆O₆S₂ Exact Mass: 504.09 Molecular Weight: 504.54</p>
1-25-06	头孢孟多 酯钠杂质 D	Cefamandole nafate impurity D	13183-79-4	 <p>Chemical Formula: C₂H₄N₄S Exact Mass: 116.01567 Molecular Weight: 116.14200</p>
1-25-07	头孢孟多 酯钠杂质 E	Cefamandole nafate impurity E	87932-78-3	 <p>Chemical Formula: C₁₉H₁₇N₂NaO₈S Exact Mass: 456.06 Molecular Weight: 456.40</p>
1-25-08	头孢孟多 酯钠杂质 F	Cefamandole nafate impurity F	N/A	 <p>Chemical Formula: C₁₇H₁₄N₂O₆S Exact Mass: 374.06 Molecular Weight: 374.37</p>



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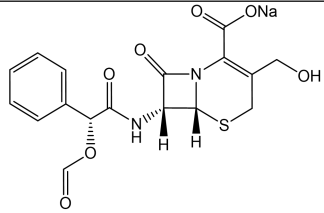
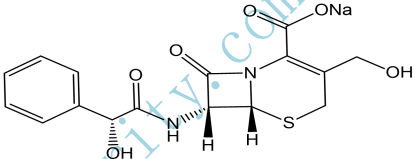
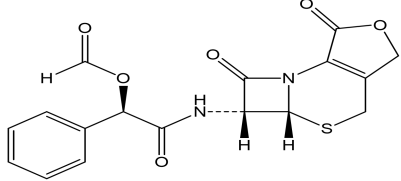
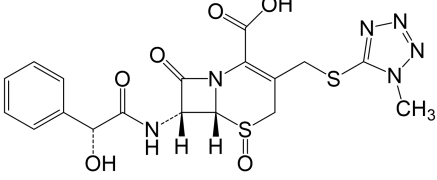
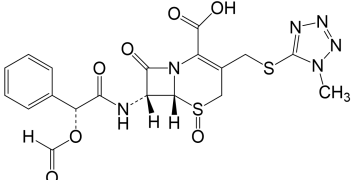
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1-25-09	头孢孟多酯钠杂质 G	Cefamandole nafate impurity G	N/A	 <p>Chemical Formula: C₁₂H₁₄N₆O₄S₂ Exact Mass: 370.05 Molecular Weight: 370.41</p>
1-25-10	头孢孟多酯钠杂质 H (氯代头孢孟多杂质)	Cefamandole nafate impurity H	N/A	 <p>Chemical Formula: C₁₈H₁₇ClN₆O₄S₂ Exact Mass: 480.04 Molecular Weight: 480.95</p>
1-25-11	异构体杂质	Cefamandole nafate sodium isomer impurity	N/A	 <p>Chemical Formula: C₁₉H₁₇N₆NaO₆S₂ Exact Mass: 512.05 Molecular Weight: 512.49</p>
1-25-12	头孢孟多酯双键位移杂质	Cefamandole nafate double bond displacement impurity	N/A	 <p>Chemical Formula: C₁₉H₁₈N₆O₆S₂ Exact Mass: 490.07292 Molecular Weight: 490.50900</p>
1-25-13	头孢孟多内酯	Cefamandole lactone	N/A	 <p>Chemical Formula: C₁₆H₁₄N₂O₅S Exact Mass: 346.06234 Molecular Weight: 346.35700</p>



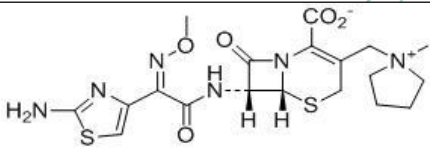
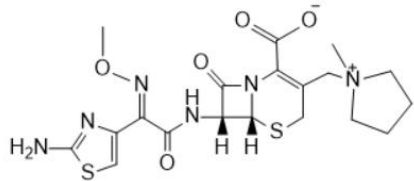
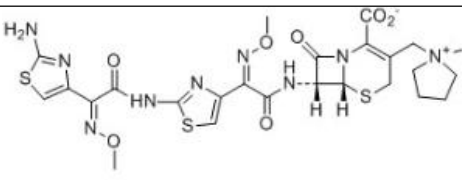
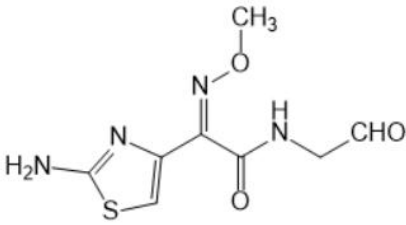
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1-25-14	去甲巯四氮唑孟多酯钠 (D-MDZ)	D-cefamandole nafate sodium	N/A	 <p>Chemical Formula: $C_{17}H_{15}N_2NaO_7S$ Exact Mass: 414.05 Molecular Weight: 414.36</p>
1-25-16	去乙酰游离酸孟多 D-MD	Deacetylated acid cefamandole	N/A	 <p>Chemical Formula: $C_{16}H_{15}N_2NaO_6S$ Exact Mass: 386.05 Molecular Weight: 386.35</p>
1-25-17	孟多酯内脂	Cefamandole nafate lactone	N/A	 <p>Chemical Formula: $C_{17}H_{14}N_2O_6S$ Exact Mass: 374.06 Molecular Weight: 374.37</p>
1-25-18	孟多氧化杂质	Cefamandole oxide impurity	N/A	 <p>Chemical Formula: $C_{18}H_{18}N_6O_6S_2$ Exact Mass: 478.07 Molecular Weight: 478.50</p>
1-25-19	孟多酯氧化杂质	Cefamandole nafate oxide impurity	N/A	 <p>Chemical Formula: $C_{19}H_{18}N_6O_7S_2$ Exact Mass: 506.07 Molecular Weight: 506.51</p>



26. 头孢吡肟杂质 Cefepime impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢吡肟	Cefepime	123171-59-5	 <p>Chemical Formula: C₁₉H₂₄N₆O₅S₂ Exact Mass: 480.1250 Molecular Weight: 480.5580</p>
1-26-1	反式头孢吡肟 (BW-A, 或者盐酸盐)	E-Cefepime	N/A	 <p>Chemical Formula: C₁₉H₂₄N₆O₅S₂ Exact Mass: 480.1250 Molecular Weight: 480.5611</p>
1-26-02	头孢吡肟 EP 杂质 B	Cefepime impurity B	N/A	 <p>Chemical Formula: C₂₅H₂₉N₉O₇S₃ Exact Mass: 663.13521 Molecular Weight: 663.74300</p>
1-26-03	头孢吡肟 EP 杂质 C	Cefepime impurity C	N/A	 <p>Chemical Formula: C₈H₁₀N₄O₃S Exact Mass: 242.0474 Molecular Weight: 242.2550</p>



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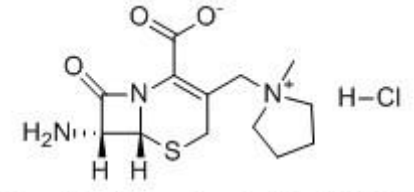
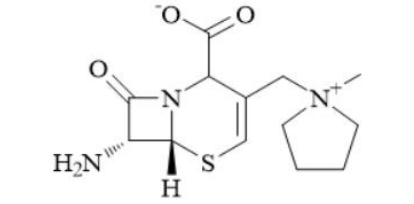
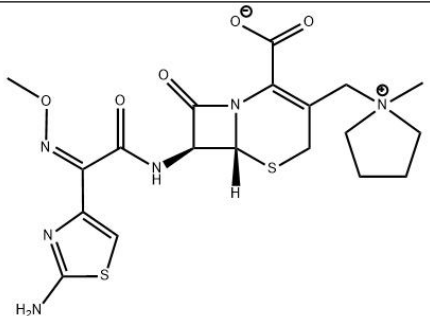
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1-26-4	头孢吡肟 EP 杂质 D(氨噻肟 酸)	Cefepime Impurity D	65872-41-5	 <chem>CN1C(S1)C(=O)C(=O)N(C)C</chem>
1-26-05	头孢吡肟 EP 杂质 E(头孢吡 肟母核)	Cefepime Impurity E	N/A	 <chem>CN1C(S1)C(=O)C(=O)N(C)C</chem> Chemical Formula: C ₁₃ H ₁₉ N ₃ O ₃ S Exact Mass: 297.1147 Molecular Weight: 297.3733
1-26-05	头孢吡肟 双键位移 杂质	δ3-Cefepime impurity	N/A	 <chem>CN1C(S1)C(=O)C(=O)N(C)C</chem> Chemical Formula: C ₁₉ H ₂₄ N ₆ O ₅ S ₂ Exact Mass: 480.12496 Molecular Weight: 480.55800
1-26-06	头孢吡肟 氧化杂质	Cefepime hydrochlori de oxidation impurities	N/A	 <chem>CN1C(S1)C(=O)C(=O)N(C)C</chem> Chemical Formula: C ₁₉ H ₂₄ N ₆ O ₆ S ₂ Exact Mass: 496.12 Molecular Weight: 496.56
1-26-07	反式头孢 吡肟双键 位移	δ3- E- Cefepime	N/A	 <chem>CN1C(S1)C(=O)C(=O)N(C)C</chem> Chemical Formula: C ₁₉ H ₂₄ N ₆ O ₅ S ₂ Exact Mass: 480.12496 Molecular Weight: 480.56106



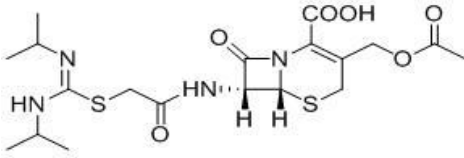
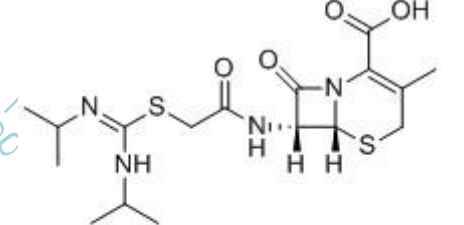
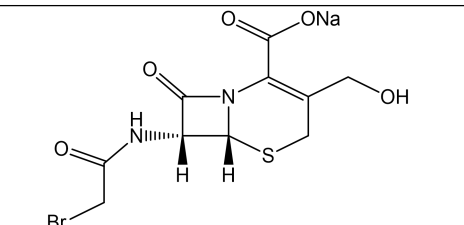
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1-26-08	头孢吡肟 中间体杂质 盐酸盐 (7-MPCA 盐酸盐, 7-ACP)	Cefepime Intermediat e	780810-20-0	 <p>Chemical Formula: $C_{13}H_{20}ClN_3O_3S$ Exact Mass: 333.09139 Molecular Weight: 333.83100</p>
1-26-09	头孢吡肟 中间体双 键位移 (7- MPCA- DT, 7- ACP-DT)	Cefepime intermediat e double bond shift	N/A	 <p>Chemical Formula: $C_{13}H_{19}N_3O_3S$ Exact Mass: 297.1147 Molecular Weight: 297.3733</p>
1-26-10	6R,7S-头孢 吡肟	6R,7S- Cefepime	N/A	 <p>Chemical Formula: $C_{19}H_{24}N_6O_5S_2$ Exact Mass: 480.12 Molecular Weight: 480.56</p>

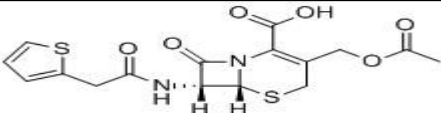
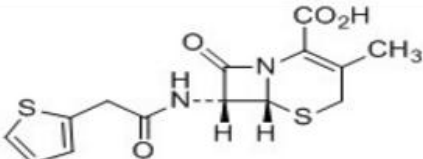
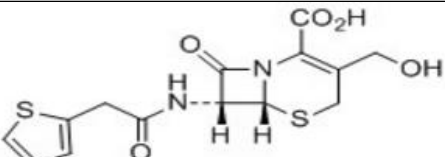
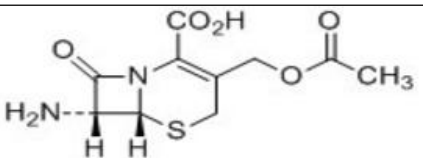


27. 头孢硫脒杂质 Cefathiamidine impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢硫脒	Cefathiamidine	33075-00-2	 <p>Chemical Formula: C₁₉H₂₈N₄O₆S₂ Exact Mass: 472.1450 Molecular Weight: 472.5750</p>
1-27-1	头孢硫脒杂质 B (3-甲基头孢硫脒)	Cefathiamidine impurity B	N/A	 <p>Chemical Formula: C₁₇H₂₆N₄O₄S₂ Exact Mass: 414.13955 Molecular Weight: 414.53900</p>
1-27-2	溴乙酰 7-ACA	Bromoacetyl 7-ACA	N/A	 <p>Chemical Formula: C₁₀H₁₀BrN₂NaO₅S Exact Mass: 371.94 Molecular Weight: 373.16</p>



28. 头孢噻吩杂质 Cephalothin impurities

序号	杂质名称	英文名称	CAS 号	结构式
原料参比物质(非卖品)	头孢噻吩	Cephalothin	153-61-7	 <p>Chemical Formula: $C_{16}H_{16}N_2O_6S_2$ Exact Mass: 396.04498 Molecular Weight: 396.43200</p>
1-28-1	头孢噻吩 EP 杂质 A	Cephalothin Impurity A(EP)		 <p>Chemical Formula: $C_{14}H_{14}N_2O_4S_2$ Exact Mass: 338.03950 Molecular Weight: 338.39600</p>
1-28-2	头孢噻吩 EP 杂质 B	Cephalothin Impurity B(EP)		 <p>Chemical Formula: $C_{14}H_{14}N_2O_5S_2$ Exact Mass: 354.03441 Molecular Weight: 354.39500</p>
1-28-3	头孢噻吩 EP 杂质 C	Cephalothin Impurity C(EP)	957-68-6	 <p>Chemical Formula: $C_{10}H_{12}N_2O_5S$ Exact Mass: 272.04669 Molecular Weight: 272.27500</p>



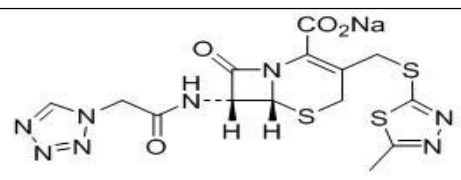
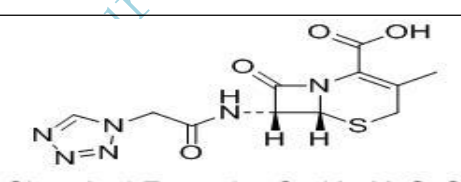
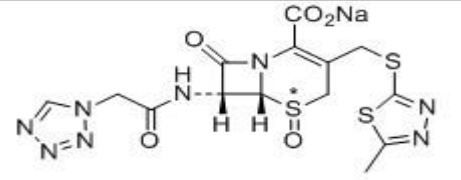
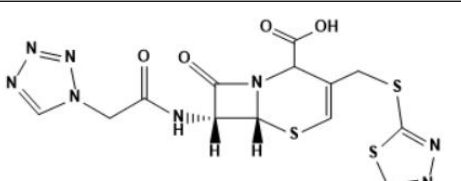
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1-28-4	头孢噻吩 EP 杂质 D	Cephalothin Impurity D(EP)	10590-10-0	<p>Chemical Formula: $C_{14}H_{12}N_2O_4S_2$ Exact Mass: 336.02385 Molecular Weight: 336.38000</p>
1-28-5	3-噻吩头 孢噻吩异 构体	Cephalothin-3- isomer	N/A	<p>Chemical Formula: $C_{16}H_{16}N_2O_6S_2$ Exact Mass: 396.04 Molecular Weight: 396.44</p>
1-28-6	头孢噻吩 双键位移	Δ 3- Cephalothin-3- isomer	/	<p>Chemical Formula: $C_{16}H_{16}N_2O_6S_2$ Exact Mass: 396.04498 Molecular Weight: 396.43200</p>
1-28-7	头孢噻吩 氧化杂质	Cephalothin Oxide Impurity	/	<p>Chemical Formula: $C_{16}H_{16}N_2O_7S_2$ Exact Mass: 412.04 Molecular Weight: 412.44</p>



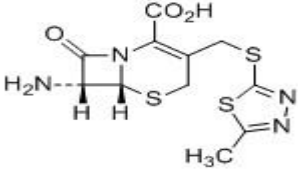
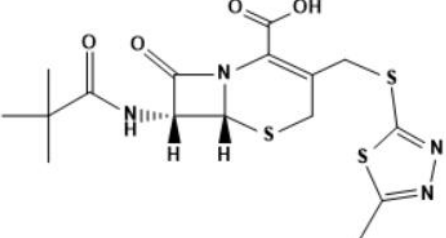
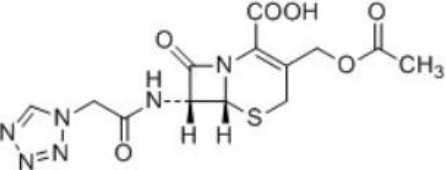
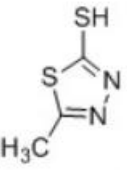
29. 头孢唑林杂质 Cefazolin impurities

序号	杂质名称	英文名称	CAS 号	化学结构
原料参比物质(非卖品)	头孢唑林钠	Cefazolin	27164-46-1	 <p>Chemical Formula: $C_{14}H_{13}N_8NaO_4S_3$ Exact Mass: 476.0120 Molecular Weight: 476.4798</p>
1-29-1	头孢唑林 EP 杂质 C	Cefazolin EP impurity C	56842-77-4	 <p>Chemical Formula: $C_{11}H_{12}N_6O_4S$ Exact Mass: 324.0641 Molecular Weight: 324.3150</p>
1-29-2	头孢唑林氧化杂质	Cefazolin oxidation impurities	N/A	 <p>Chemical Formula: $C_{14}H_{13}N_8NaO_5S_3$ Exact Mass: 492.00687 Molecular Weight: 492.47877</p>
1-29-3	头孢唑林双键位移	Cefazolin double bond displacement impurity	N/A	 <p>Chemical Formula: $C_{14}H_{14}N_8O_4S_3$ Exact Mass: 454.03 Molecular Weight: 454.51</p>



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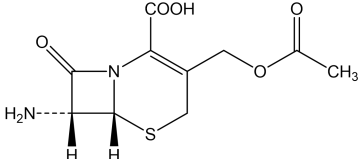
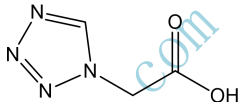
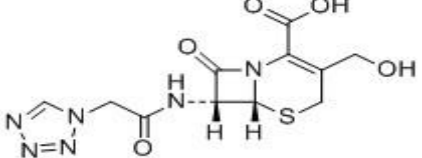
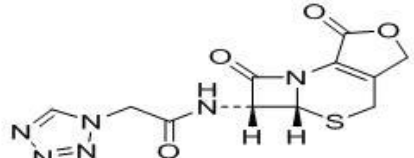
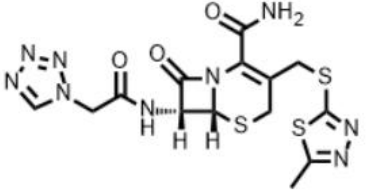
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1-29-4	头孢唑啉 EP 杂质 A	Cefazolin EP impurity A	30246-33-4	 <p>Chemical Formula: $C_{11}H_{12}N_4O_3S_3$ Exact Mass: 344.00715 Molecular Weight: 344.42200</p>
1-29-5	头孢唑啉 EP 杂质 B	Cefazolin EP impurity B	1798390-48-3	 <p>Chemical Formula: $C_{16}H_{20}N_4O_4S_3$ Exact Mass: 428.06 Molecular Weight: 428.55</p>
1-29-6	头孢唑啉 EP 杂质 D	Cefazolin EP impurity D	32510-61-5	 <p>Chemical Formula: $C_{13}H_{14}N_6O_6S$ Exact Mass: 382.06955 Molecular Weight: 382.35100</p>
1-29-7	头孢唑啉 EP 杂质 E	Cefazolin EP impurity E	29490-19-5	 <p>Chemical Formula: $C_3H_4N_2S_2$ Exact Mass: 131.98159 Molecular Weight: 132.19900</p>



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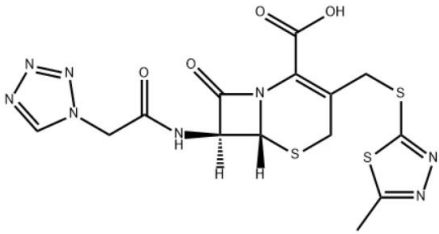
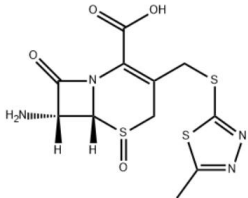
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1-29-8	头孢唑啉 EP 杂质 H	Cefazolin EP impurity H	N/A	 <p>Chemical Formula: C₁₀H₁₂N₂O₅S Exact Mass: 272.05 Molecular Weight: 272.28</p>
1-29-9	头孢唑啉 USP 杂质 A (四氮唑 乙酸)	Cefazolin USP impurity A	21732-17-2	 <p>Chemical Formula: C₃H₄N₄O₂ Exact Mass: 128.03 Molecular Weight: 128.09</p>
1-29-10	头孢唑啉 USP 杂质 E	Cefazolin USP impurity E	478494-71-2	 <p>Chemical Formula: C₁₁H₁₂N₆O₅S Exact Mass: 340.05899 Molecular Weight: 340.31400</p>
1-29-11	头孢唑啉 USP 杂质 I(内酯)	Cefazolin USP impurity I	1172998-53-6	 <p>Chemical Formula: C₁₁H₁₀N₆O₄S Exact Mass: 322.0484 Molecular Weight: 322.2990</p>
1-29-12	头孢唑林 EP 杂质 K	Cefazolin EP impurity K	1322626-65-2	 <p>Chemical Formula: C₁₄H₁₅N₉O₃S₃ Exact Mass: 453.0460 Molecular Weight: 453.5224</p>



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1-29-13	头孢唑林 USP 杂质 L (6R,7S- 头孢唑 啉)	Cefazolin USP impurity L (6R,7S-ZL)		 <p>Chemical Formula: C₁₄H₁₄N₈O₄S₃ Exact Mass: 454.0300 Molecular Weight: 454.5072</p>
1-29-14	头孢唑林 杂质 A 亚 砷	Cefazolin impurity A sulfoxide		 <p>Chemical Formula: C₁₁H₁₂N₄O₄S₃ Exact Mass: 360.0021 Molecular Weight: 360.4324</p>

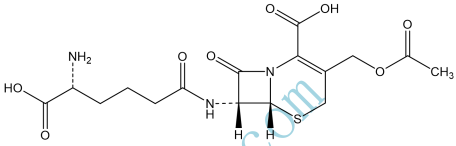
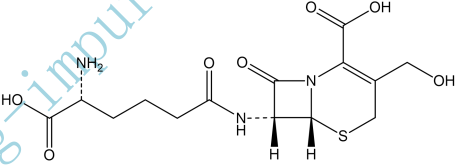


30.拉氧头孢杂质 Latamoxef impurities

序号	杂质名称	英文名称	CAS	化学结构
原料参比物质(非卖品)	拉氧头孢	Latamoxef	64953-12-4 64953-12-4 (钠盐)	<p>Chemical Formula: $C_{20}H_{20}N_4O_6S$ Exact Mass: 520.1012 Molecular Weight: 520.4726</p>
1-30-1	拉氧头孢双键位移杂质	Latamoxef double bond displacement impurity	N/A	<p>Chemical Formula: $C_{20}H_{20}N_4O_6S$ Exact Mass: 520.1012 Molecular Weight: 520.4726</p>
1-30-3	拉氧头孢脱羧杂质 (LY-DC)	Latamoxef decarboxylation impurity	N/A	<p>Chemical Formula: $C_{19}H_{20}N_4O_7S$ Exact Mass: 476.1114 Molecular Weight: 476.4640</p>

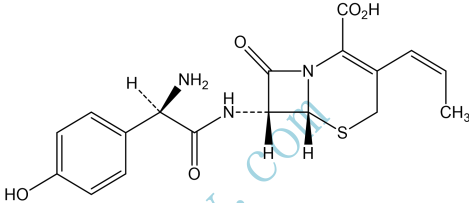
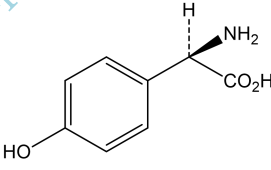
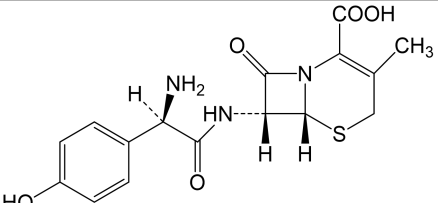
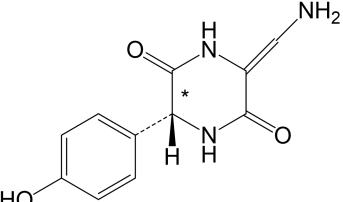


31. 头孢菌素杂质 Cephalosporin impurities

序号	杂质名称	英文名称	CAS 号	化学结构
1-31-1	头孢菌素 C	Cephalosporin C	61-24-5	 <p>Chemical Formula: C₁₈H₂₁N₃O₅S Exact Mass: 415.10 Molecular Weight: 415.42</p>
1-31-2	D-CPC (去乙酰头孢菌素 C)	Deacetyl cephalosporin C impurity	1476-46-6	 <p>Chemical Formula: C₁₄H₁₉N₃O₇S Exact Mass: 373.09 Molecular Weight: 373.38</p>



33. 头孢丙烯杂质 Cefprozil impurities

序号	杂质名称	英文名称	CAS 号	化学结构
原料参比物质(非卖品)	头孢丙烯	Cefprozil	N/A	 <p>Chemical Formula: C₁₈H₁₉N₃O₅S Exact Mass: 389.10 Molecular Weight: 389.43</p>
1-33-1	EP 杂质 A	Cefprozil EP impurity A	22818-40-2	 <p>Chemical Formula: C₈H₉NO₃ Exact Mass: 167.06 Molecular Weight: 167.16</p>
1-33-2	EP 杂质 B	Cefprozil EP impurity B	50370-12-2	 <p>Chemical Formula: C₁₆H₁₇N₃O₅S Exact Mass: 363.09 Molecular Weight: 363.39</p>
1-33-3	EP 杂质 C	Cefprozil EP impurity C	147103-93-3	 <p>Chemical Formula: C₁₁H₁₁N₃O₃ Exact Mass: 233.08 Molecular Weight: 233.22</p>



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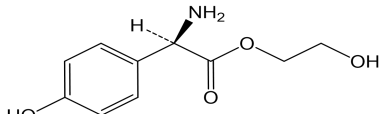
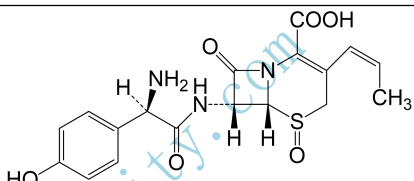
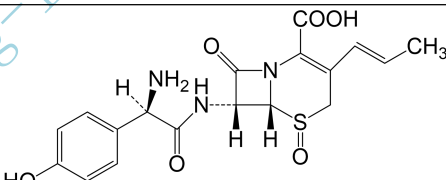
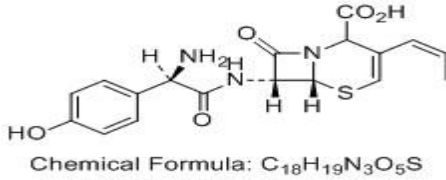
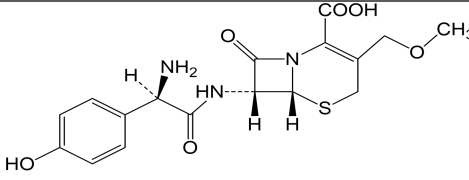
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1-33-4	EP 杂质 D	Cefprozil EP impurity D	106447-44-3	<p>Chemical Formula: $C_{10}H_{12}N_2O_3S$ Exact Mass: 240.06 Molecular Weight: 240.28</p>
1-33-5	EP 杂质 F	Cefprozil EP impurity F	107937-01-9	<p>Chemical Formula: $C_{10}H_{12}N_2O_3S$ Exact Mass: 240.06 Molecular Weight: 240.28</p>
1-33-6	EP 杂质 H	Cefprozil EP impurity H	N/A	<p>Chemical Formula: $C_{26}H_{26}N_4O_7S$ Exact Mass: 538.15 Molecular Weight: 538.57</p>
1-33-7	EP 杂质 G	Cefprozil EP impurity G	N/A	<p>Chemical Formula: $C_{18}H_{21}N_3O_6S$ Exact Mass: 407.12 Molecular Weight: 407.44</p>
1-33-8	EP 杂质 I	Cefprozil EP impurity I	N/A	<p>Chemical Formula: $C_{18}H_{21}N_3O_6S$ Exact Mass: 407.12 Molecular Weight: 407.44</p>



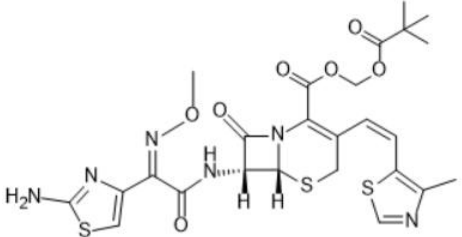
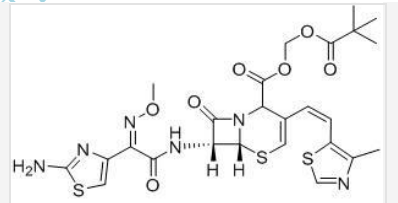
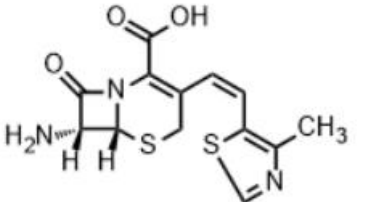
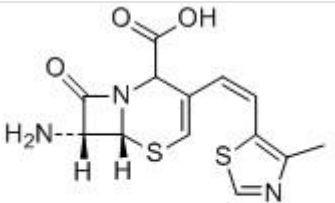
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1-33-9	EP 杂质 L	Cefprozil EP impurity L	203007-73-2	 <p>Chemical Formula: C₁₀H₁₃NO₄ Exact Mass: 211.08 Molecular Weight: 211.21</p>
1-33-10	氧化杂质 1	Cefprozil oxide impurity 1	N/A	 <p>Chemical Formula: C₁₈H₁₉N₃O₆S Exact Mass: 405.10 Molecular Weight: 405.42</p>
1-33-11	氧化杂质 2	Cefprozil oxide impurity 2	N/A	 <p>Chemical Formula: C₁₈H₁₉N₃O₆S Exact Mass: 405.10 Molecular Weight: 405.42</p>
1-33-12	双键位移杂质	Cefprozil double bond displacement impurity	N/A	 <p>Chemical Formula: C₁₈H₁₉N₃O₅S Exact Mass: 389.10454 Molecular Weight: 389.42600</p>
1-33-13	杂质 Z	Cefprozil impurities Z	N/A	 <p>Chemical Formula: C₁₇H₁₉N₃O₆S Exact Mass: 393.10 Molecular Weight: 393.41</p>



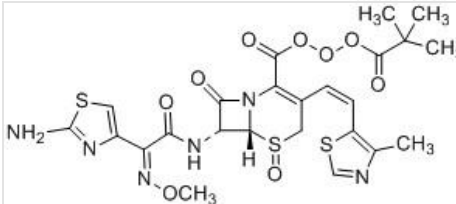
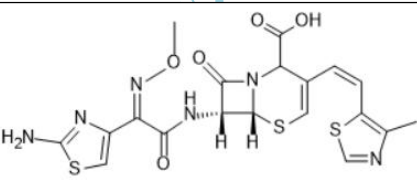
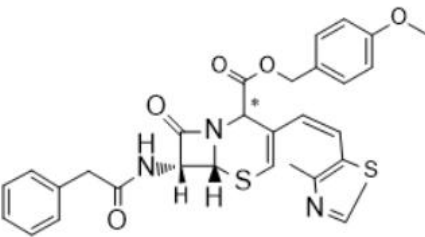
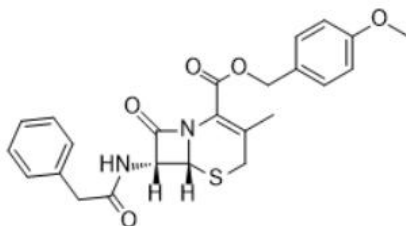
34. 头孢妥仑匹酯杂质

序号	杂质名称	英文名称	CAS 号	化学结构
原料参比物质(非卖品)	头孢妥仑匹酯	Cefditoren pivoxil	117467-28-4	 <p>Chemical Formula: C₂₅H₂₈N₆O₇S₃ Exact Mass: 620.1182 Molecular Weight: 620.7208</p>
1-34-01	头孢妥仑匹酯双键位移杂质(简称: TLPZ-DT)	Δ ³ -Cefditoren pivoxil impurity	148774-47-4	 <p>Chemical Formula: C₂₅H₂₈N₆O₇S₃ Exact Mass: 620.1182 Molecular Weight: 620.7140</p>
1-34-02	母核 7-TACA-TL	Cefditoren pivoxil	N/A	 <p>Chemical Formula: C₁₃H₁₃N₃O₃S₂ Exact Mass: 323.0398 Molecular Weight: 323.3906</p>
1-34-03	母核双键位移 7-TACA-DT	Cefditoren pivoxil impurity	N/A	 <p>Chemical Formula: C₁₃H₁₃N₃O₃S₂ Exact Mass: 323.03983 Molecular Weight: 323.38500</p>



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1-34-04	氧化杂质 亚砷	Cefditoren pivoxil impurity	N/A	 <p>Chemical Formula: C₂₄H₂₆N₆O₉S₃ Exact Mass: 638.09234 Molecular Weight: 638.68500</p>
1-34-05	头孢妥伦酸双键位移	Cefditoren acid Δ3 impurity	N/A	 <p>Chemical Formula: C₁₉H₁₈N₆O₅S₃ Exact Mass: 506.0501 Molecular Weight: 506.5784</p>
1-34-06	GCTA-1	GCTA-1	N/A	 <p>Chemical Formula: C₂₉H₂₆N₃O₅S₂ Exact Mass: 560.1314 Molecular Weight: 560.6638</p>
1-34-07	GCTA-2	GCTA-2	N/A	 <p>Chemical Formula: C₂₄H₂₄N₂O₅S Exact Mass: 452.1406 Molecular Weight: 452.5228</p>

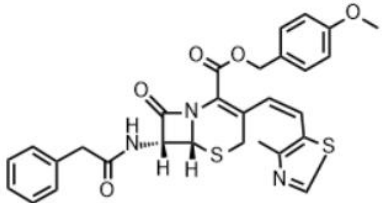
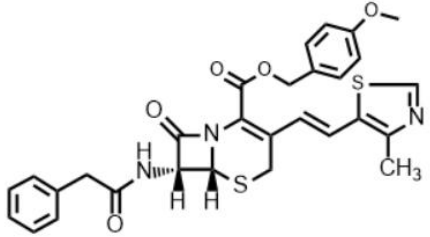


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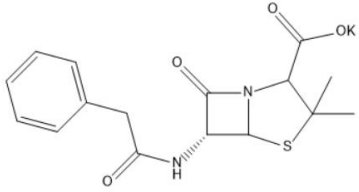
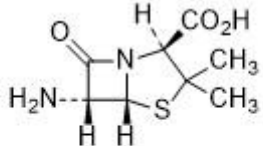
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1-34-08	反式头孢 妥伦酯母 核 (3E-7- ATCA)	3E-7-ATCA	N/A	<p>Chemical Formula: $C_{13}H_{13}N_3O_3S_2$ Exact Mass: 323.0398 Molecular Weight: 323.3906</p>
1-34-09	反式头孢 妥伦钠 (3E-TL- Na)	3E-TL-Na	N/A	<p>Chemical Formula: $C_{19}H_{17}N_6NaO_5S_3$ Exact Mass: 528.0320 Molecular Weight: 528.5602</p>
1-34-10	7位反式头 孢妥伦钠 (7E-TL)	7E-TL	N/A	<p>Chemical Formula: $C_{19}H_{17}N_6NaO_5S_3$ Exact Mass: 528.0320 Molecular Weight: 528.5602</p>
1-34-11	7位反式头 孢妥伦匹 酯 (7E- TLPZ)	7E-TLPZ	N/A	<p>Chemical Formula: $C_{25}H_{28}N_6O_7S_3$ Exact Mass: 620.1182 Molecular Weight: 620.7208</p>

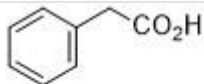
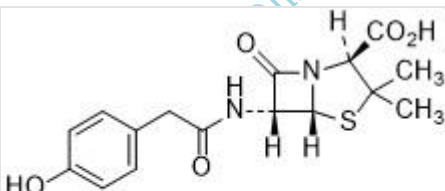
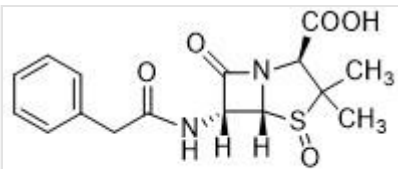


1-34-12	GCTA	GCTA	N/A	 <p>Chemical Formula: C₂₉H₂₇N₃O₅S₂ Exact Mass: 561.1392 Molecular Weight: 561.6718</p>
1-34-12	GCTA 反式异构体 (简称: 3E-GCTA)	3E-GCTA	N/A	 <p>Chemical Formula: C₂₉H₂₇N₃O₅S₂ Exact Mass: 561.1392 Molecular Weight: 561.6718</p>

35.青霉素杂质

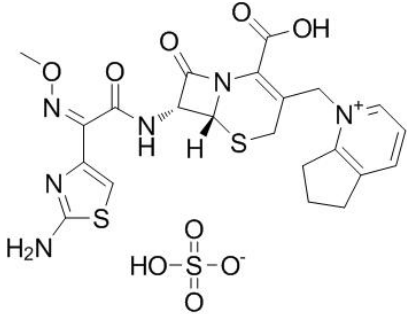
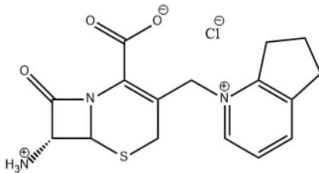
序号	杂质名称	英文名称	CAS 号	化学结构
原料参比物质(非卖品)	青霉素钾盐	Benzylpenicillin potassium salt	113-98-4	 <p>Chemical Formula: C₁₆H₁₇KN₂O₄S Exact Mass: 372.0546 Molecular Weight: 372.4805</p>
1-35-01	EP 杂质 A 6-APA	Penicillin EP impurity A	551-16-6	 <p>Chemical Formula: C₈H₁₂N₂O₃S Exact Mass: 216.05686 Molecular Weight: 216.25500</p>



1-35-02	EP 杂质 B 苯乙酸	Penicillin EP impurity B	103-82-2	 <p>Chemical Formula: $C_8H_8O_2$ Exact Mass: 136.05243 Molecular Weight: 136.15000</p>
1-35-03	EP 杂质 C	Penicillin EP impurity C		 <p>Chemical Formula: $C_{16}H_{18}N_2O_5S$ Exact Mass: 350.09364 Molecular Weight: 350.38900</p>
1-35-04	青霉素氧化杂质	Penicillin impurity		 <p>Chemical Formula: $C_{16}H_{18}N_2O_5S$ Exact Mass: 350.09364 Molecular Weight: 350.38900</p>
1-35-5				
1-35-6				
1-35-7				

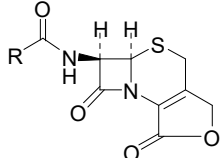
36. 头孢匹罗杂质



原料参比物质(非卖品)	硫酸头孢匹罗	Cefpirome sulfate	98753-19-6	
1-36-01	头孢匹罗母核盐酸盐	PL-7-ACP	N/A	 <p>Chemical Formula: C₁₆H₁₈N₃O₃S⁺ Exact Mass: 332.1063 Molecular Weight: 332.3969</p>

二、定制杂质(Customized impurities)

1. 头孢类杂质 Cephalosporin impurities

杂质名称	英文名称	结构式
未知杂质鉴定	Unknown impurity identification	N/A
内酯	Inner ester	 <p>R=各种基团</p>



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2.其他类杂质 Others

杂质名称	英文名称	结构式
头孢类、青霉素类 各种杂质	All kinds of Cephalosporin and penicillin impurities	N/A

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(Shandong Hitide Biology Technology Co., LTD.)

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公司网站：药物杂质网，网址：<http://www.drug-impurity.com>

联系方式：0531-88792032；

公司销售专用 QQ 号：2331733959

备注：

- 1、专业经营药物杂质，现货提供各种头孢类、青霉素类杂质及定制。
- 2、可提供正规增值税专用发票，支持注册备案资料。
- 3、可提供图谱解析服务。
- 4、报价有效期 1 个月

欢迎随时联系。