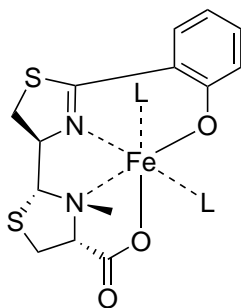
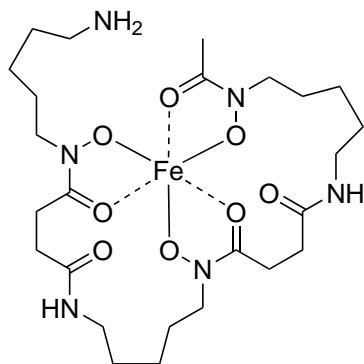


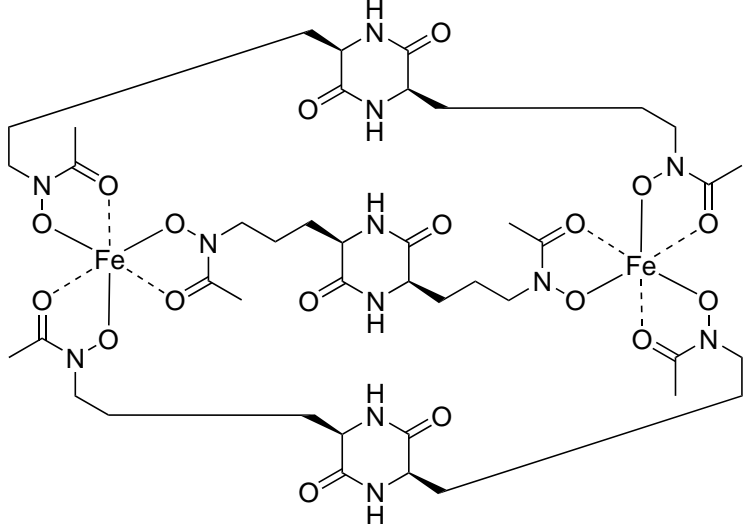
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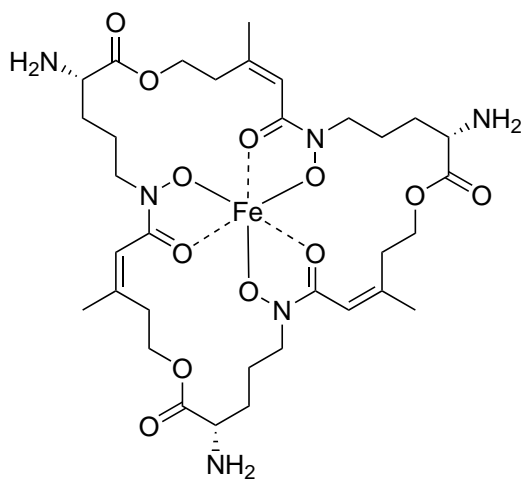
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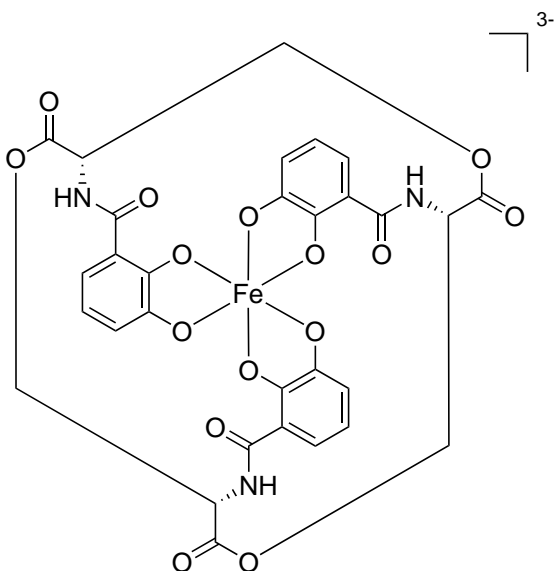
Deferoxamine B
1



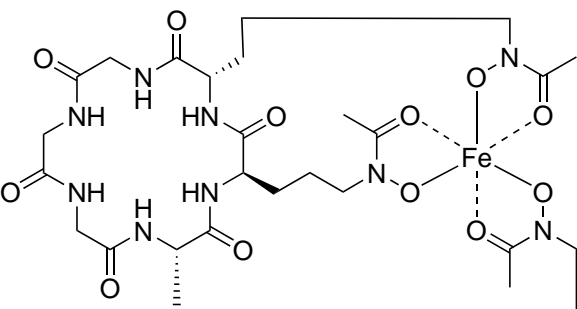
Rhodotorulic acid
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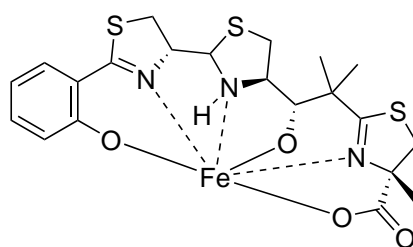
Fusarinine C
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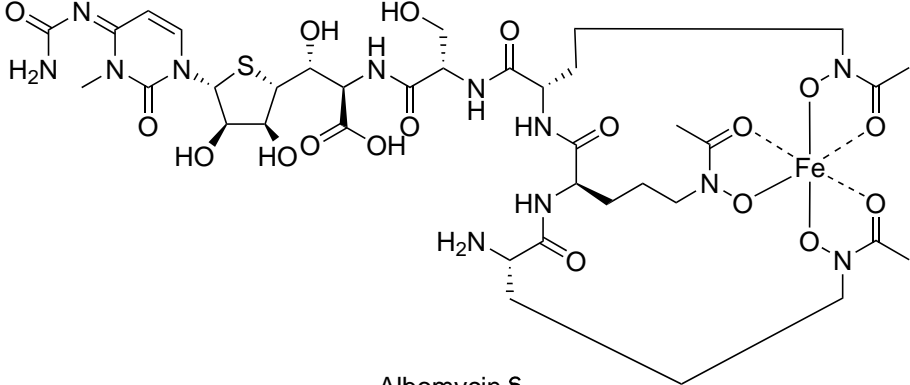
Enterobactin
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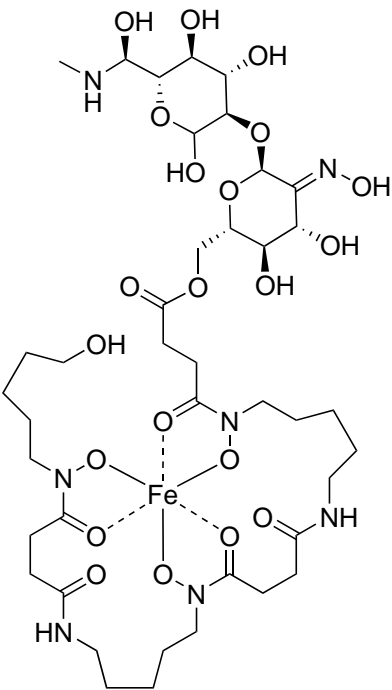
Ferrichrome
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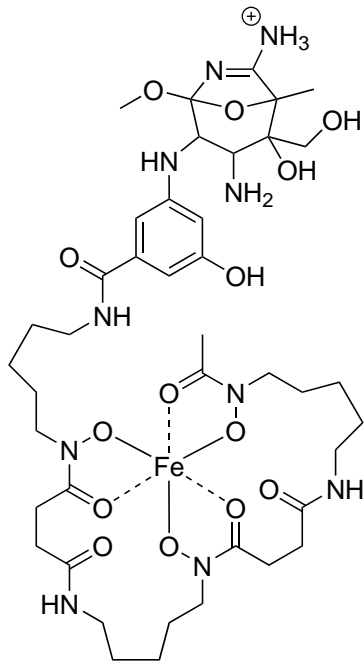
Yersiniabactin
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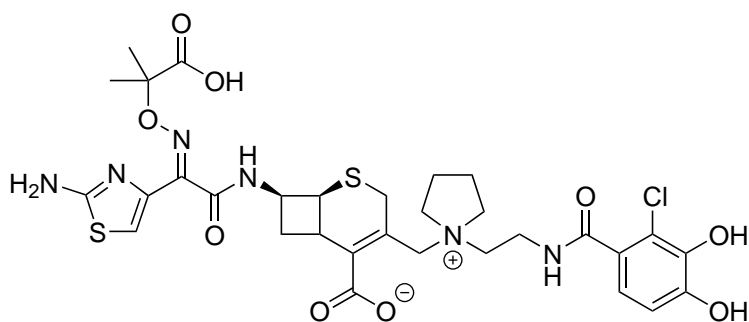
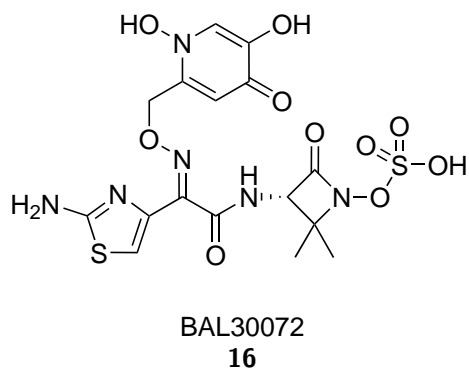
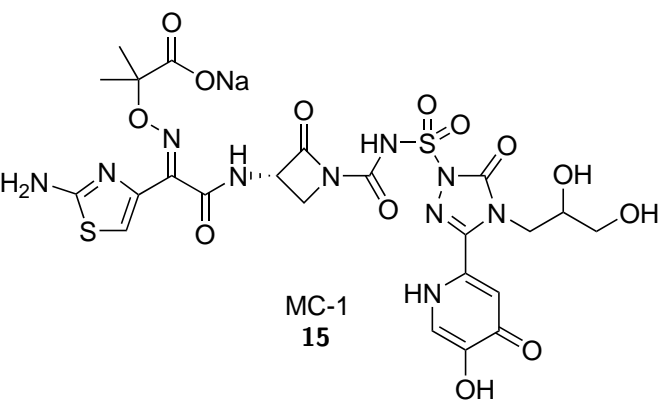
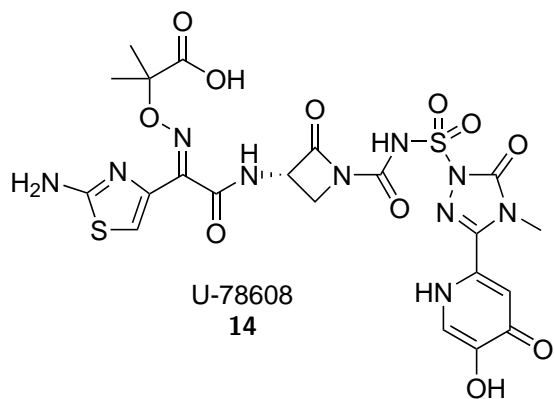
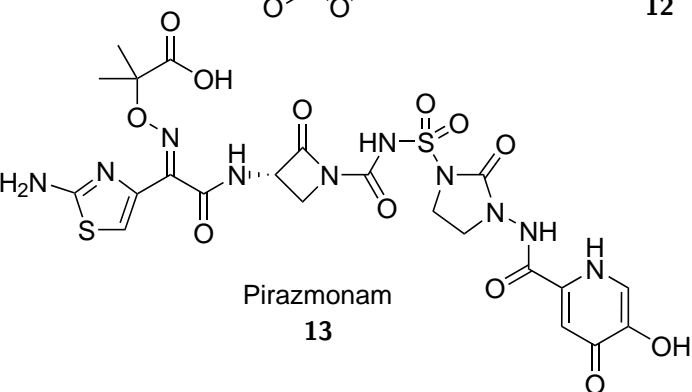
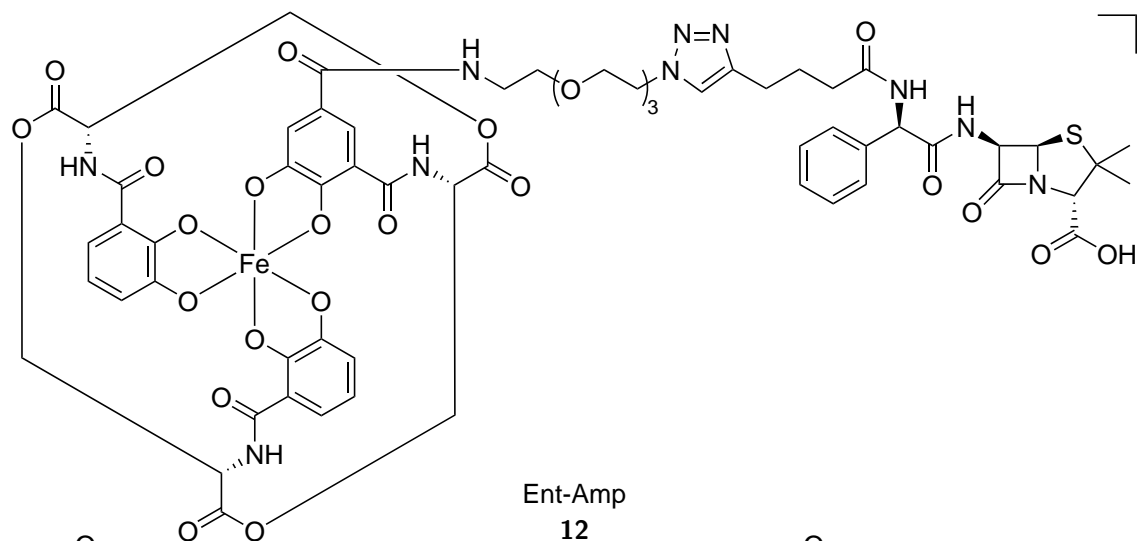
Albomycin δ_2
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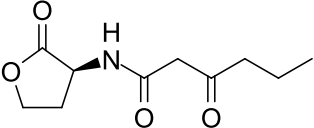


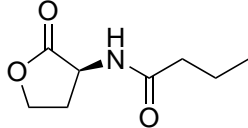
Salmycin A
10



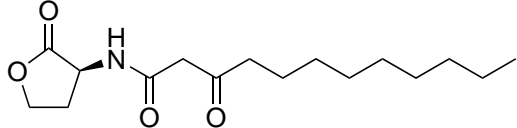
Ferrimycin A1
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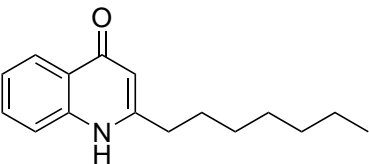




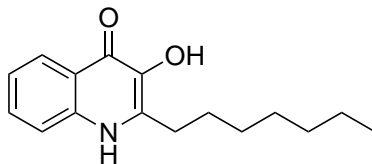
C₄-HSL
19



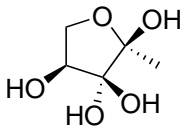
3-oxo-C₁₂-HSL
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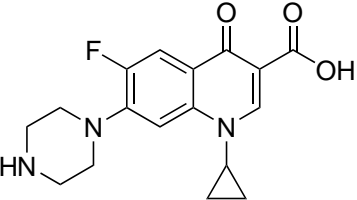
HHQ
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PQS
22

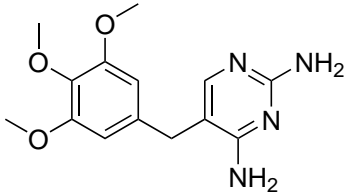


AI-2
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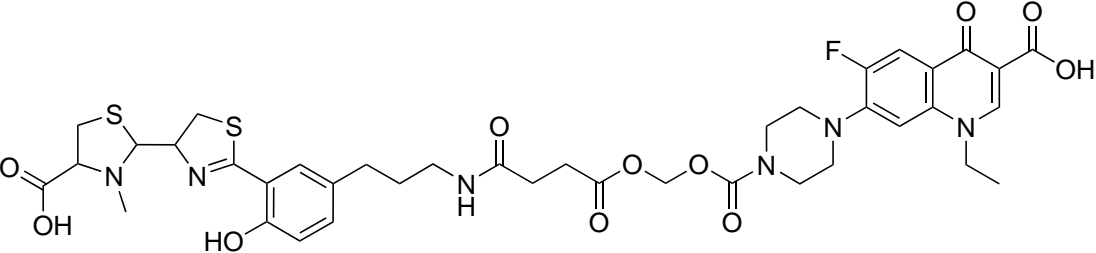
Ciprofloxacin

24

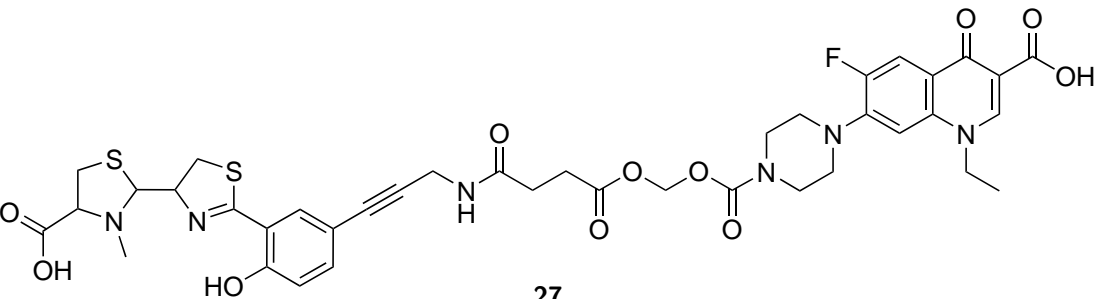


Trimethoprim

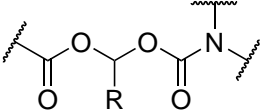
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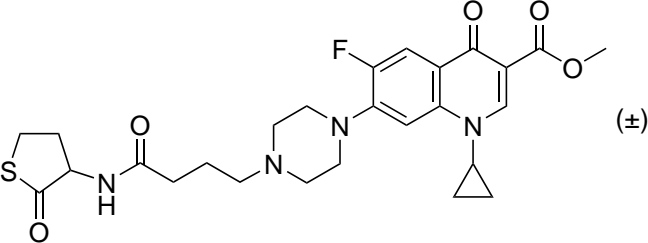


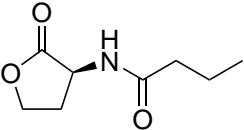
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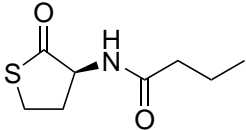






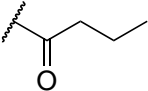
C₄-HSL

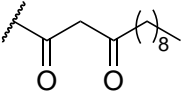
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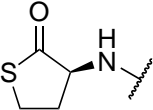


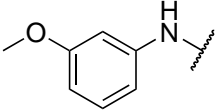
C₄-HCTL

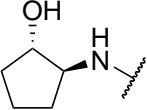
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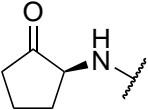


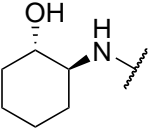


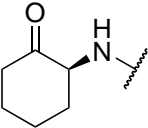


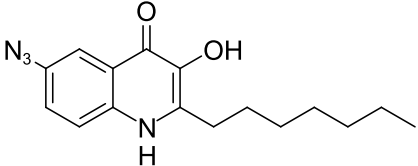
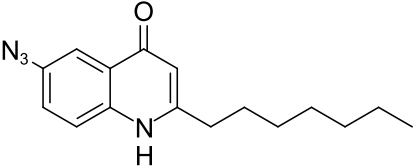


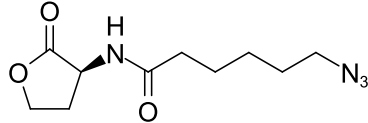
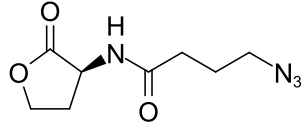
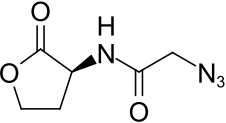


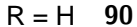


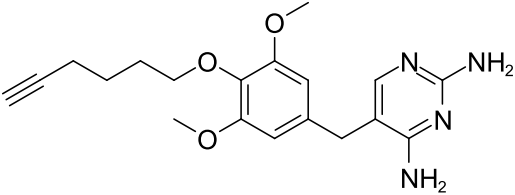


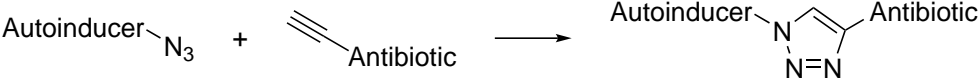


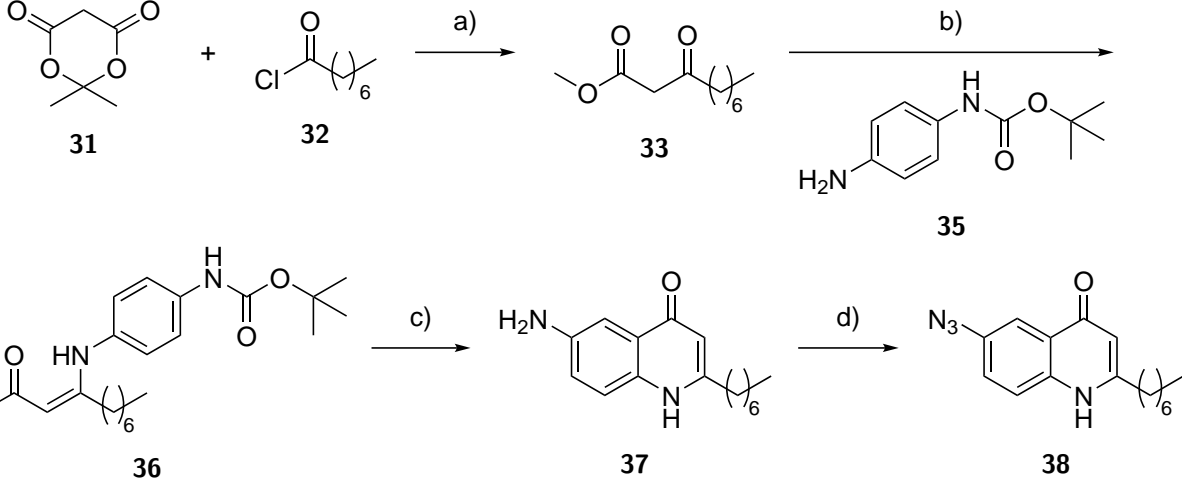


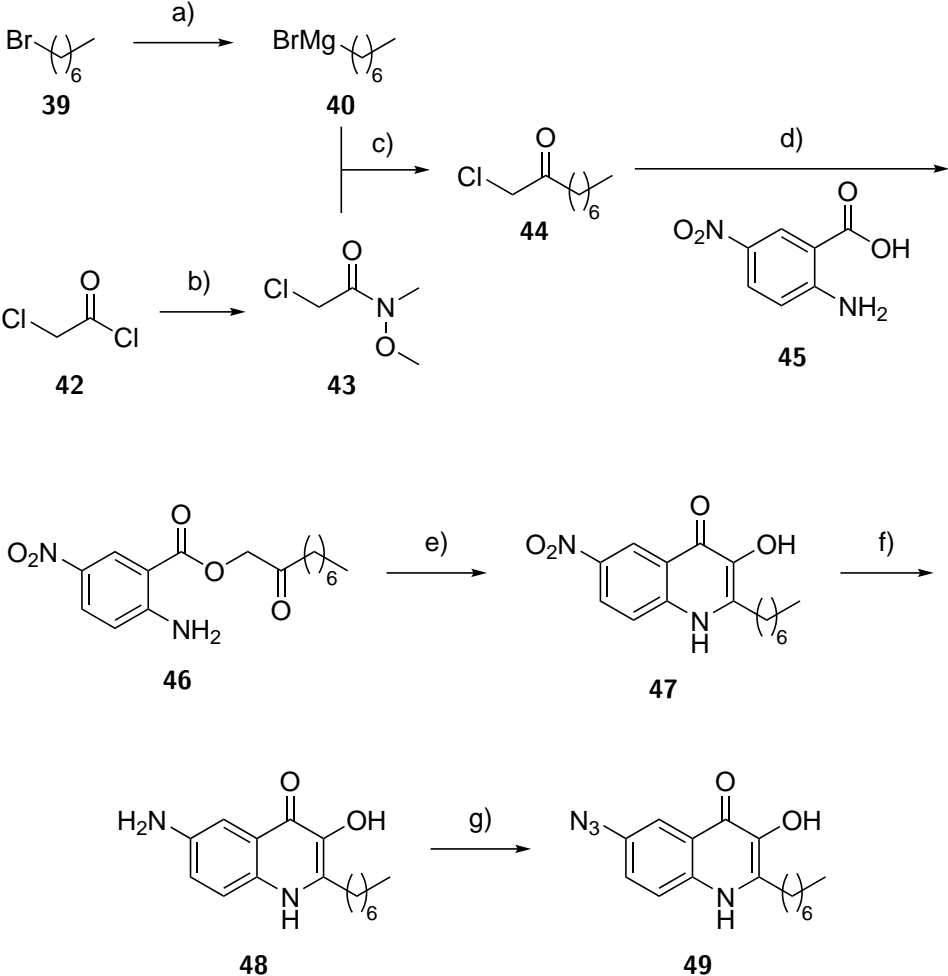


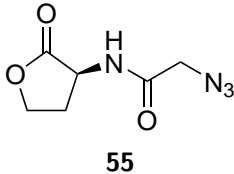
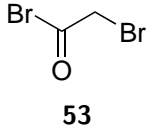
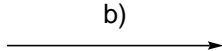
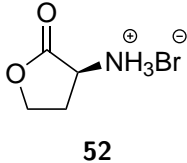
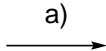
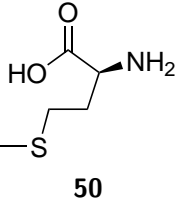


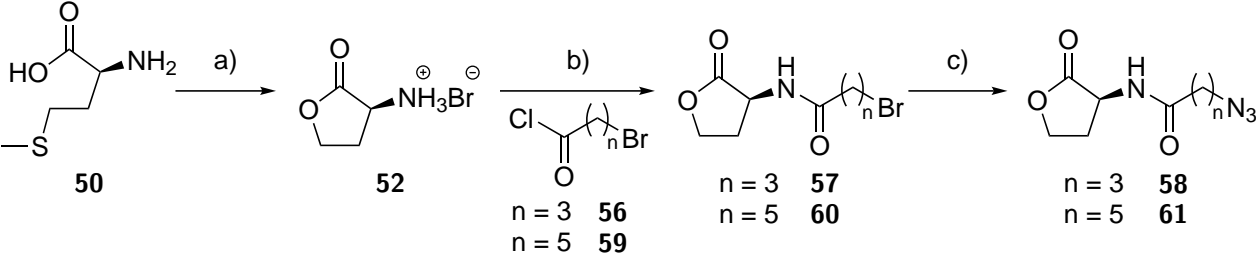


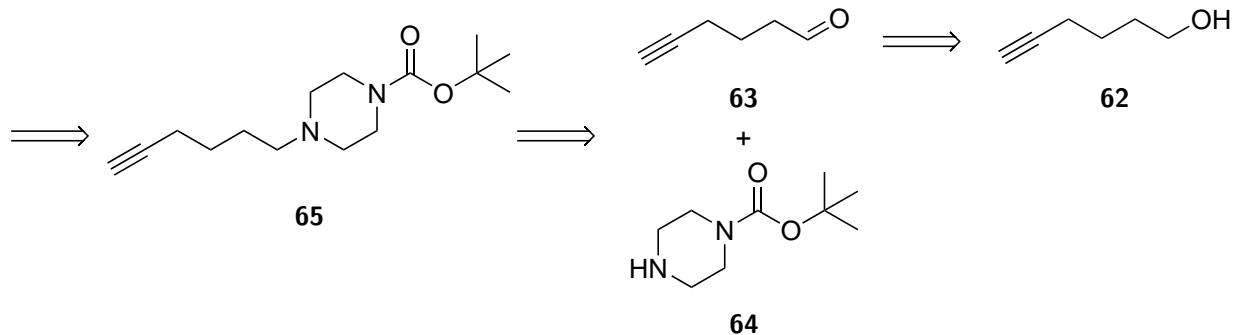
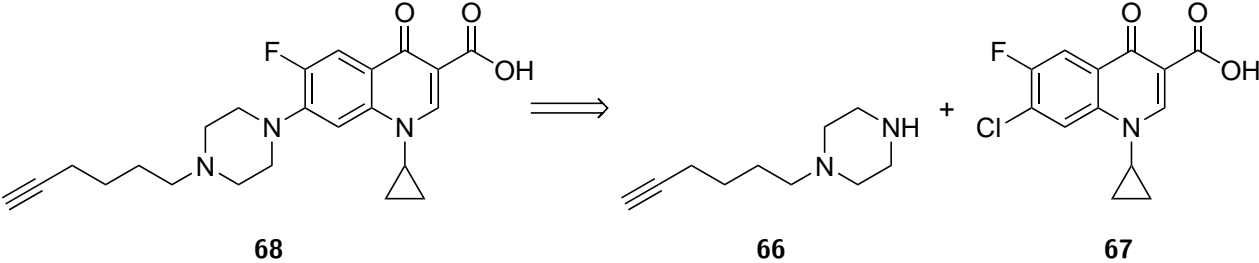


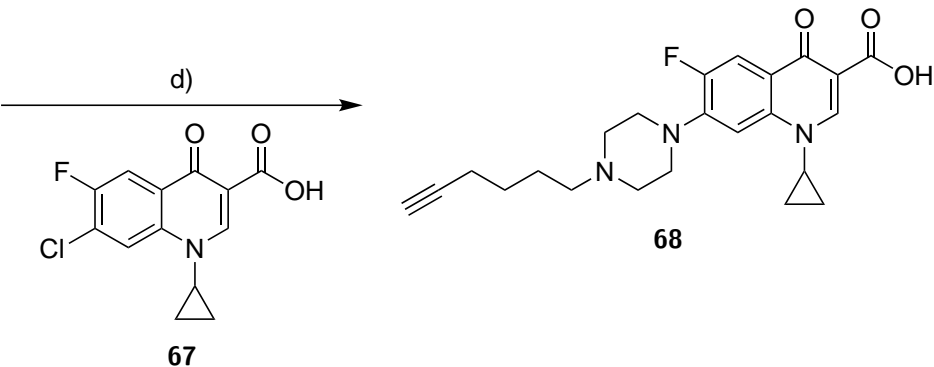
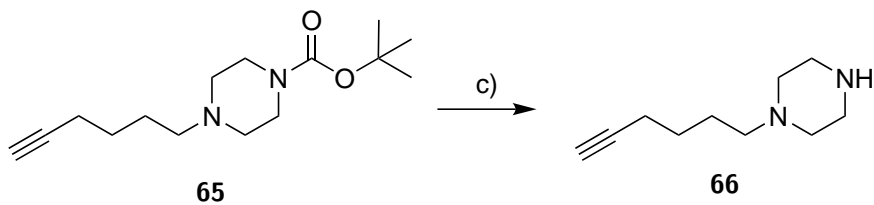
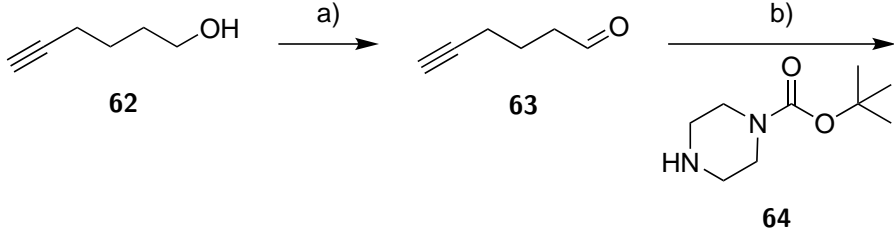


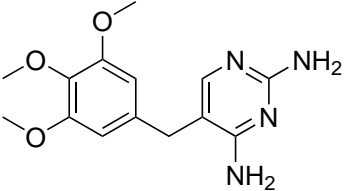




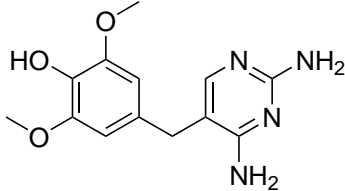
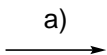




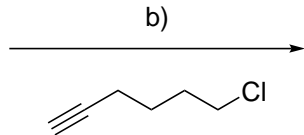




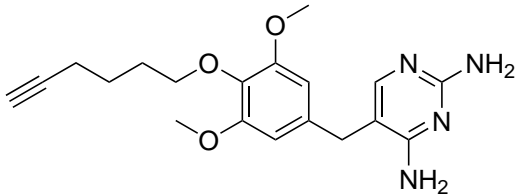
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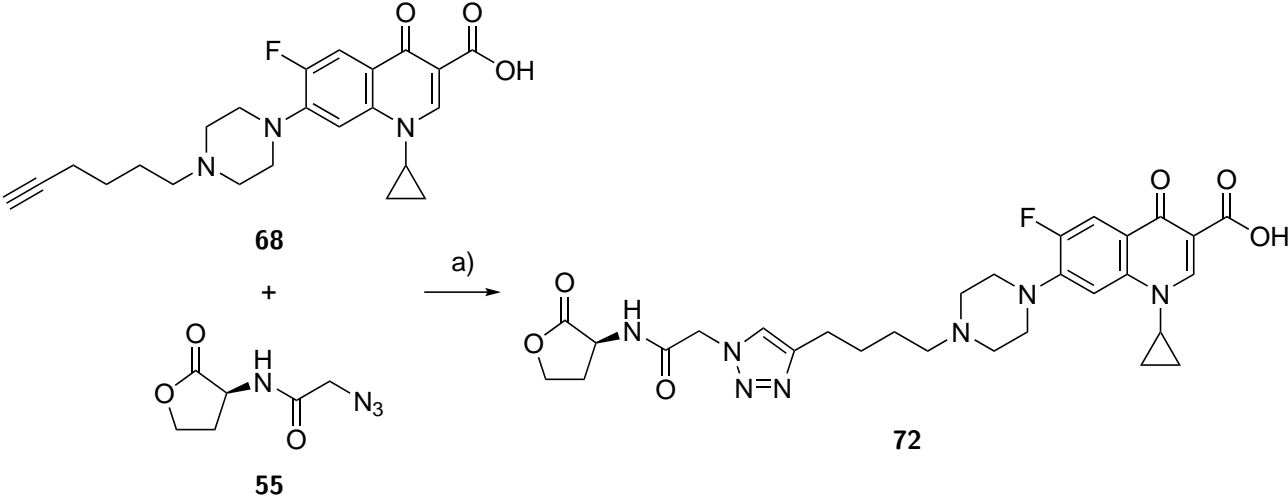
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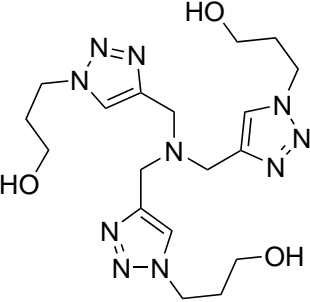


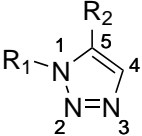
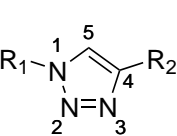
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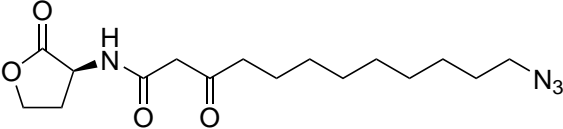


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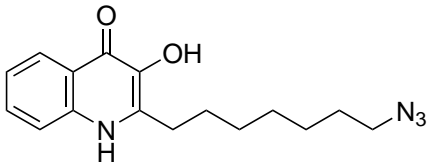




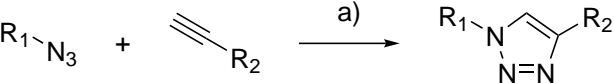


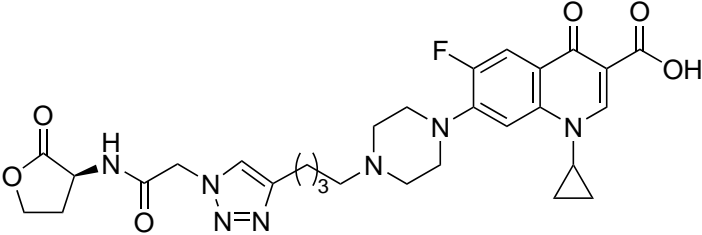


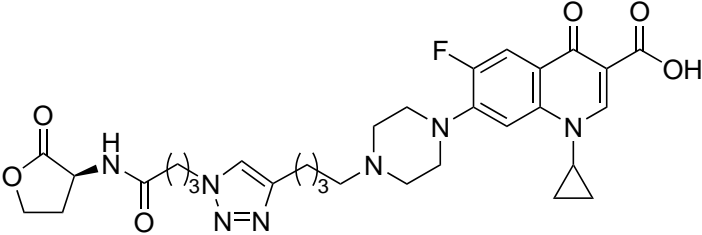
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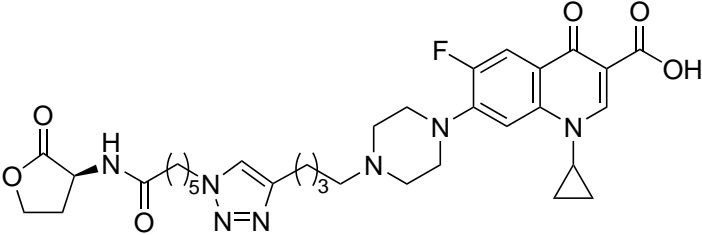


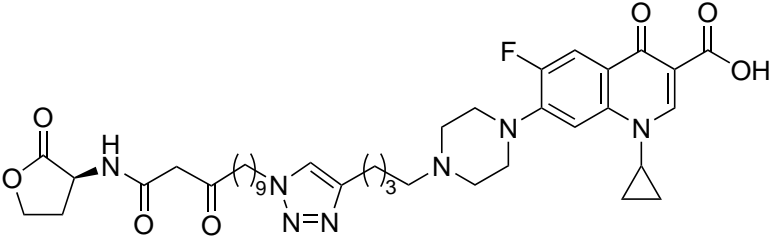
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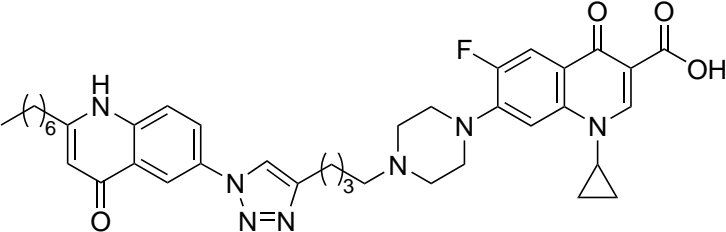


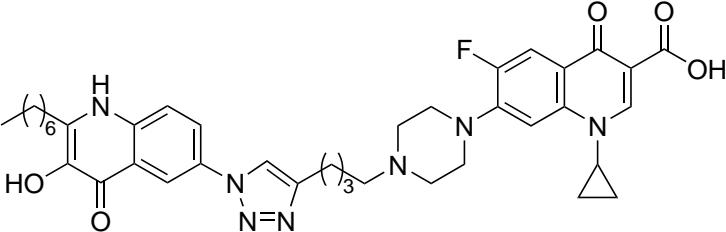


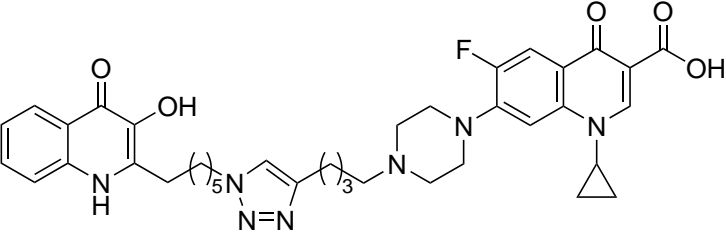


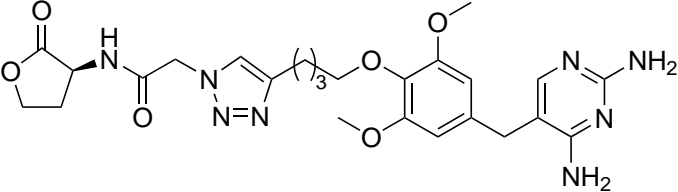


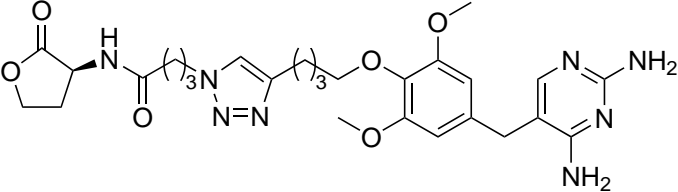


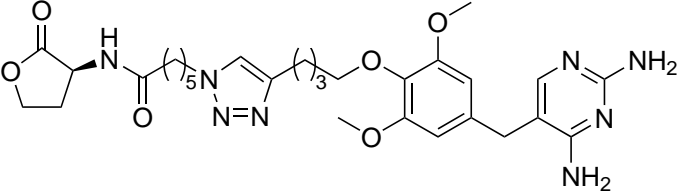


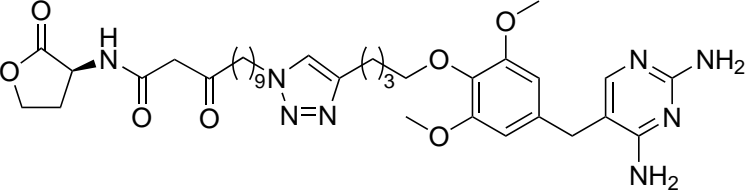


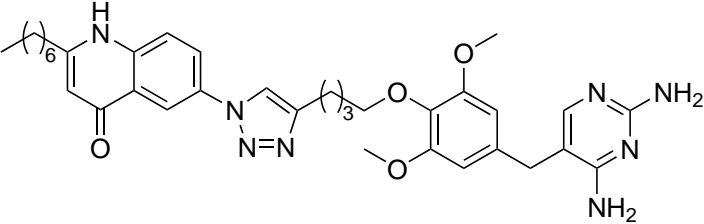


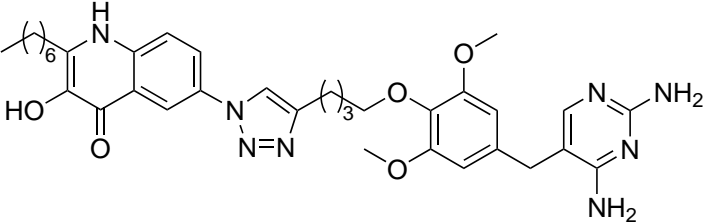


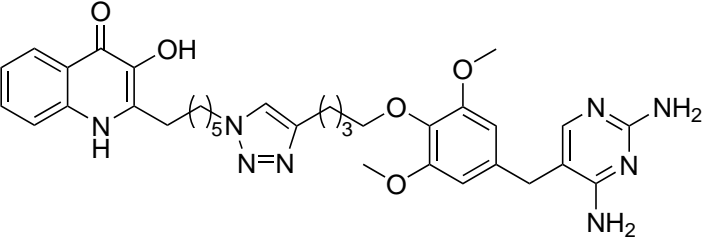


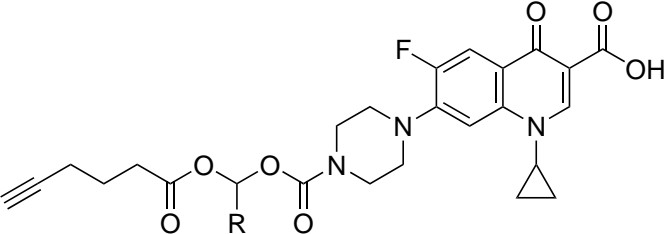






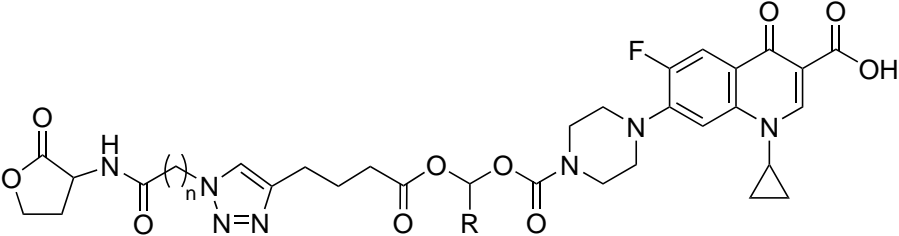






$R = H$ **90**

$R = Me$ **91**



$n = 1, \text{ R} = \text{H}$ **92**

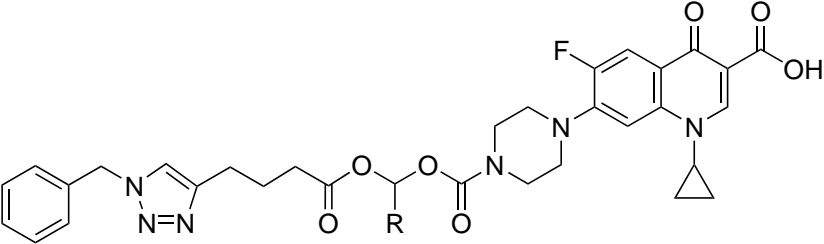
$n = 3, \text{ R} = \text{H}$ **93**

$n = 5, \text{ R} = \text{H}$ **94**

$n = 1, \text{ R} = \text{Me}$ **95**

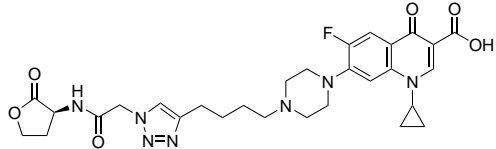
$n = 3, \text{ R} = \text{Me}$ **96**

$n = 5, \text{ R} = \text{Me}$ **97**

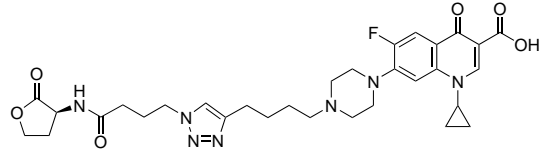


$\text{R} = \text{H}$ **98**

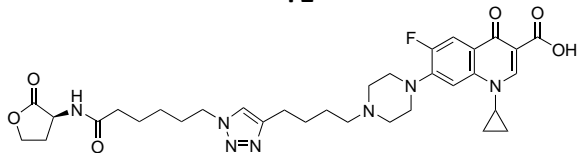
$\text{R} = \text{Me}$ **99**



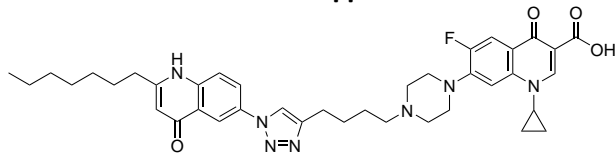
72



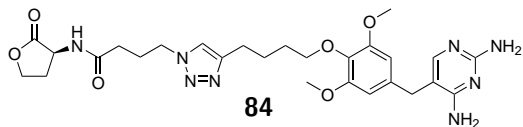
77



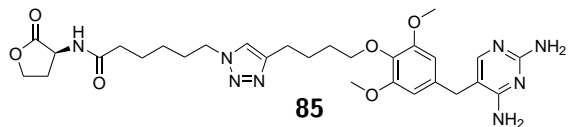
78



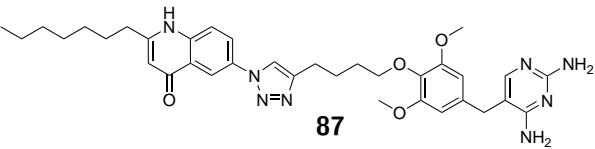
80



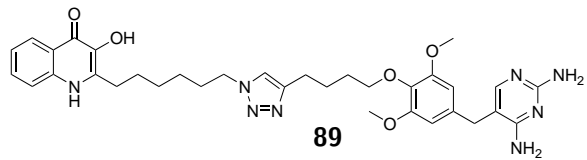
84



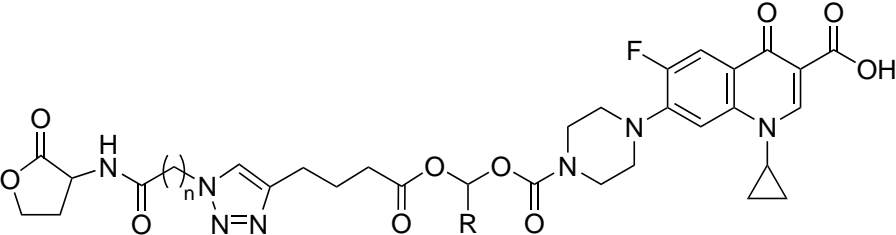
85



87



89



$n = 1, R = H$ **92**

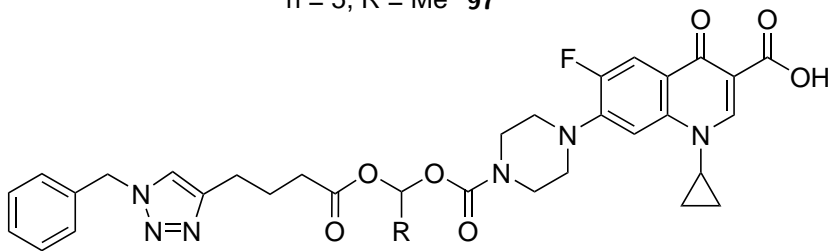
$n = 3, R = H$ **93**

$n = 5, R = H$ **94**

$n = 1, R = Me$ **95**

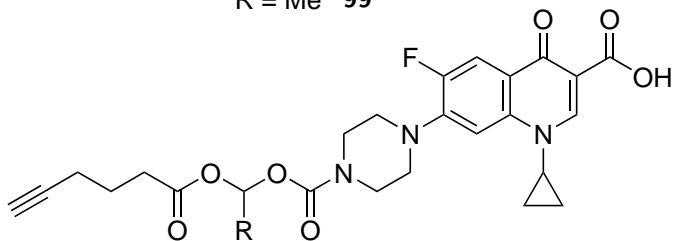
$n = 3, R = Me$ **96**

$n = 5, R = Me$ **97**



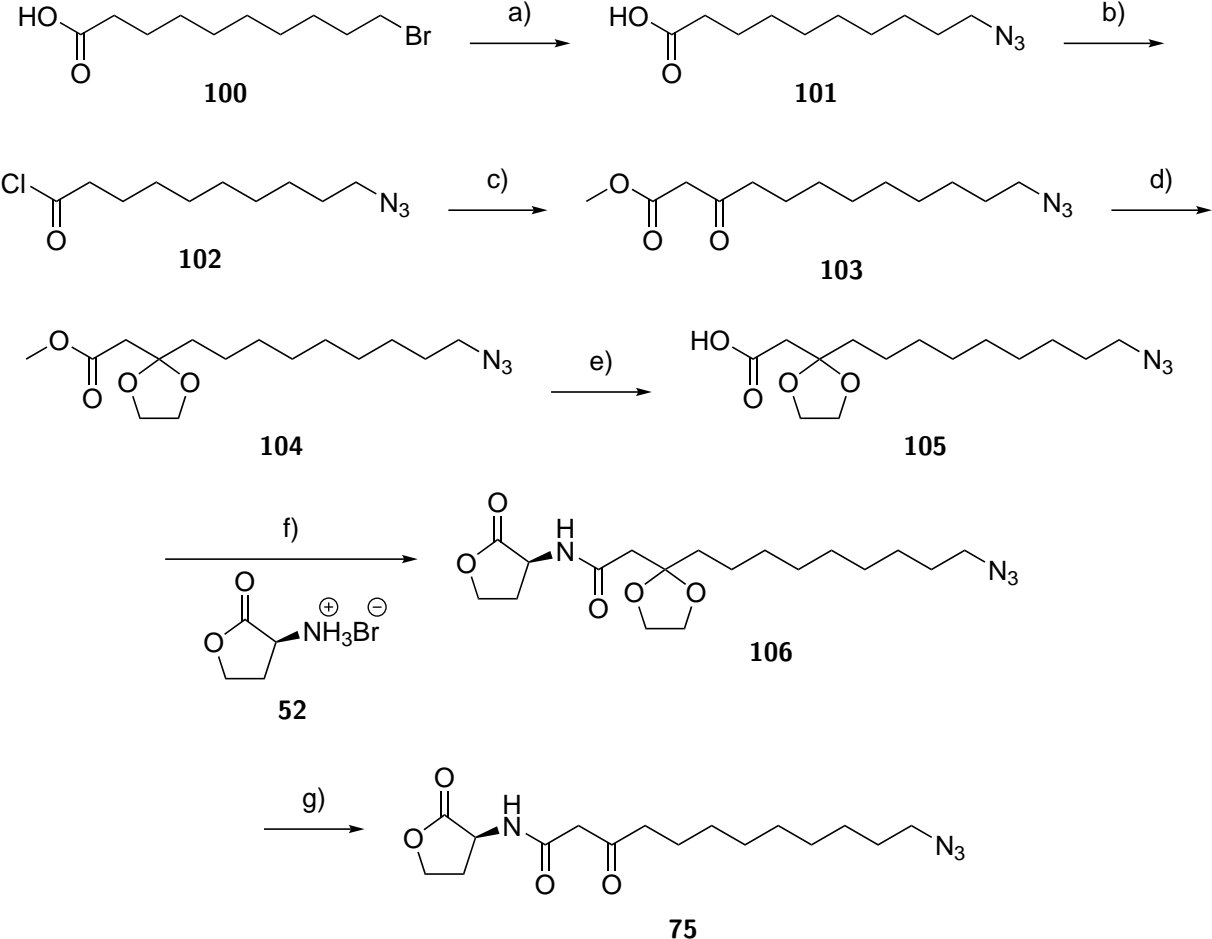
$R = H$ **98**

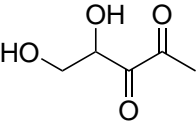
$R = Me$ **99**



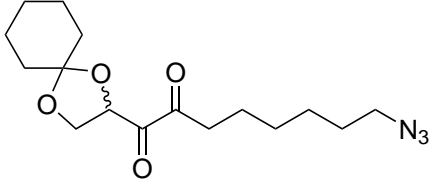
$R = H$ **90**

$R = Me$ **91**

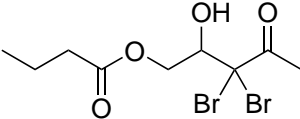




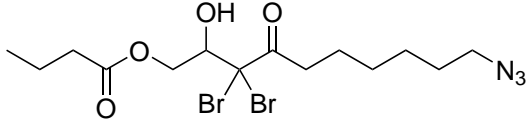
Al-2
23



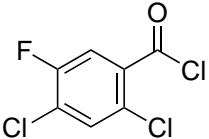
107



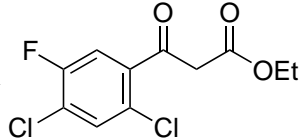
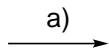
108



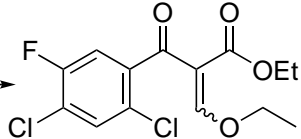
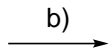
109



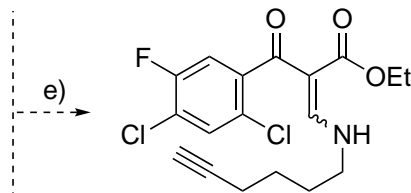
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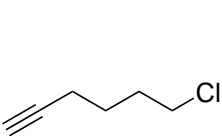
111



112

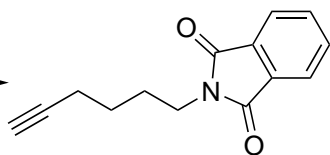


116



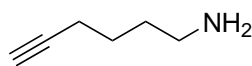
113

c)

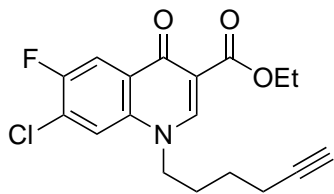


114

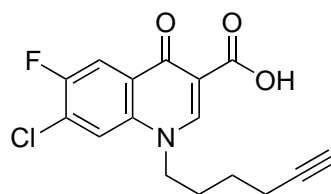
d)



115

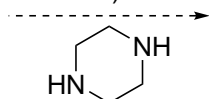


117

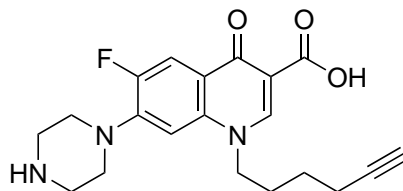


118

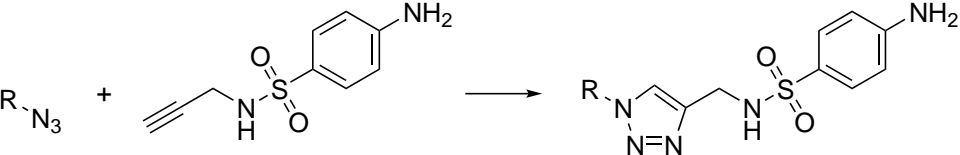
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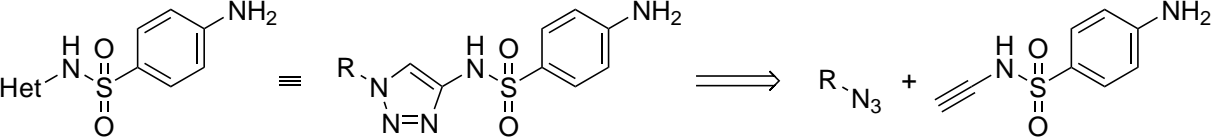


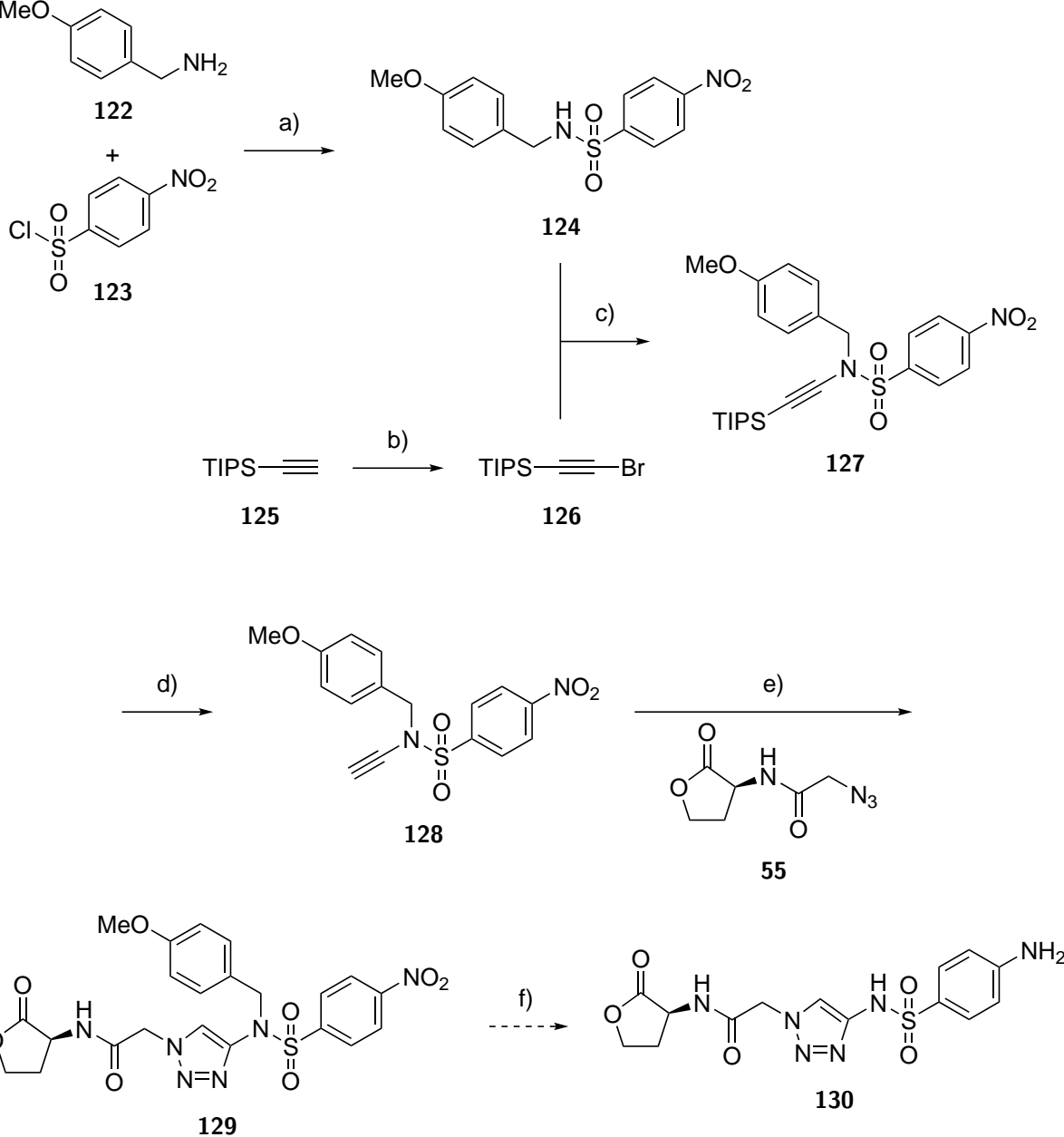
119

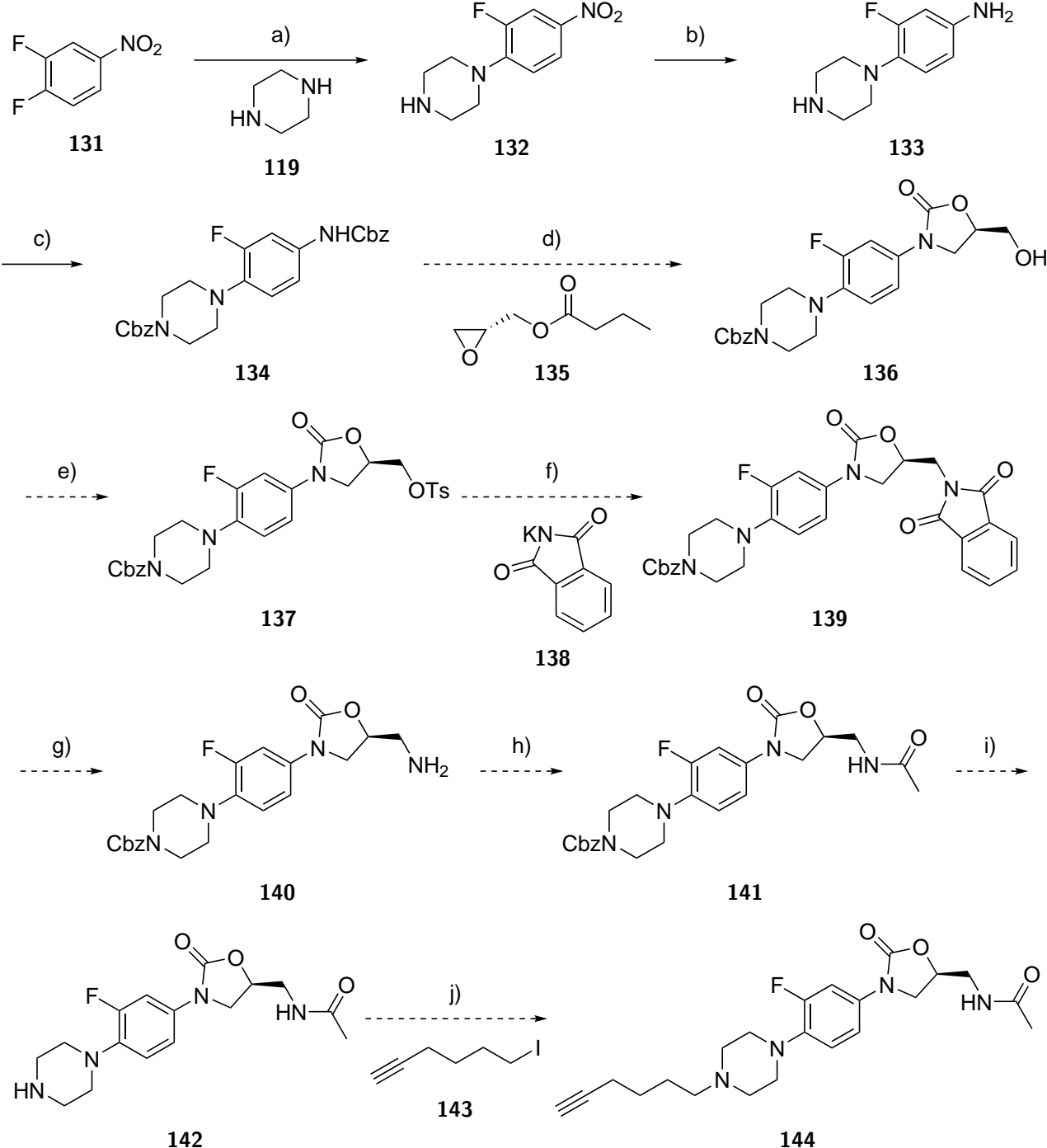


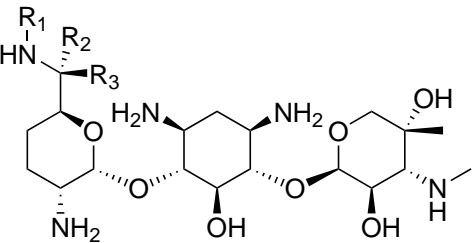
120



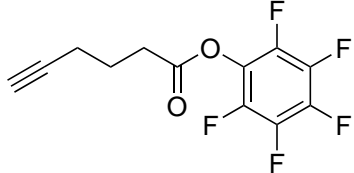






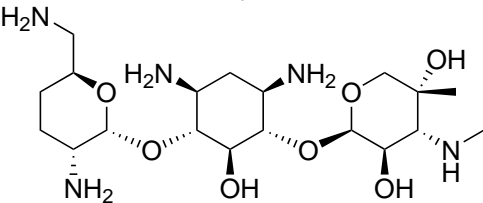


Gentamicin	R_1	R_2	R_3
C1	Me	Me	H
C1a	H	H	H
C2	H	Me	H
C2a	H	H	Me
C2b	Me	H	H

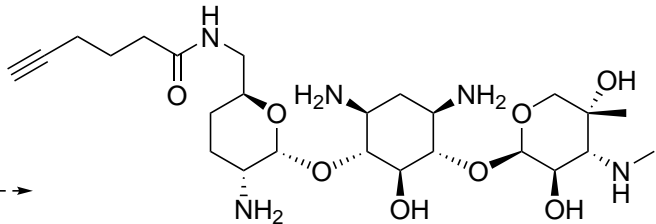
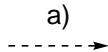


145

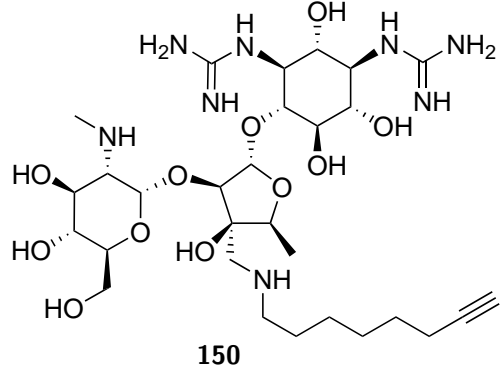
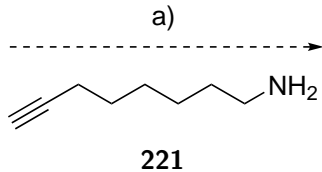
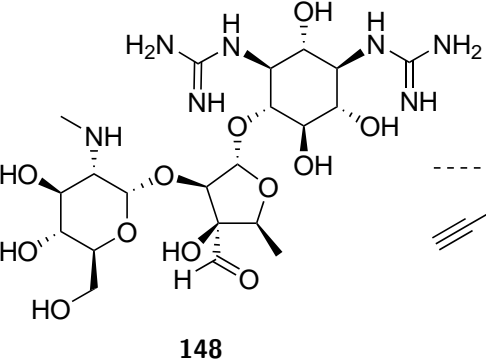
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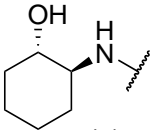
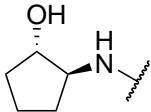
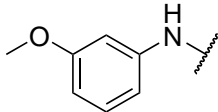
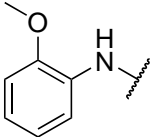
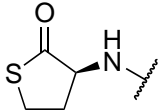


146

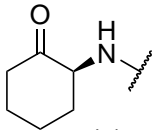


147



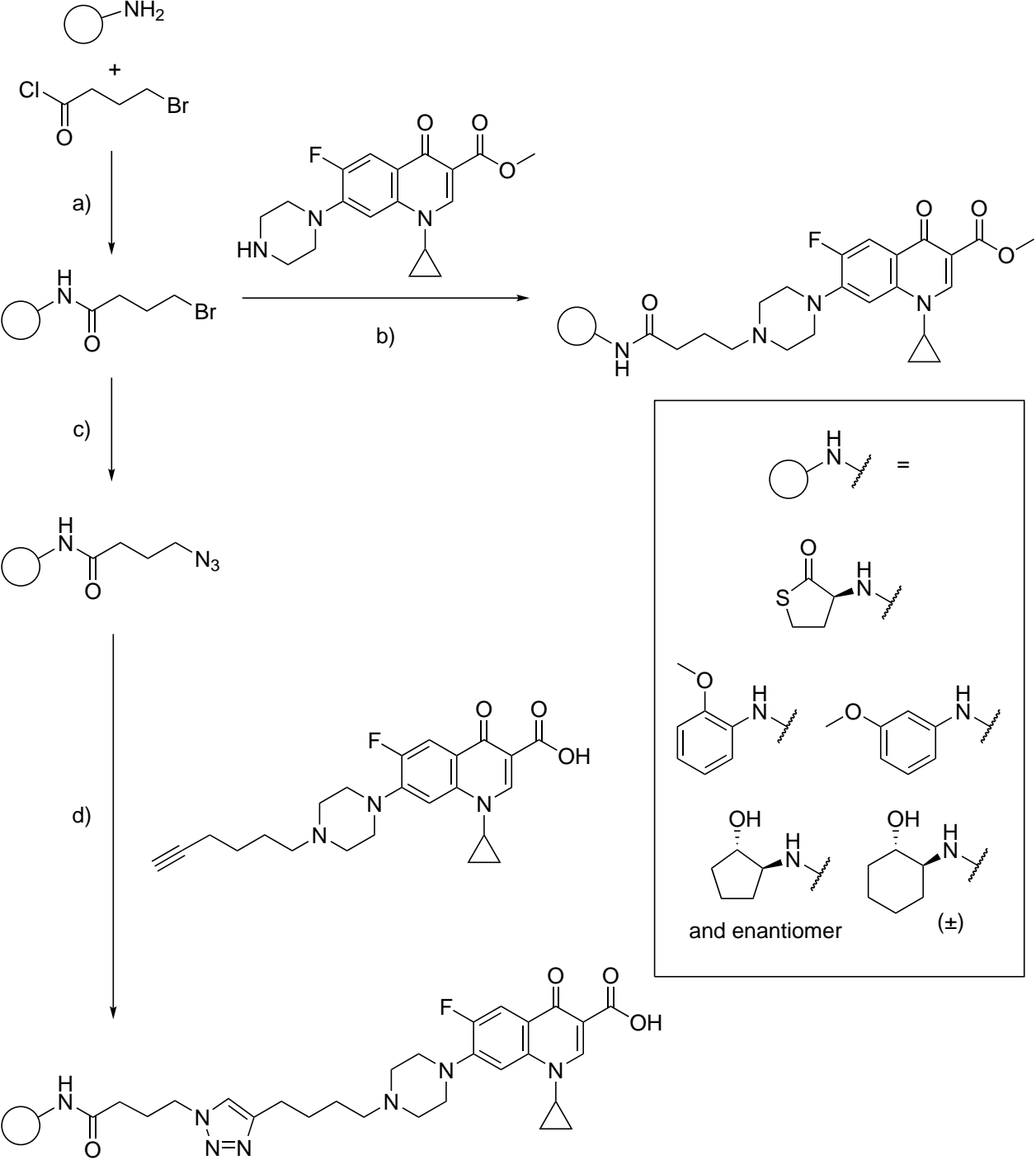


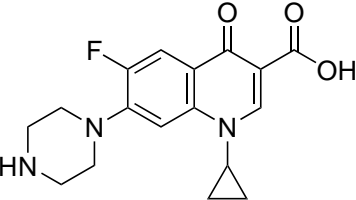
(±)



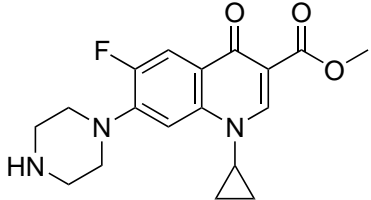
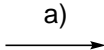
(±)

and enantiomer

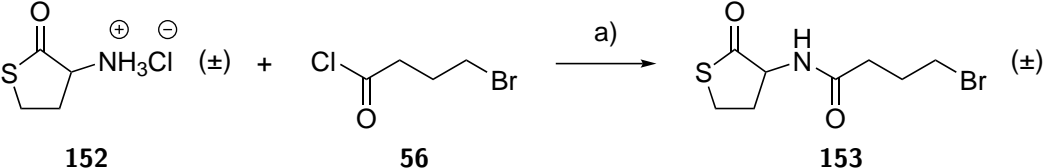


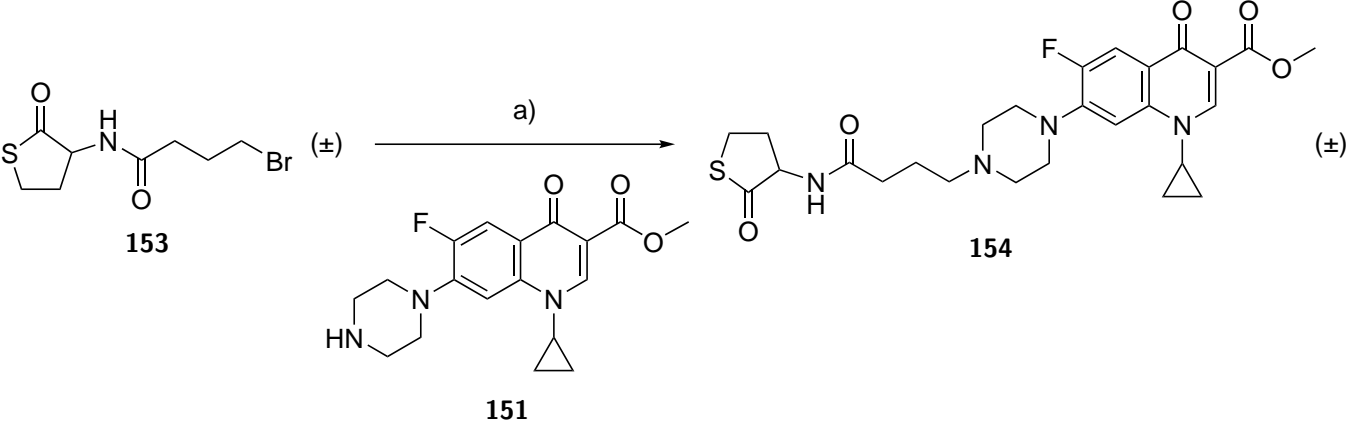


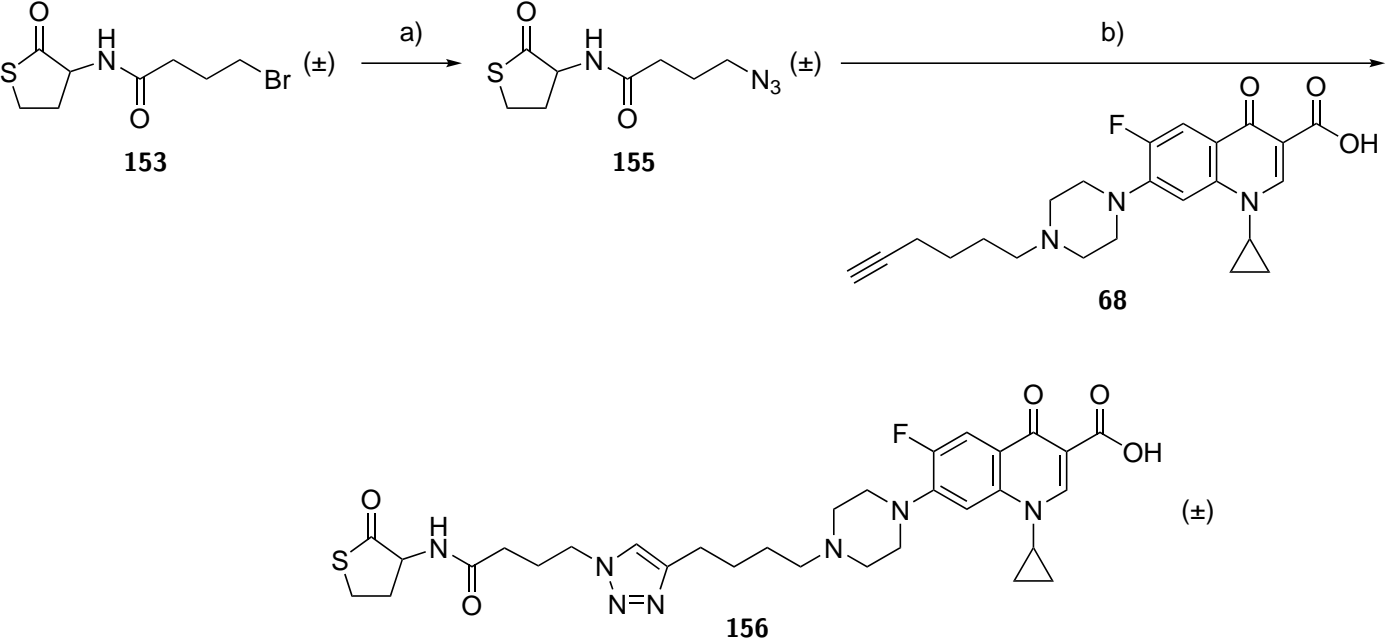
24

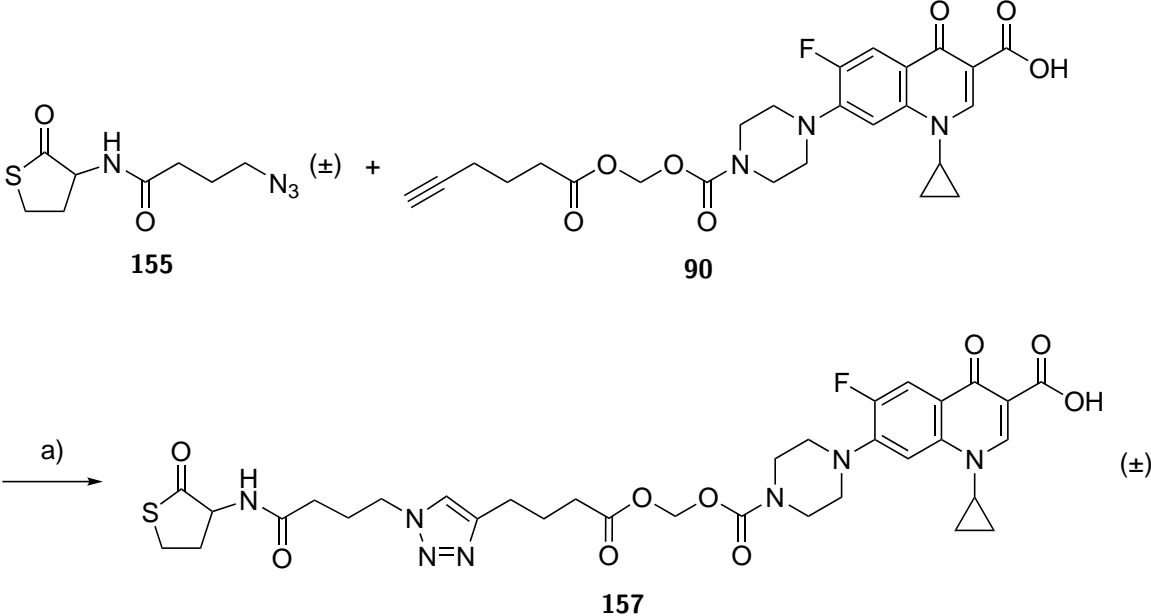


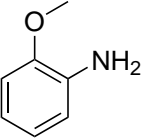
151





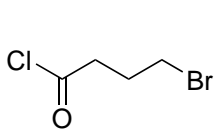




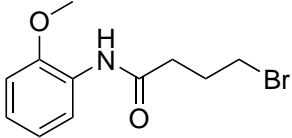
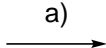


158

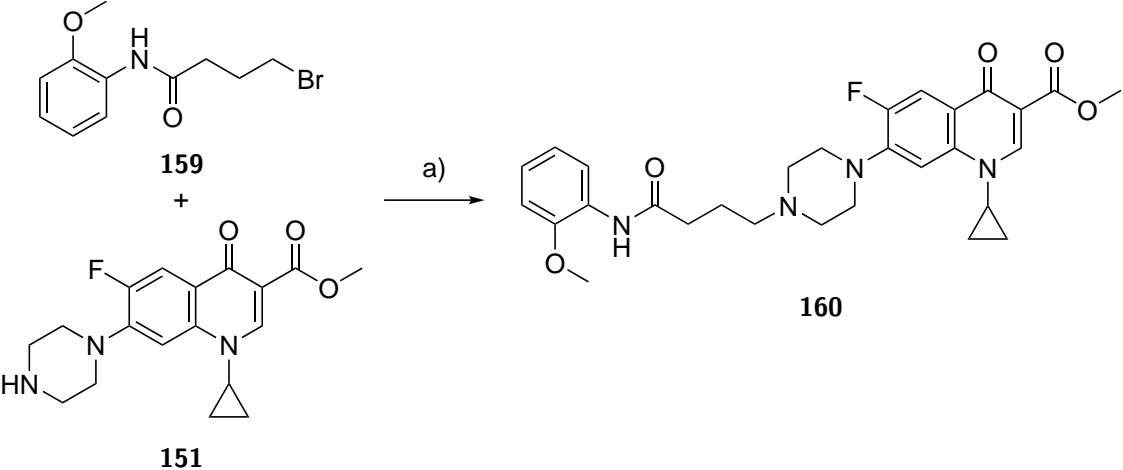
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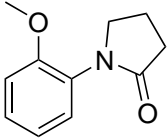
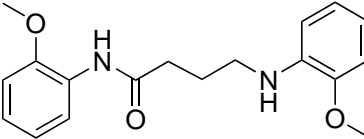
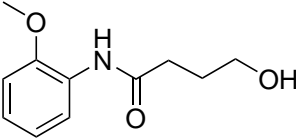


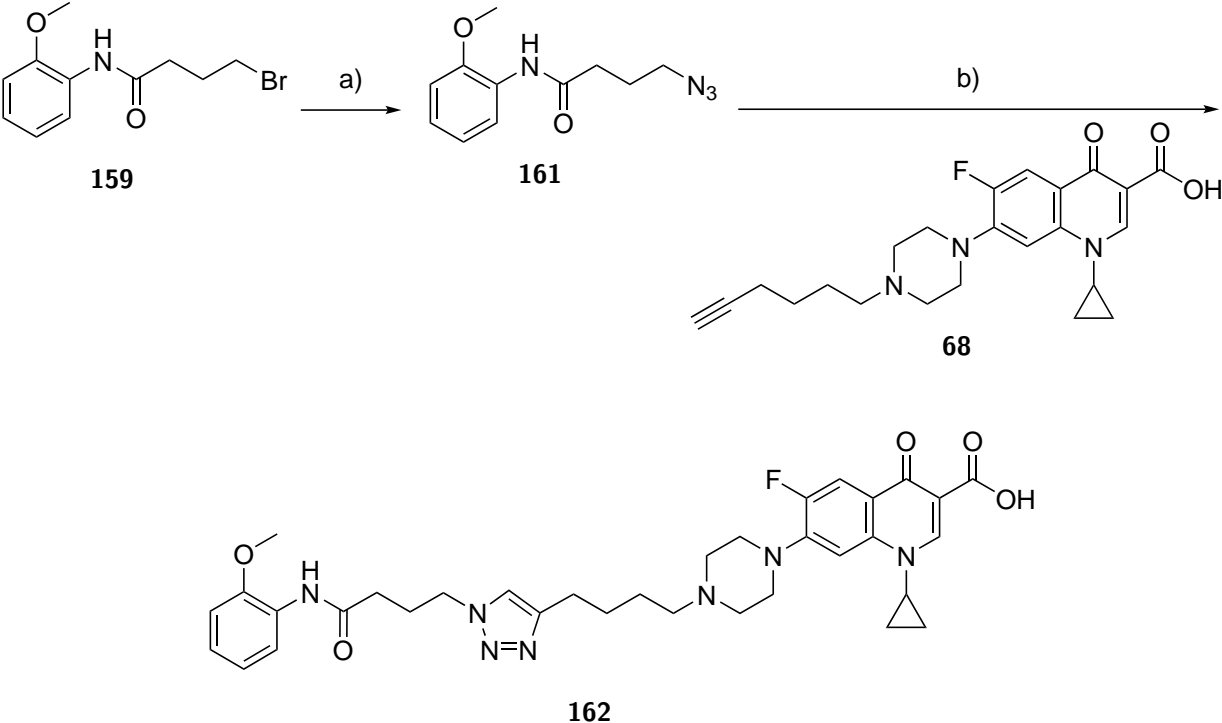
56

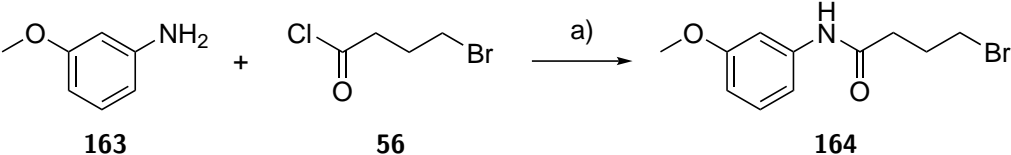


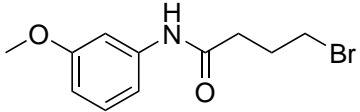
159





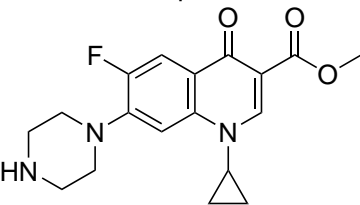




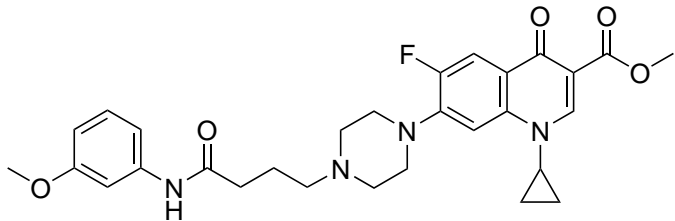
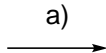


164

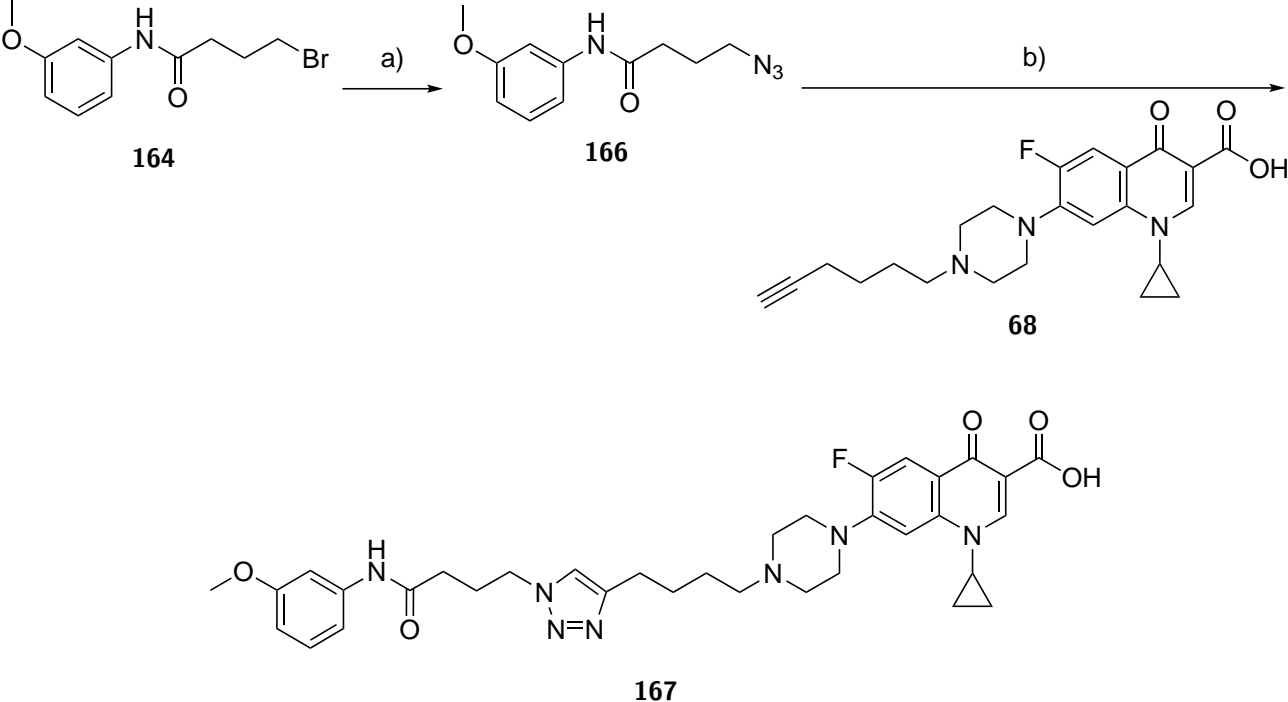
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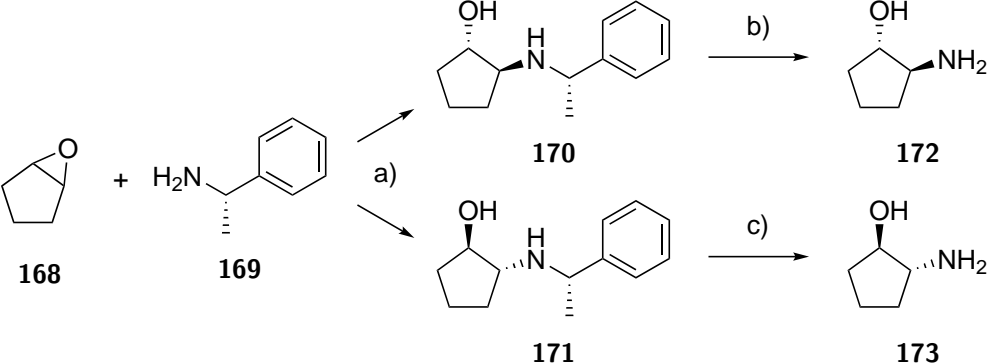


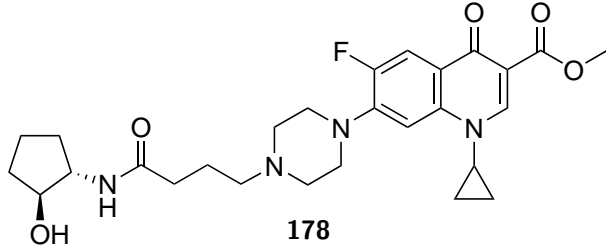
151



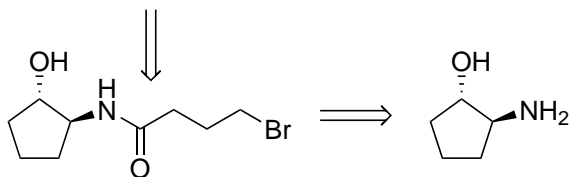
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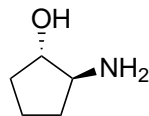




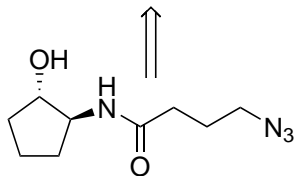
178
179



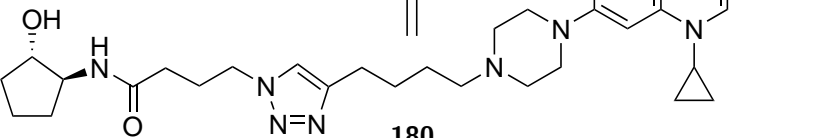
174
175



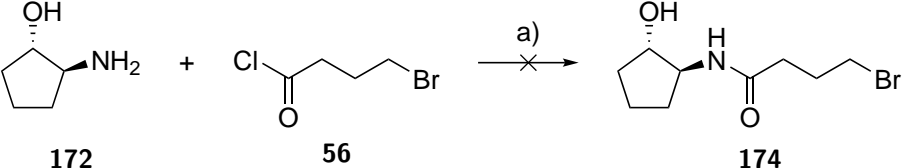
172
173

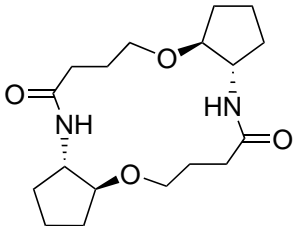
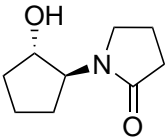
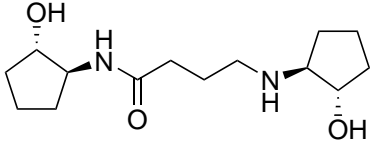


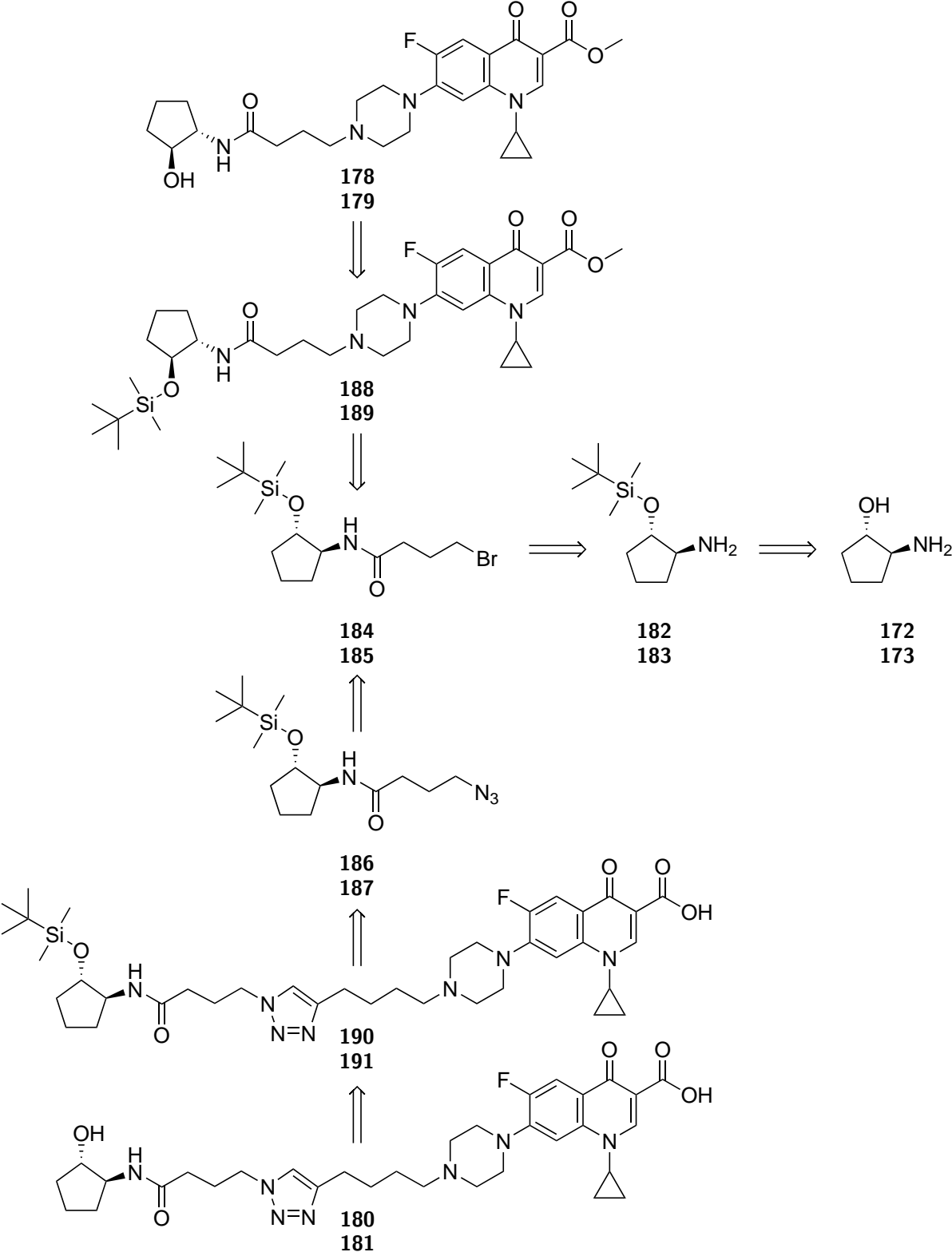
176
177

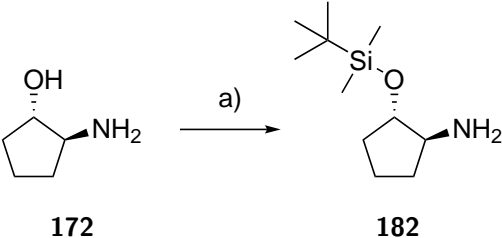


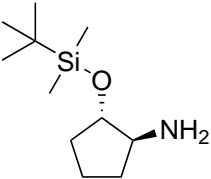
180
181





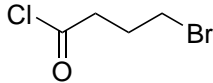




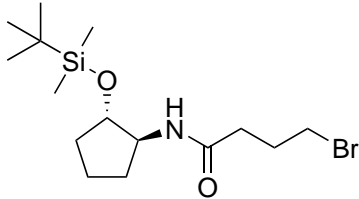
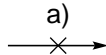


182

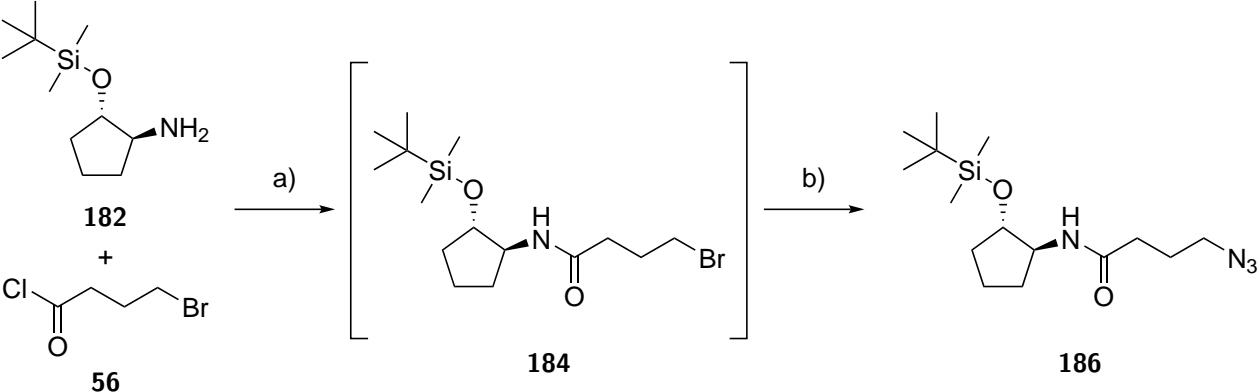
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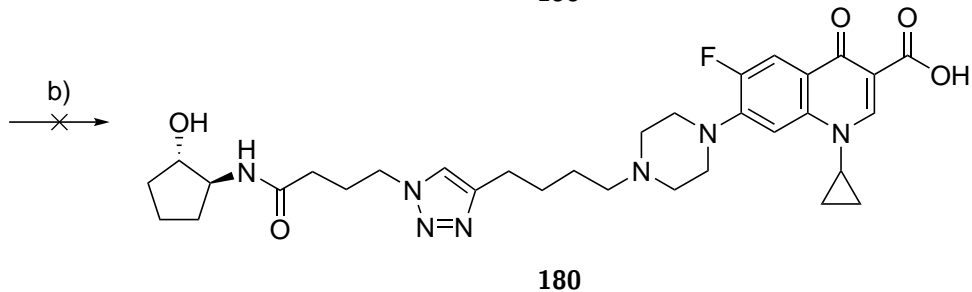
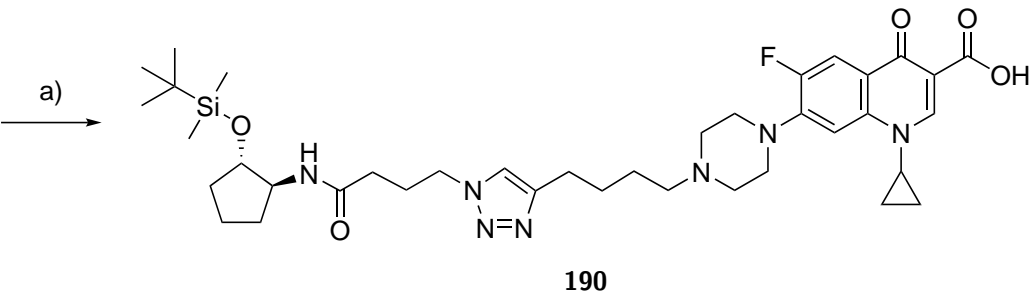
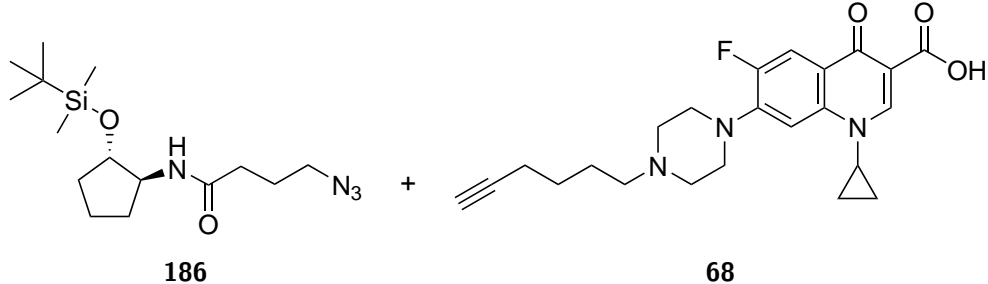


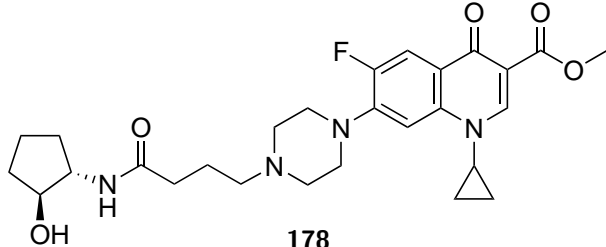
56



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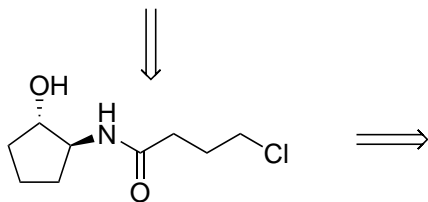






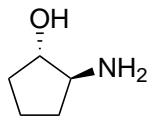
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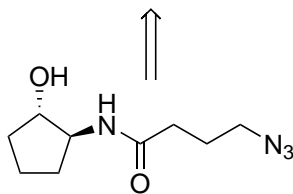
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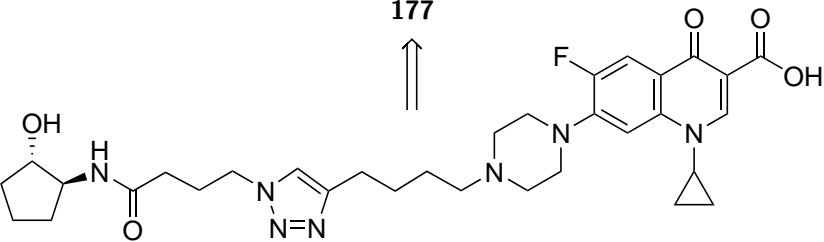
172

173



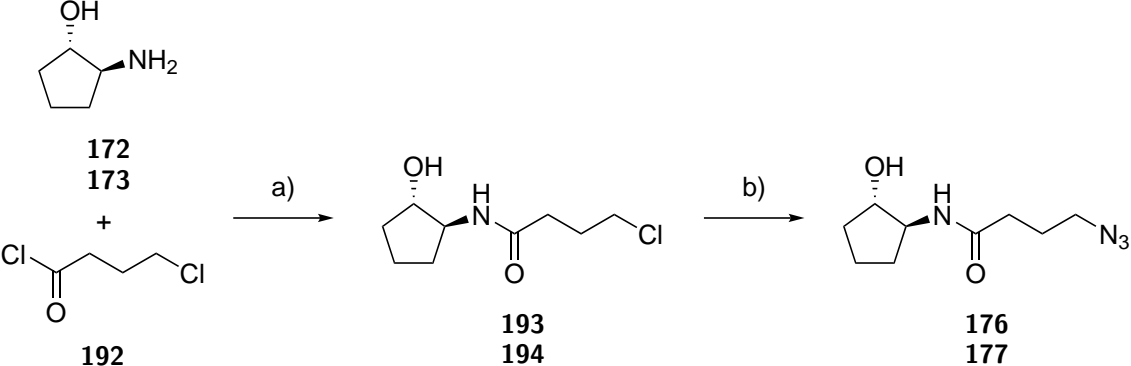
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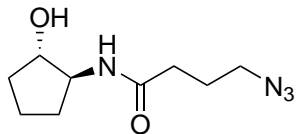
177



180

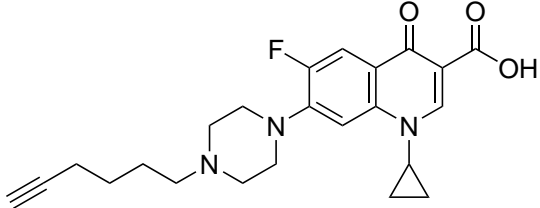
181





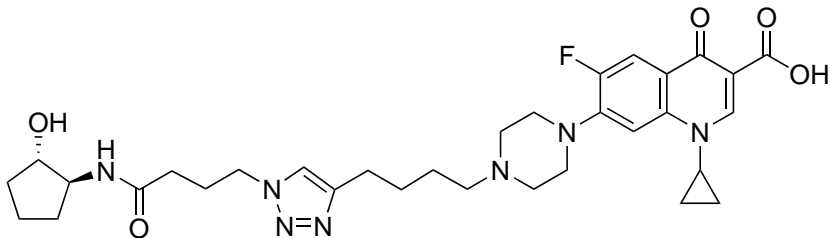
176
177

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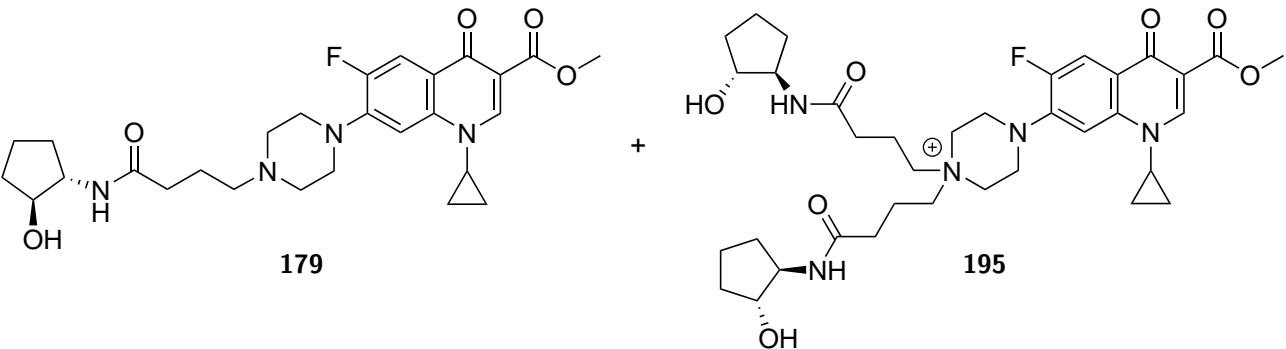
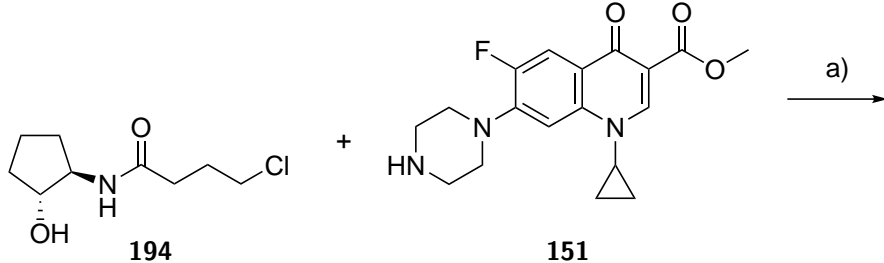


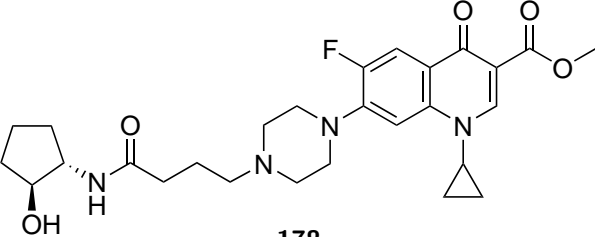
68

a) →



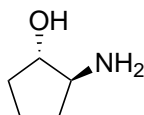
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181





178

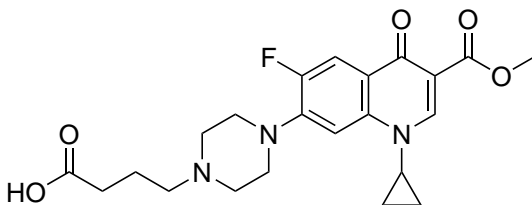
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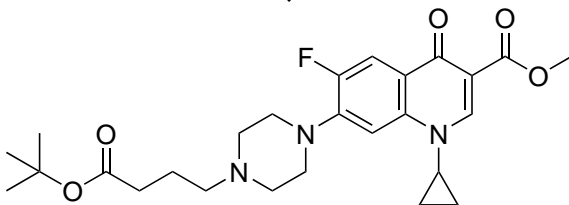
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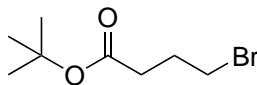
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198

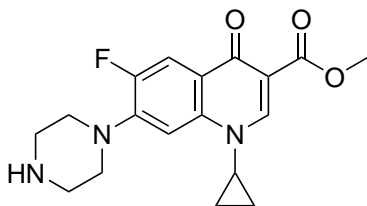


197

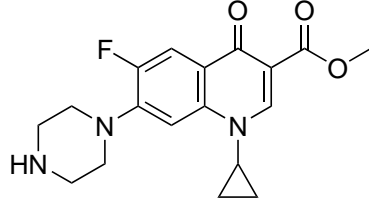


196

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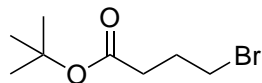


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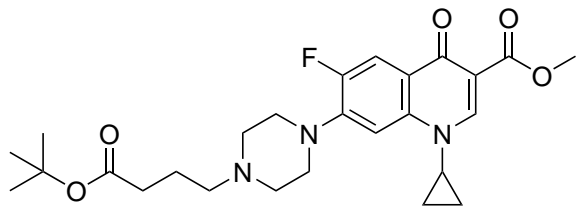
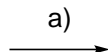


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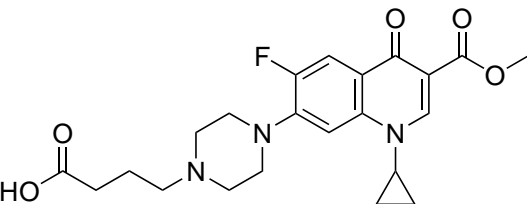
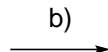
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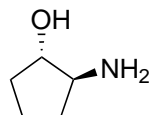
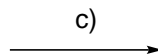
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197

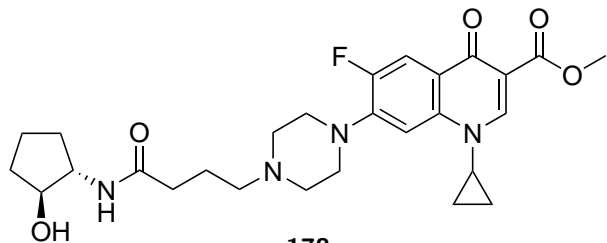


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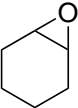
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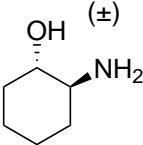
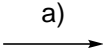


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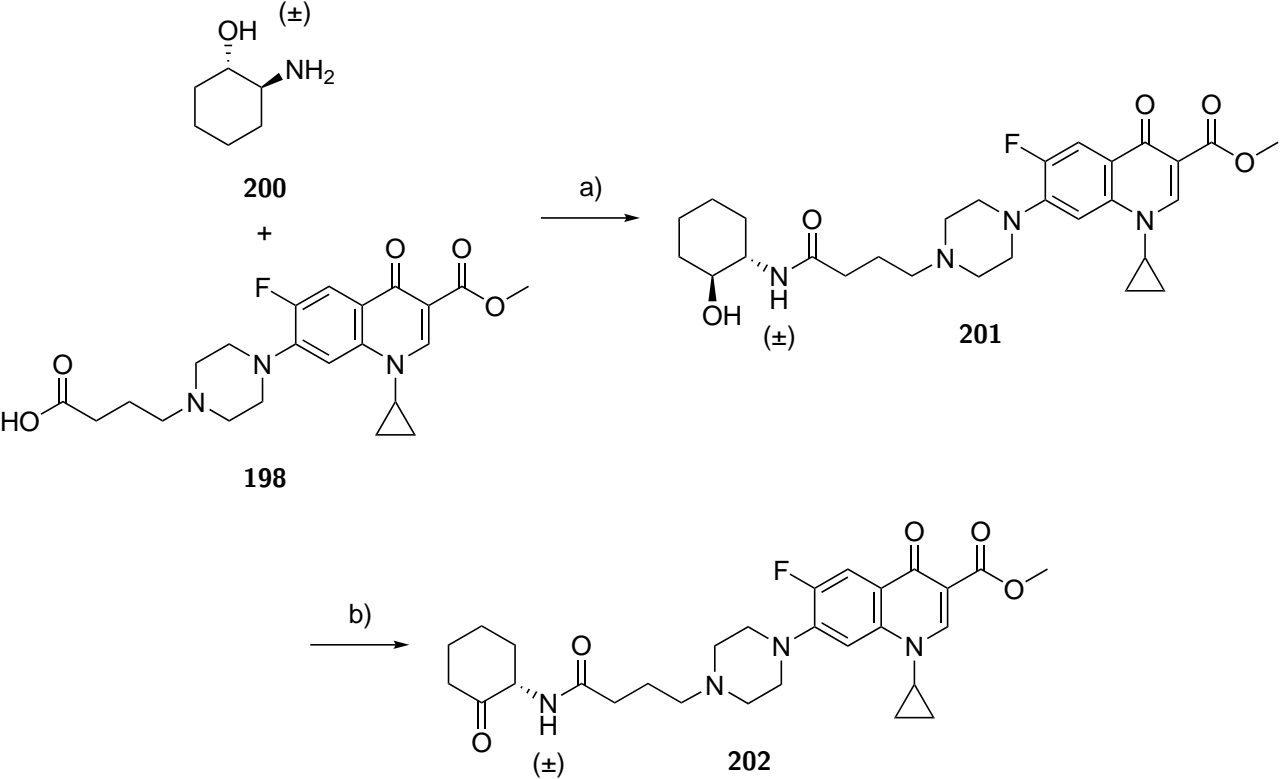
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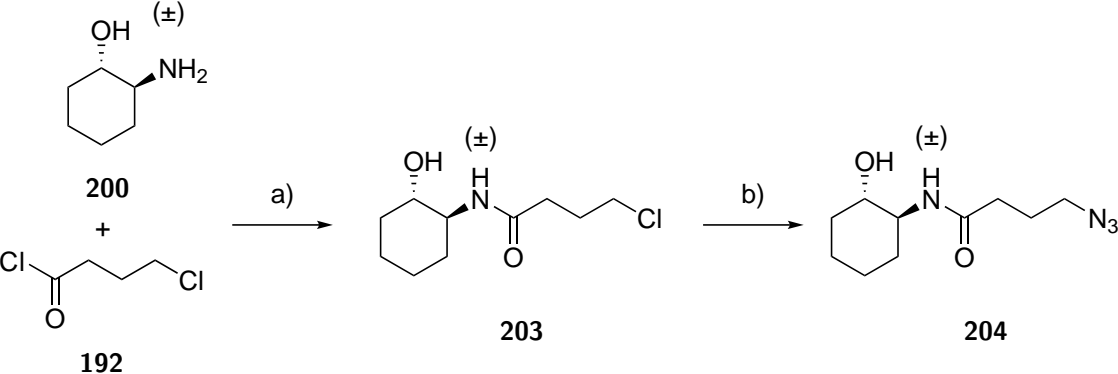


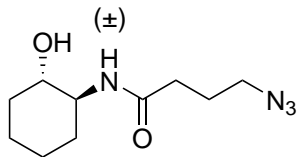
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200

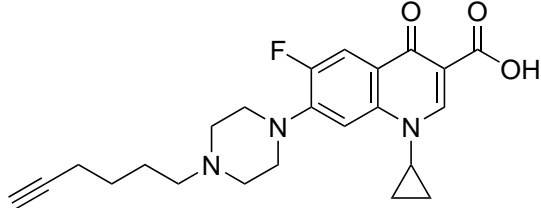






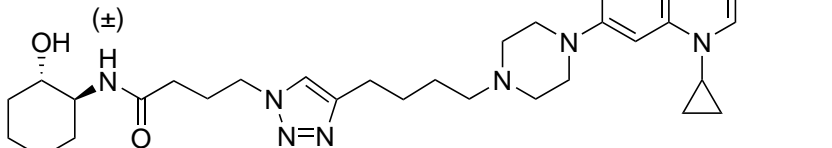
204

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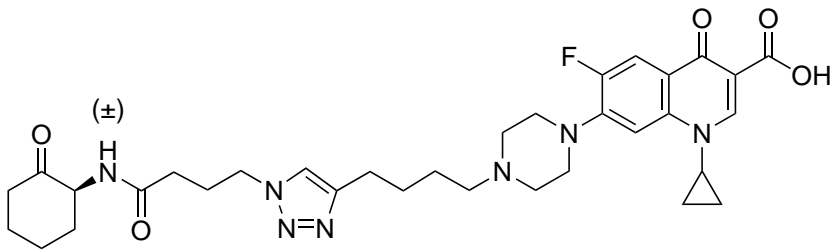
68

a)

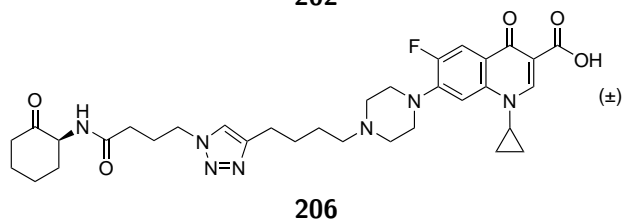
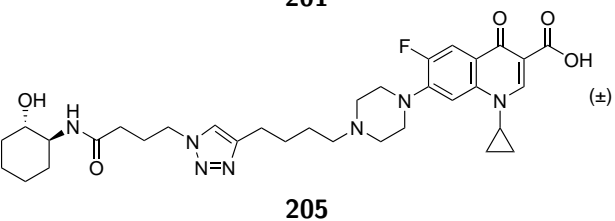
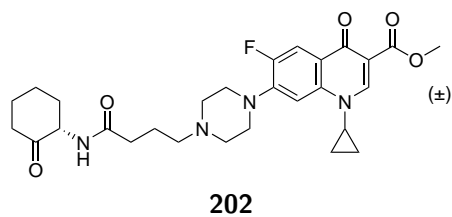
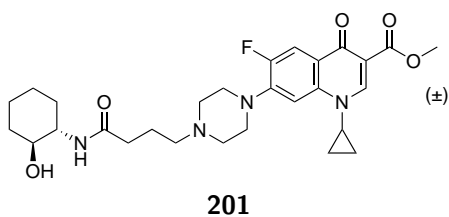
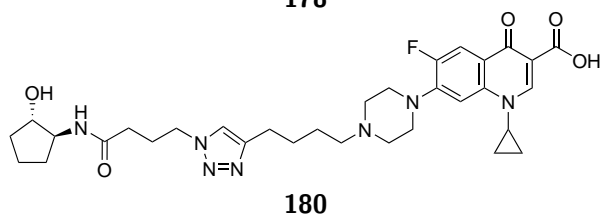
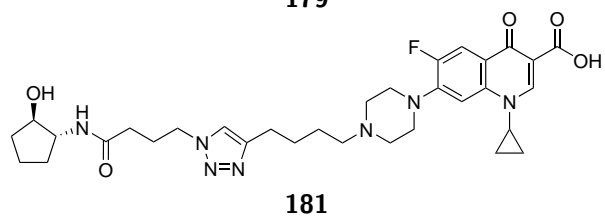
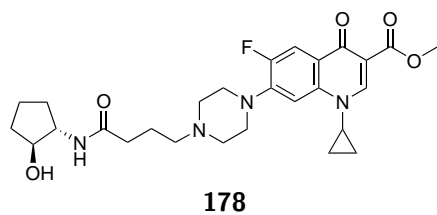
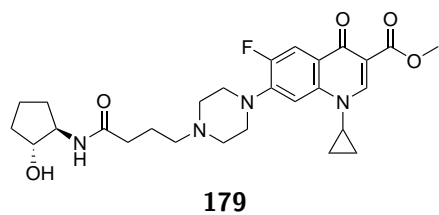
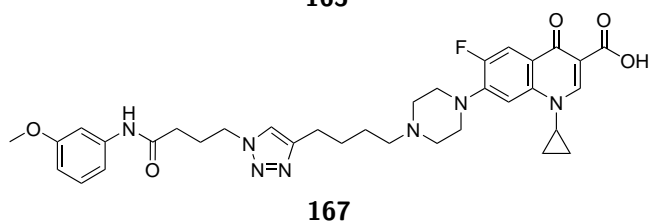
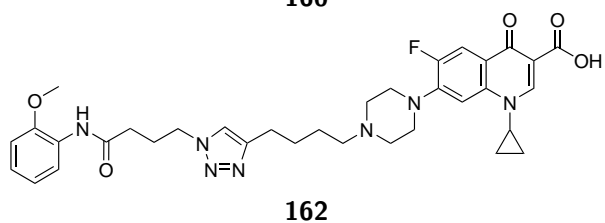
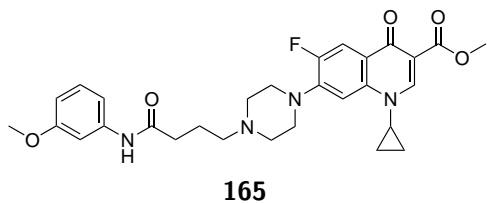
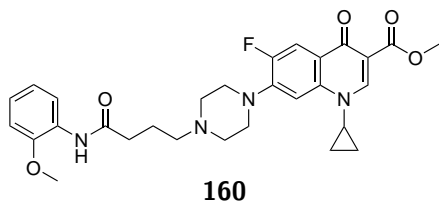
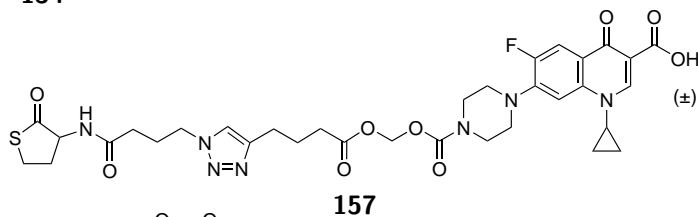
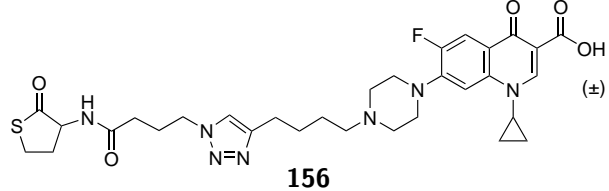
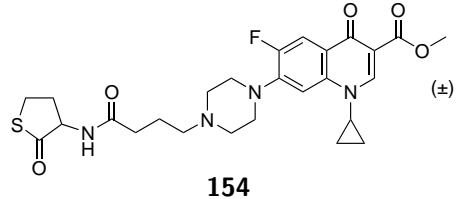


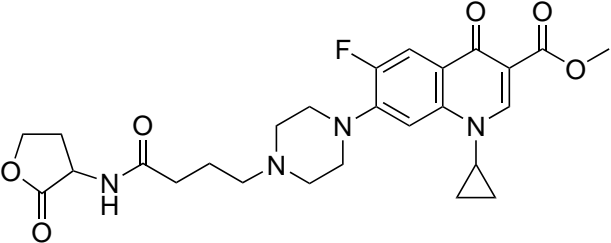
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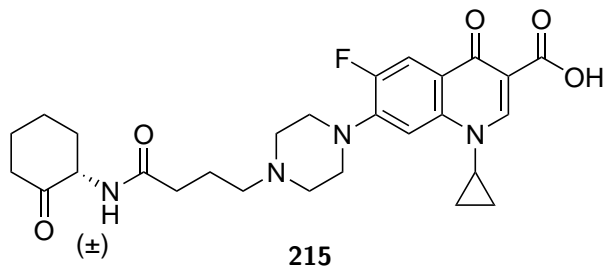
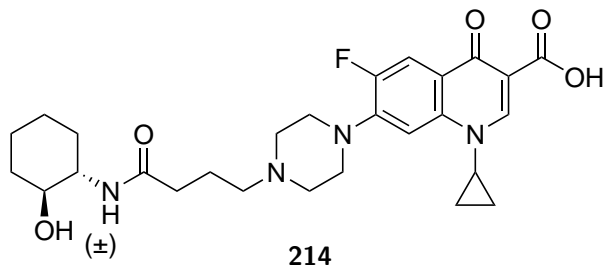
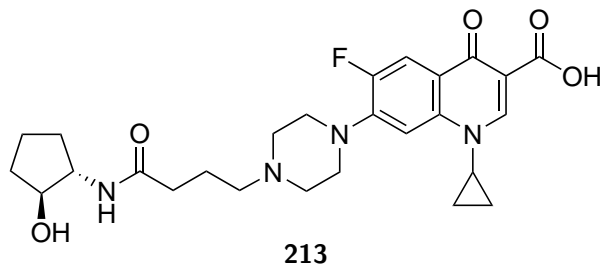
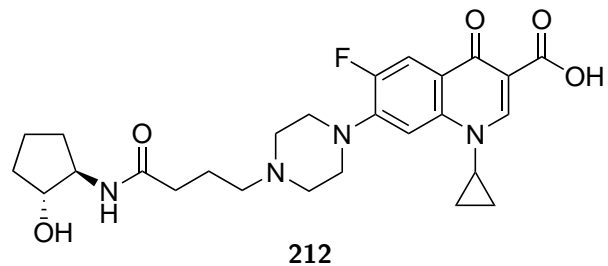
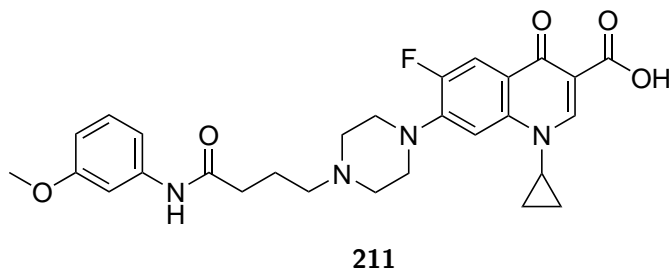
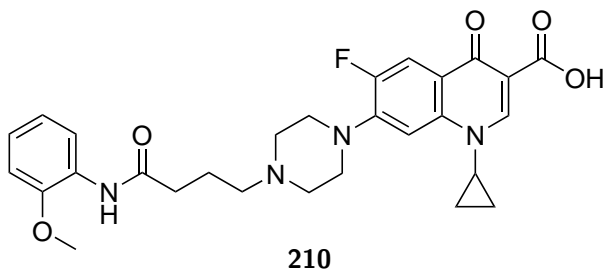
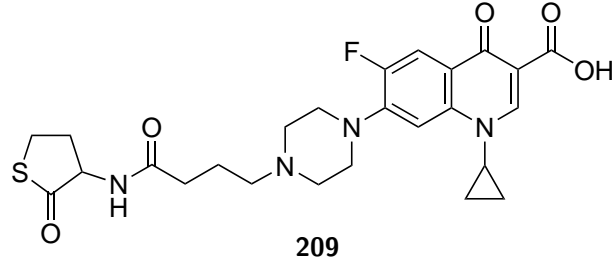
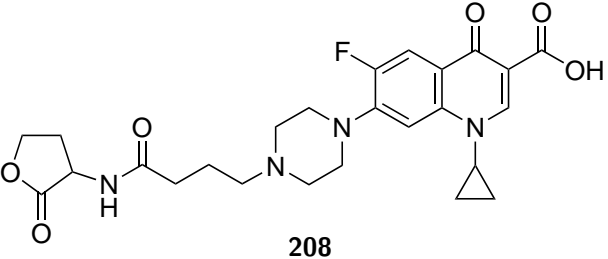
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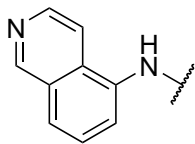
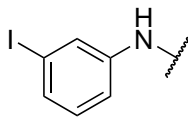
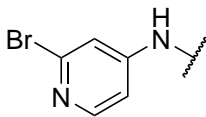
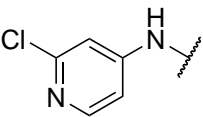
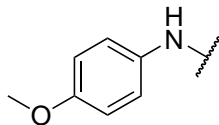
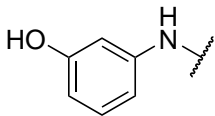
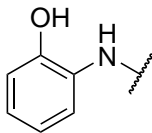
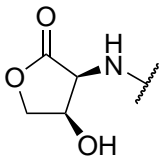
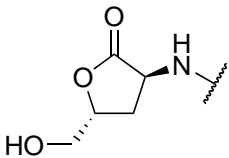
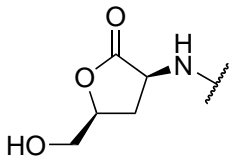
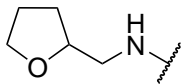
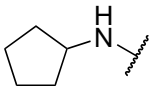
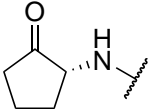
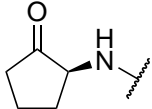


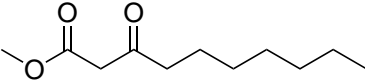
206



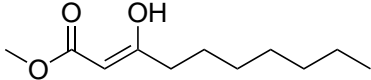




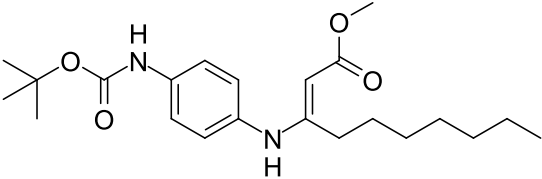


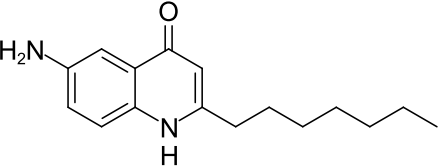


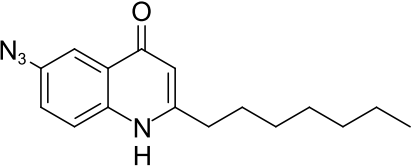
33
92 %

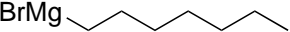


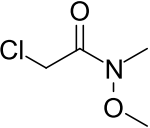
34
8 %

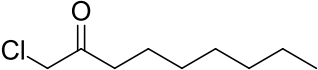


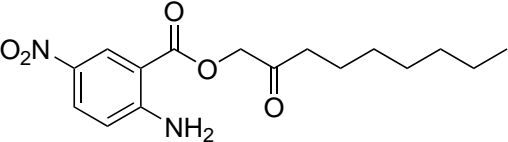


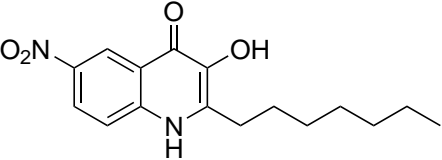


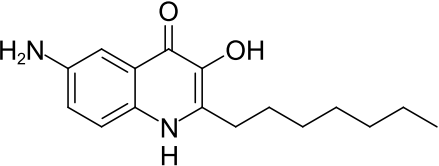


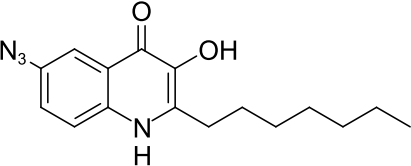


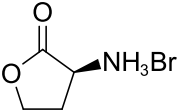


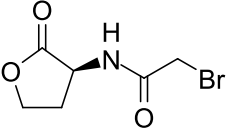


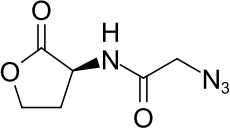


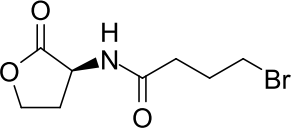


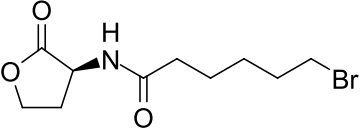


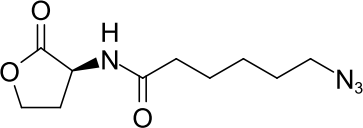


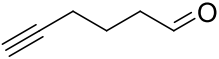


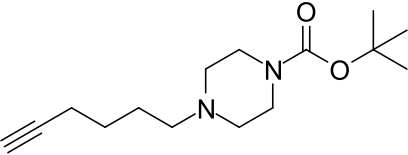


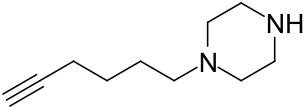


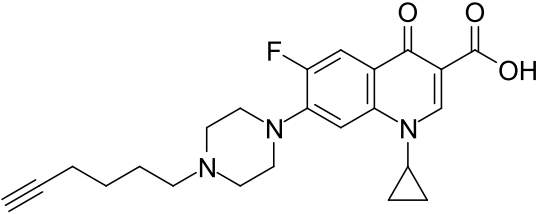


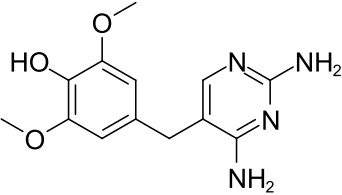


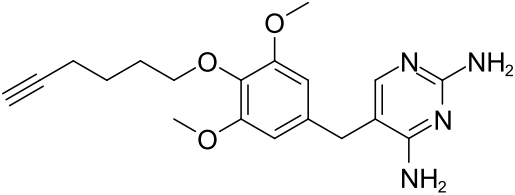


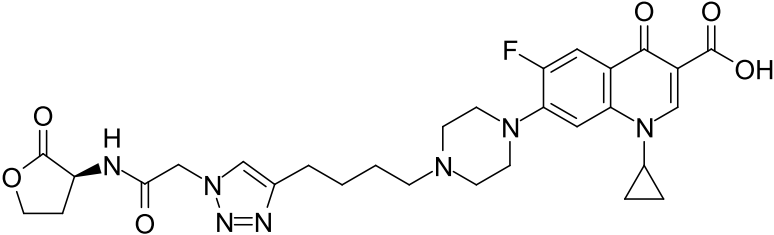


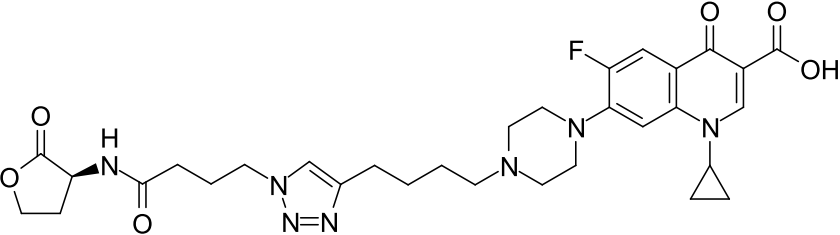


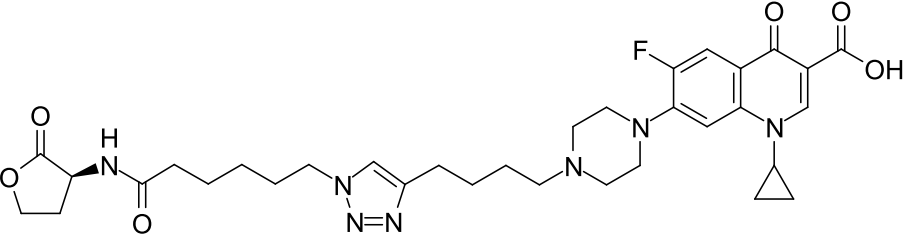


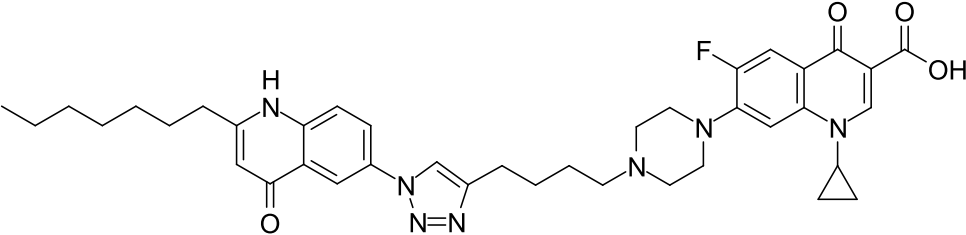


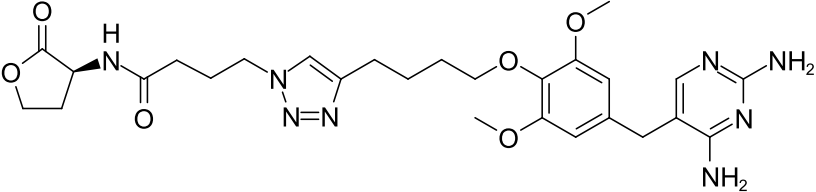


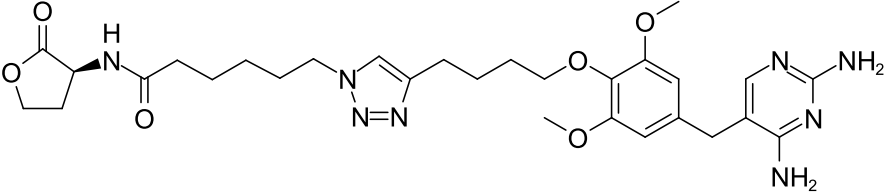


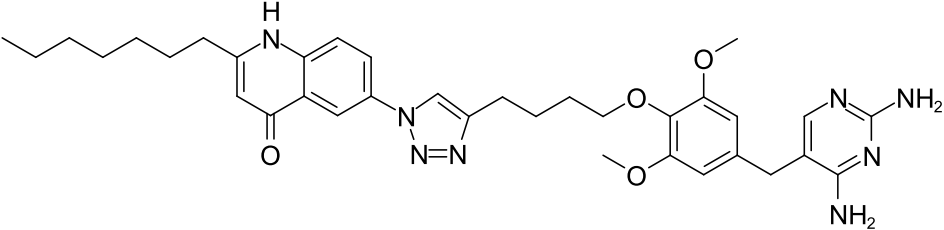


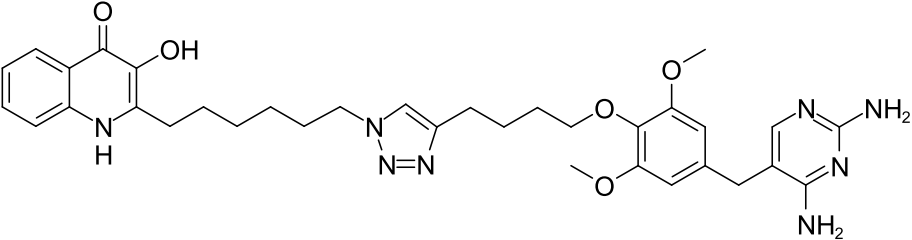


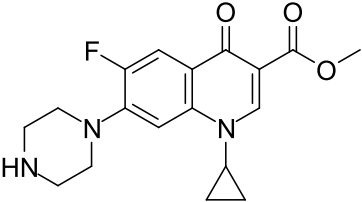


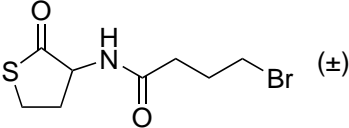


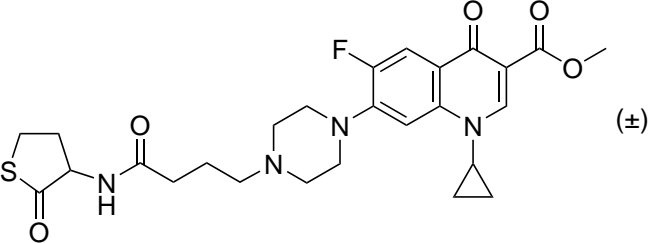


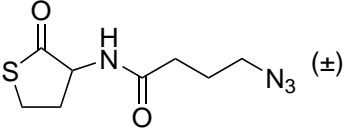


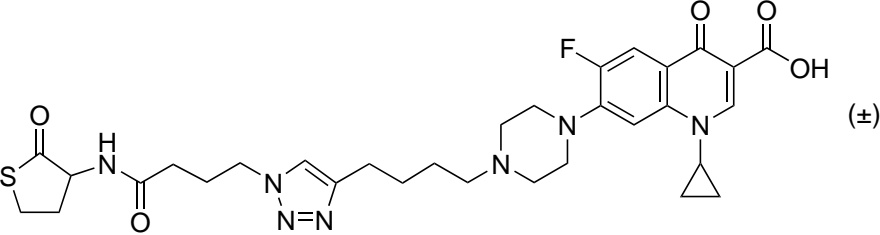


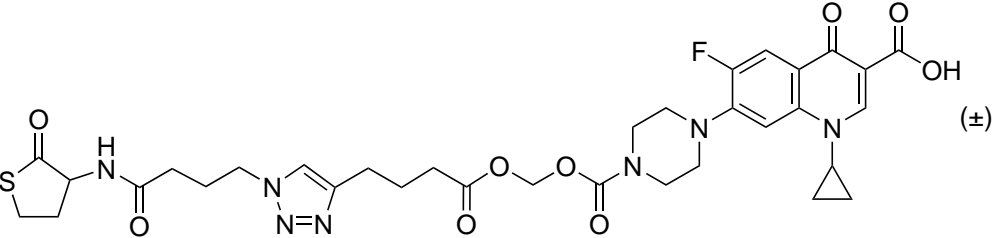


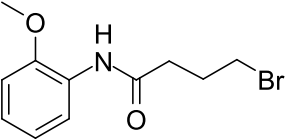


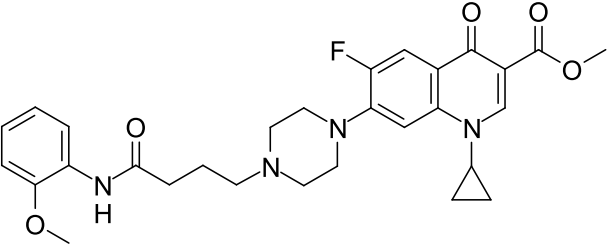


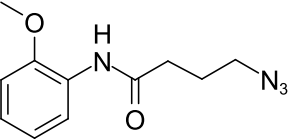


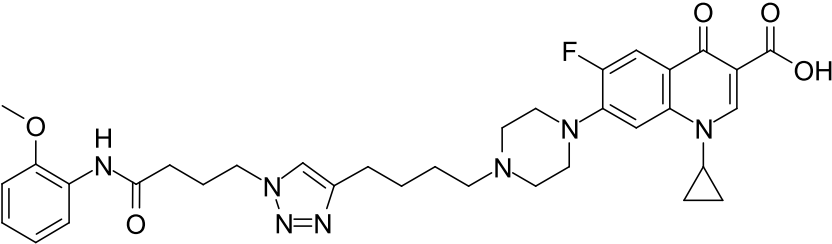


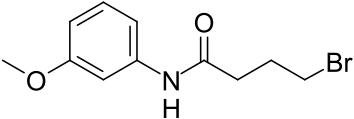


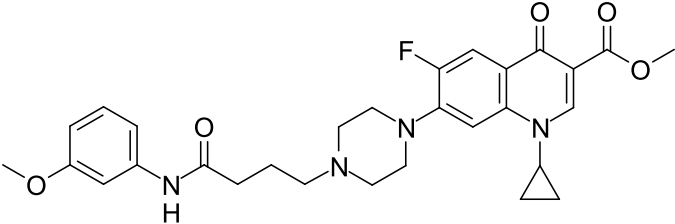


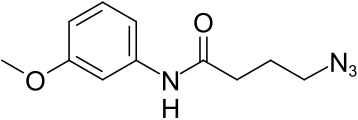


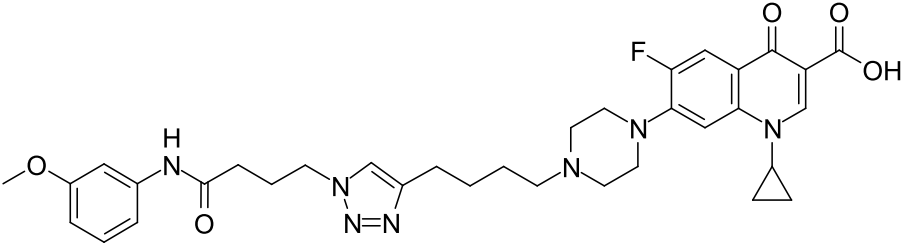


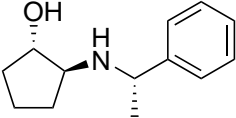




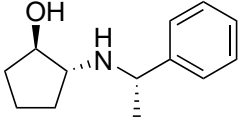








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