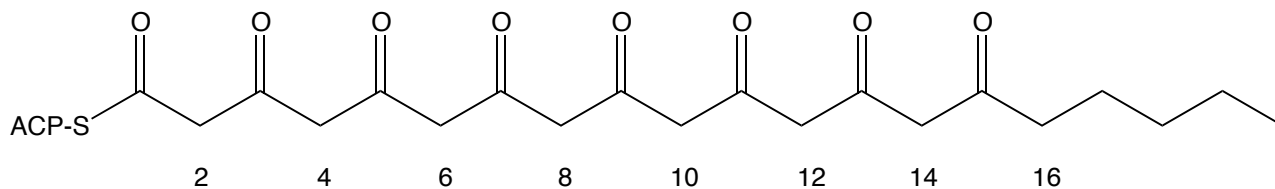


Study Question 7c: Fun with Polyketides

Assume you have the polyketide shown below. This is a large molecule and one can imagine several different ways it can fold up and cyclize.



1. Draw the 1st product that would result if C₆ attacked C₁₁ via an aldol reaction, followed by dehydration and enolization. Number the carbons using the scheme shown above. No mechanism desired!

2. Continuing from your answer above, what further cyclization reactions would be logical? Show the product that would form if all reasonable aldols, dehydrations and enolizations occurred. Show the structure after each major transformation, and of course, show your final product. There is more than one path to the final product, you just need a reasonable one. Again, number your product. No mechanism desired!