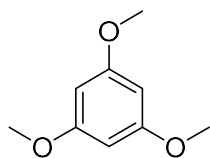


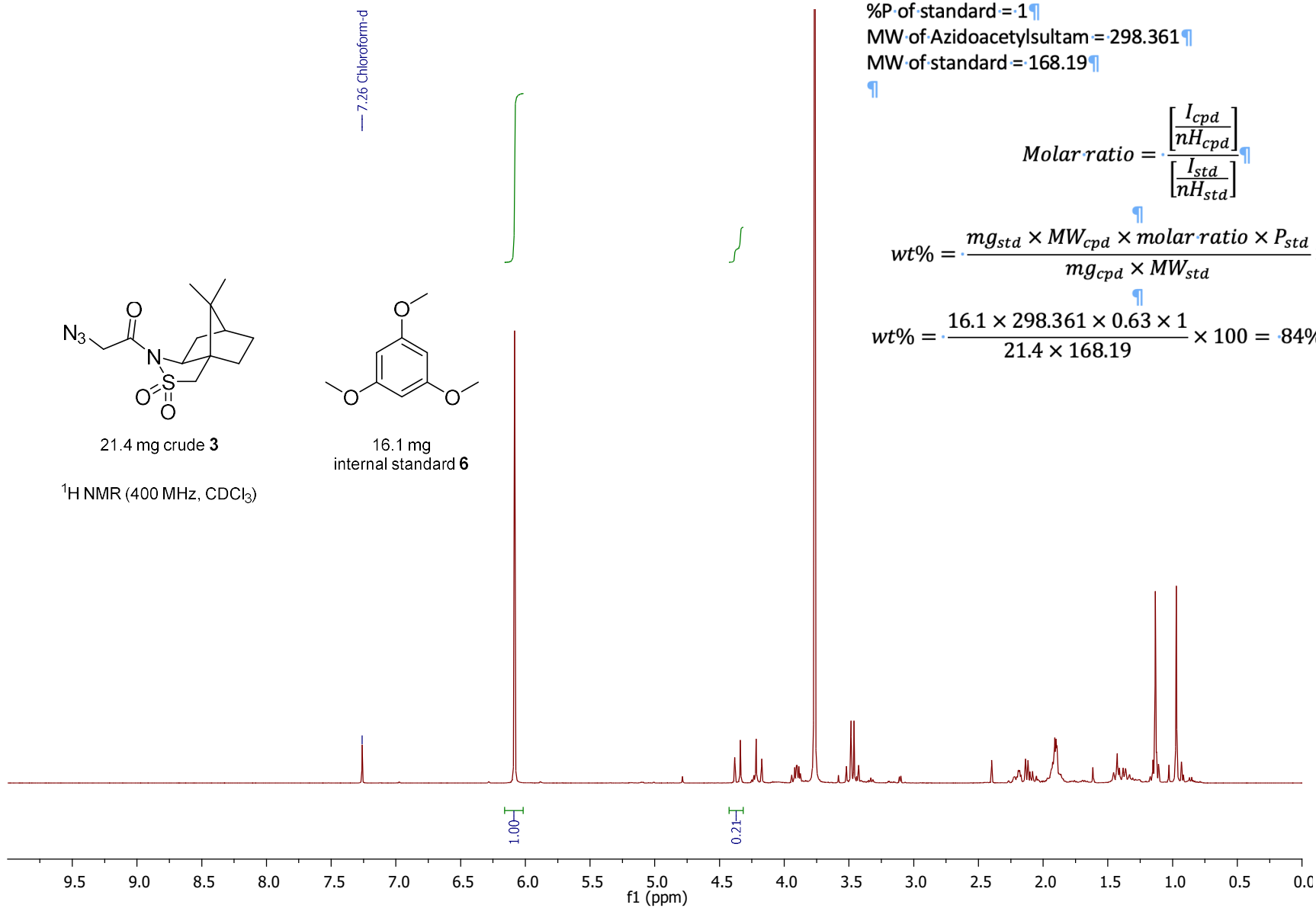
21.4 mg crude **3**

¹H NMR (400 MHz, CDCl₃)



16.1 mg
internal standard **6**

— 7.26 Chloroform-d



Internal standard = 16.1 mg

Sample = 21.4 mg

Molar ratio = $[0.63/1]/[3/3] = 0.21$

%P of standard = 1

MW of Azidoacetylsultam = 298.361

MW of standard = 168.19

$$\text{Molar ratio} = \frac{\left[\frac{I_{cpd}}{nH_{cpd}} \right]}{\left[\frac{I_{std}}{nH_{std}} \right]}$$

$$\text{wt\%} = \frac{mg_{std} \times MW_{cpd} \times \text{molar ratio} \times P_{std}}{mg_{cpd} \times MW_{std}} \times 100$$

$$\text{wt\%} = \frac{16.1 \times 298.361 \times 0.63 \times 1}{21.4 \times 168.19} \times 100 = 84\% \text{ purity}$$