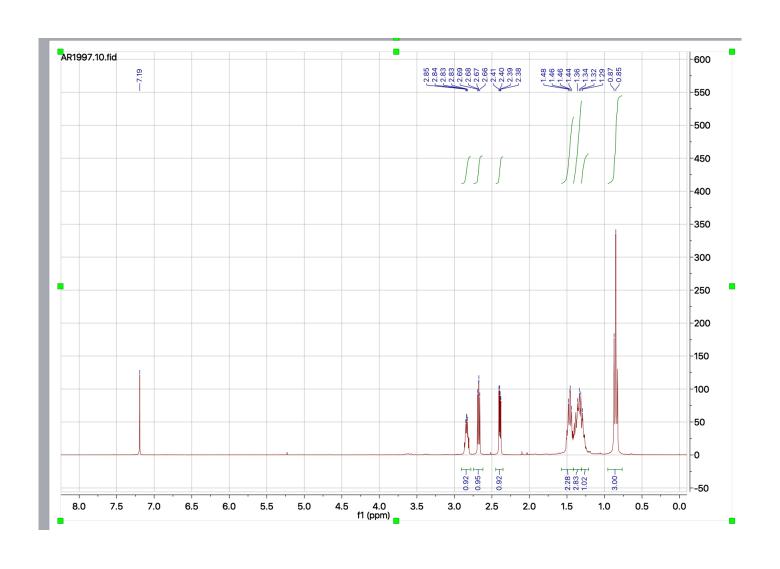
SCIENCE

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(S,S) 1,2-epoxyhexane and (2S)-hexane-1,2-diol

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Field strength: 300 MHz

Why is this your favorite spectrum?

I thought this lab experiment was very interesting, as we kinetically resolved two isomers of 1,2-epoxyhexane in a way that selectively enriched the (S,S) enantiomer. The (R,R) epoxide is converted to a diol while the (S,S) epoxide enantiomer is unreactive, so it can be purified. The ratio of this experiment shown in the NMR had an enantiomeric ratio of 81:19, which demonstrates a fairly successful experiment.