

Supplementary Information

Conversion of Medium-sized Lactam to α -Vinylated or α -Acetylenylated Azacycles

via N,O-Acetal TMS Ethers

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[§]These authors contributed equally to this work.

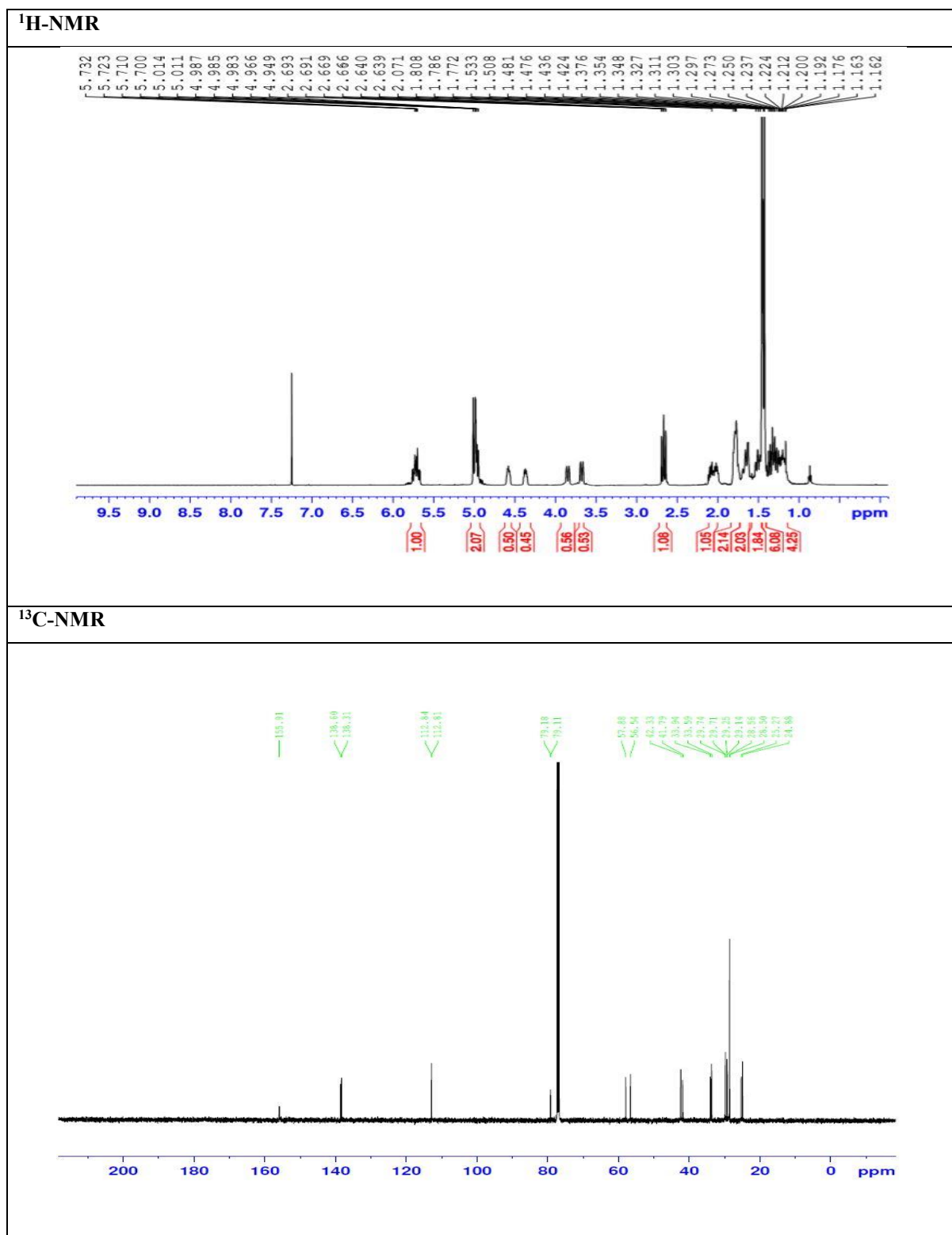
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Copies of ^1H NMR and ^{13}C NMR Spectra-----	S1
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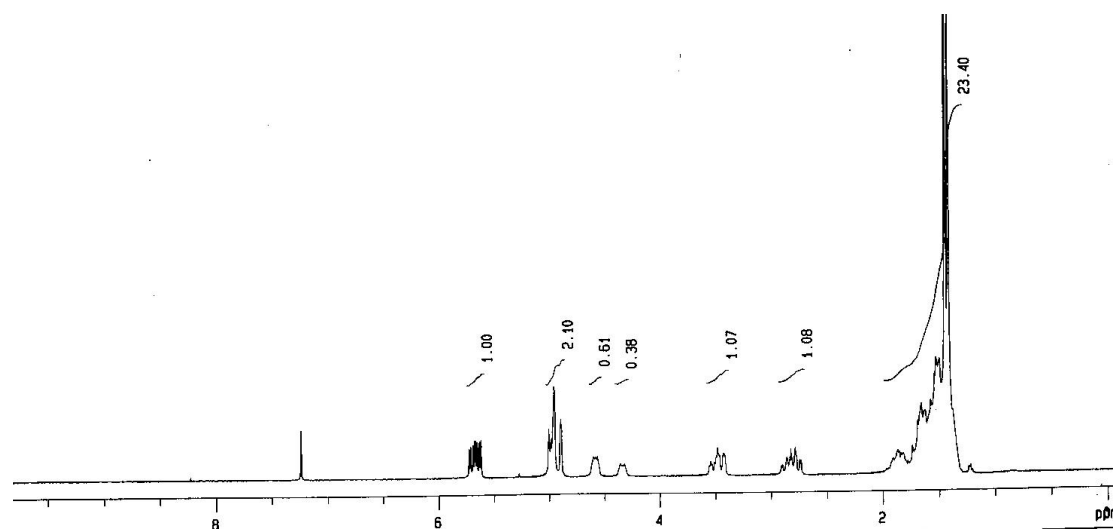
¹H- and ¹³C-NMR Spectra

tert-Butyl 2-vinylazepane-1-carboxylate (**4a**)

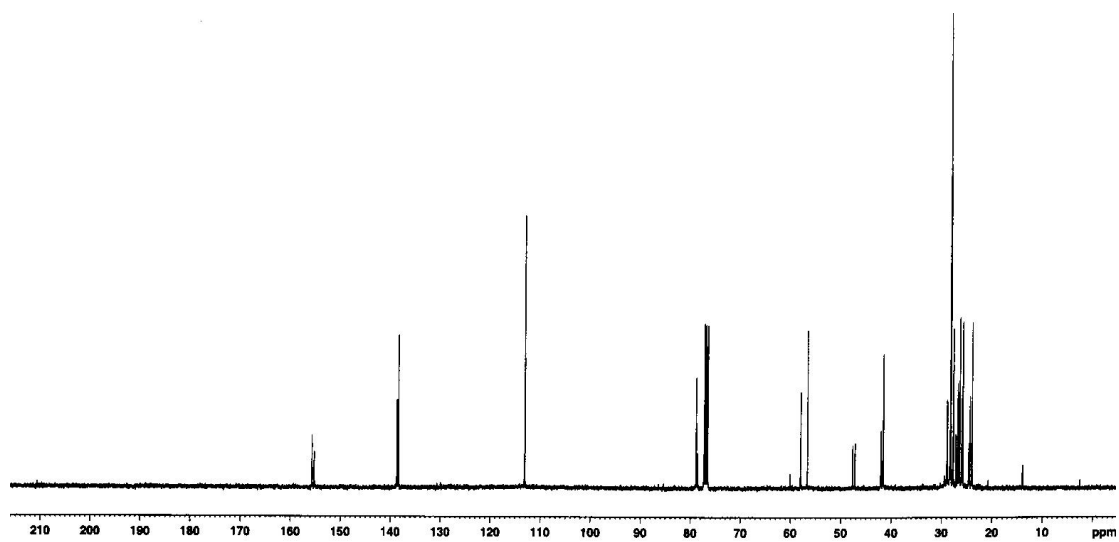


tert-Butyl 2-vinylazocane-1-carboxylate (**4b**)

¹H-NMR

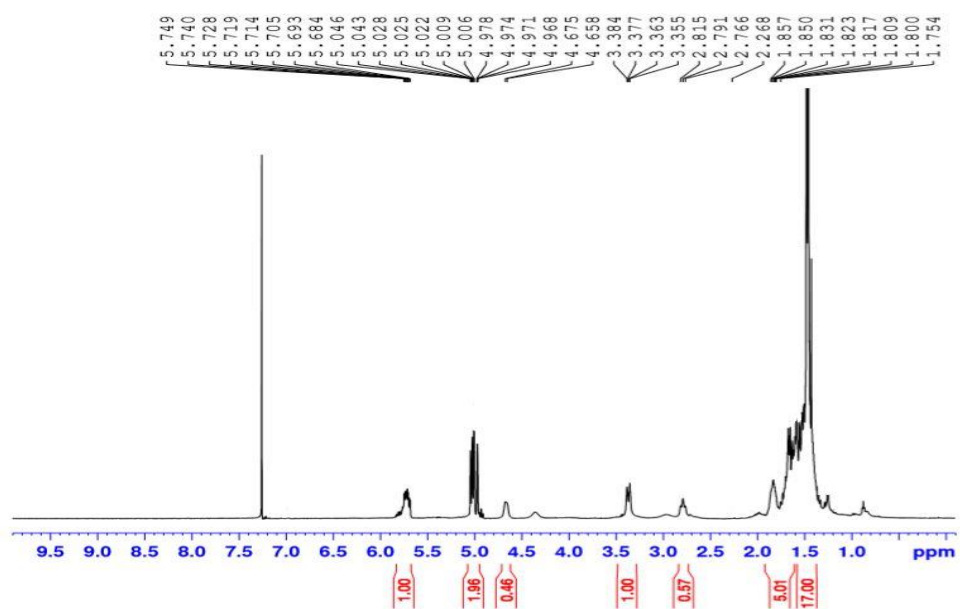


¹³C-NMR

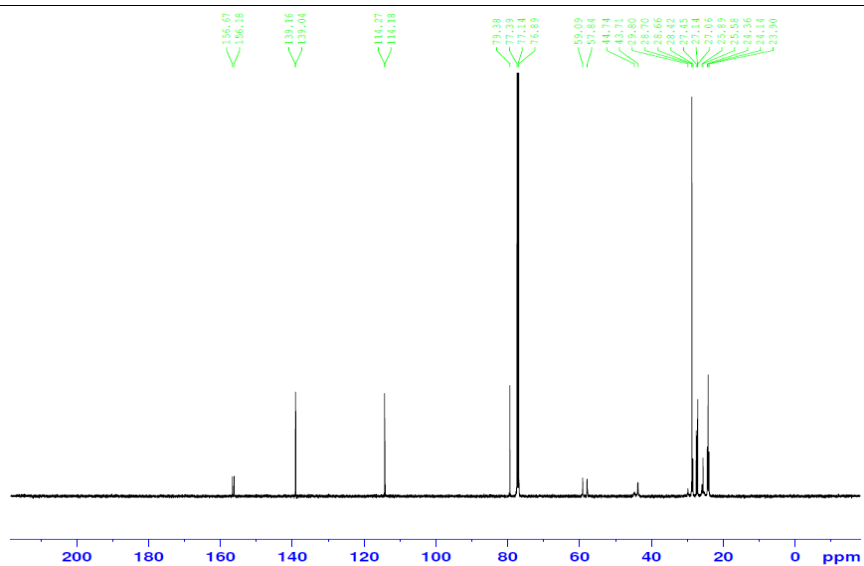


tert-Butyl 2-vinylazone-1-carboxylate (**4c**)

¹H-NMR

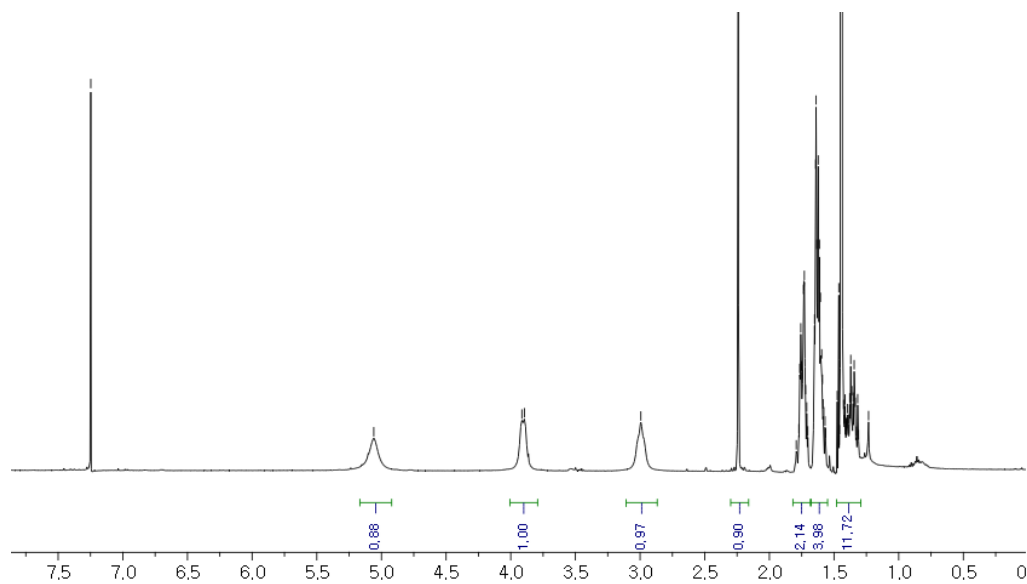


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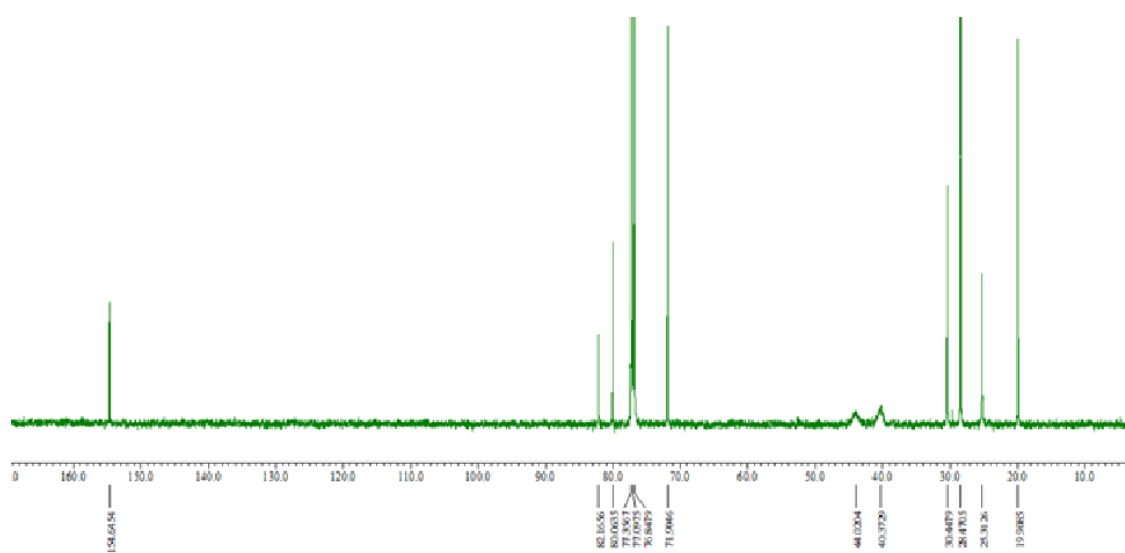


tert-Butyl 2-ethynylpiperidine-1-carboxylate (**5a**)

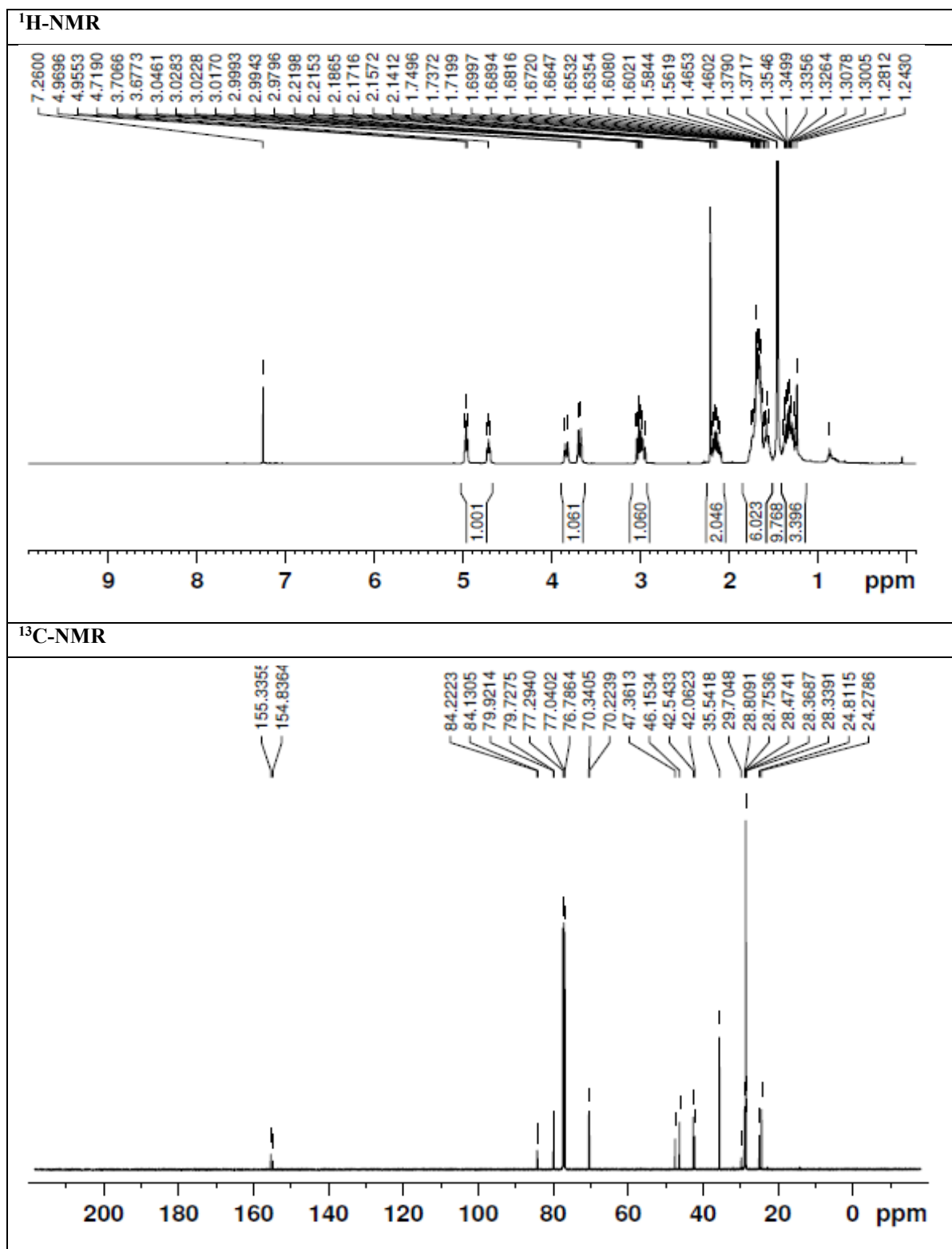
¹H-NMR



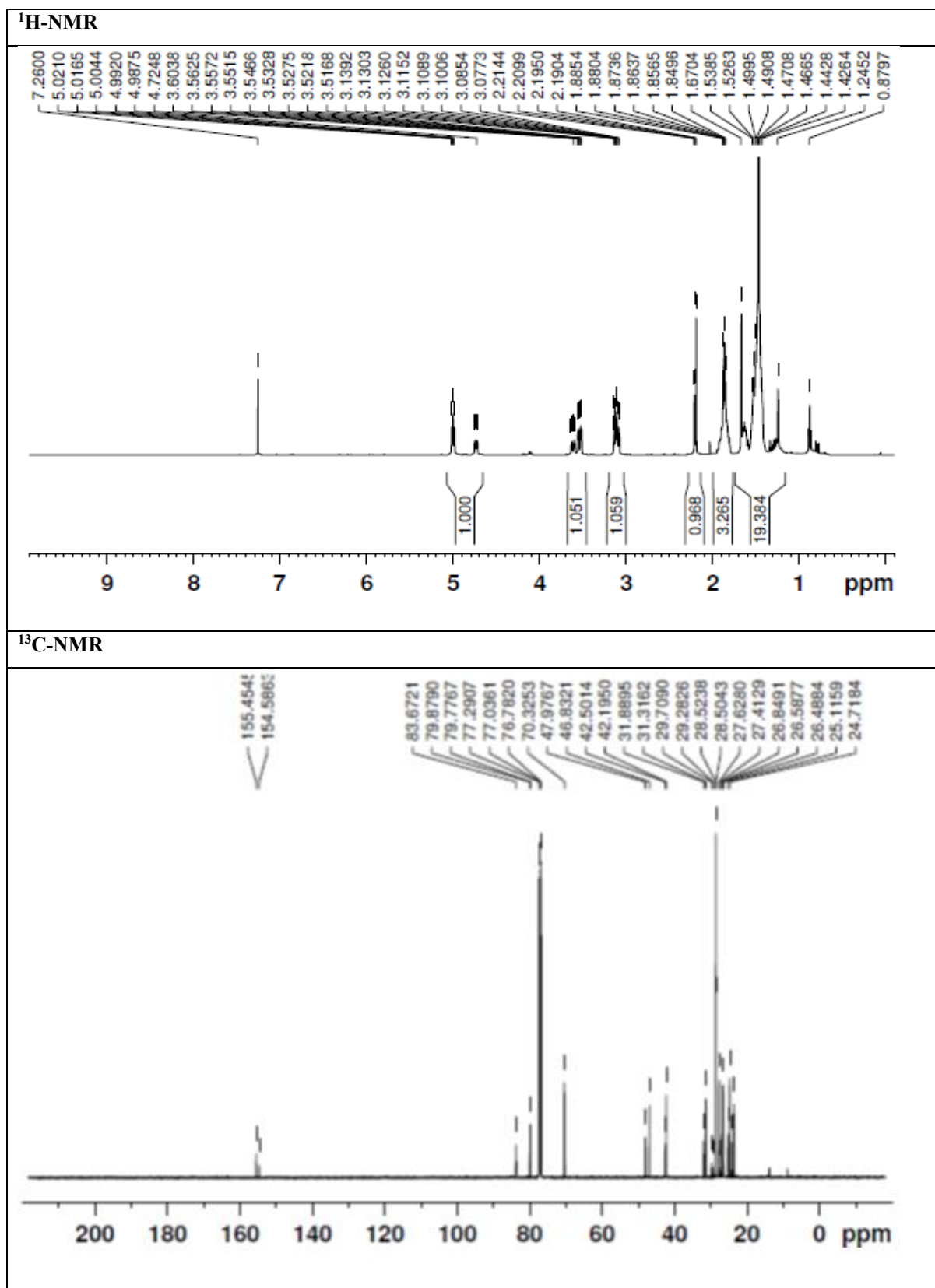
¹³C-NMR



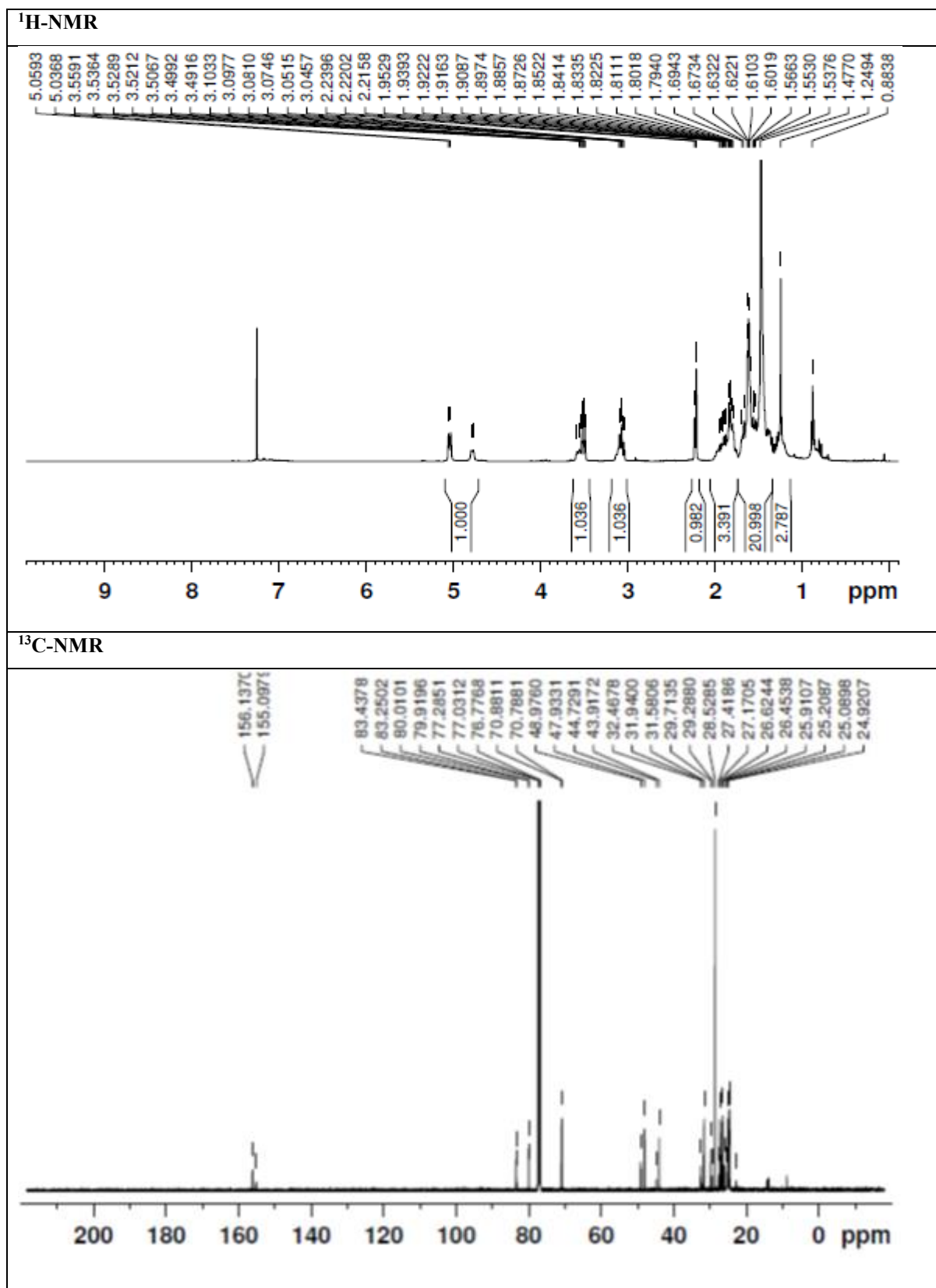
tert-Butyl 2-ethynylazepane-1-carboxylate(**5b**)



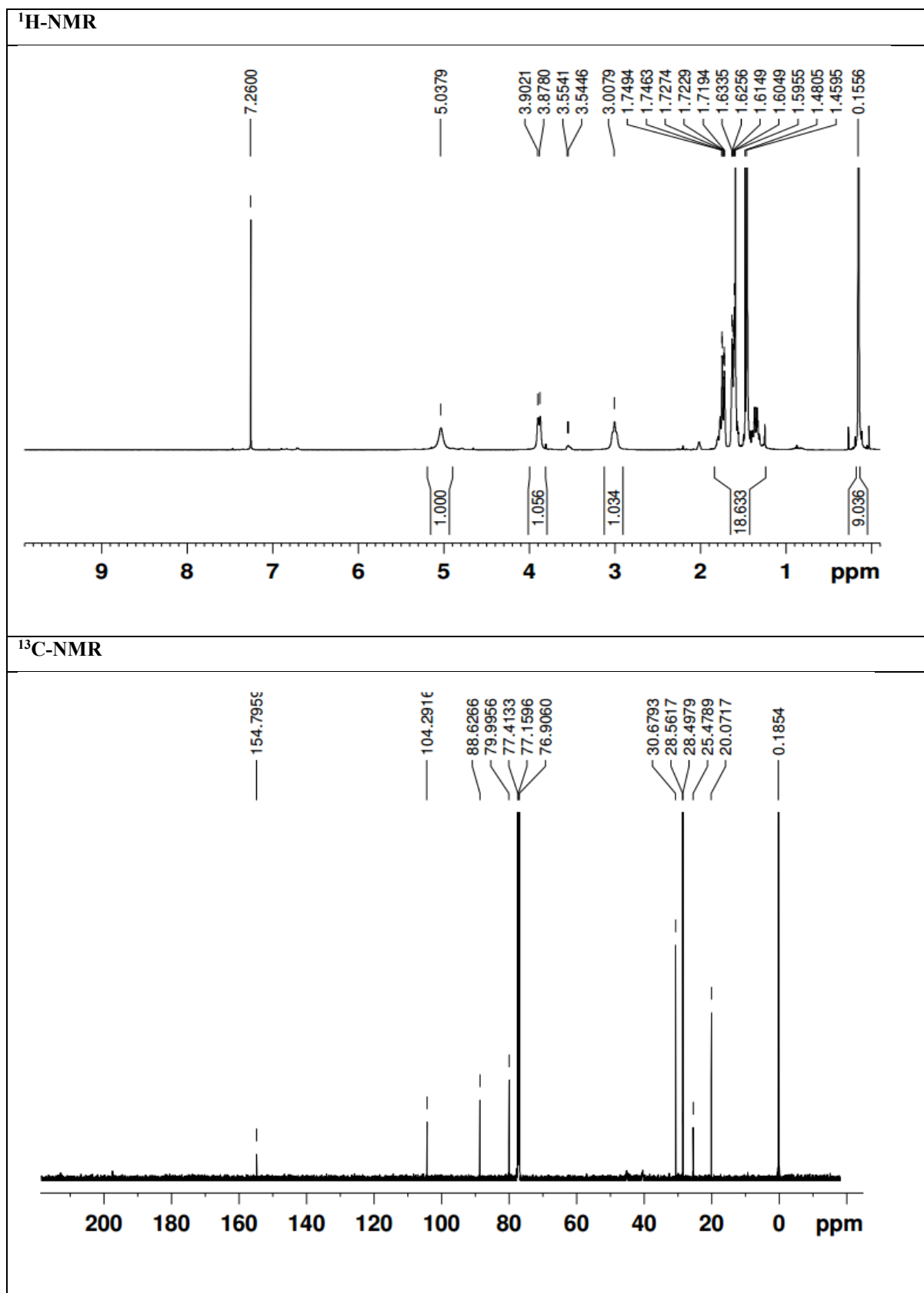
tert-Butyl 2-ethynylazocane-1-carboxylate (**5c**)



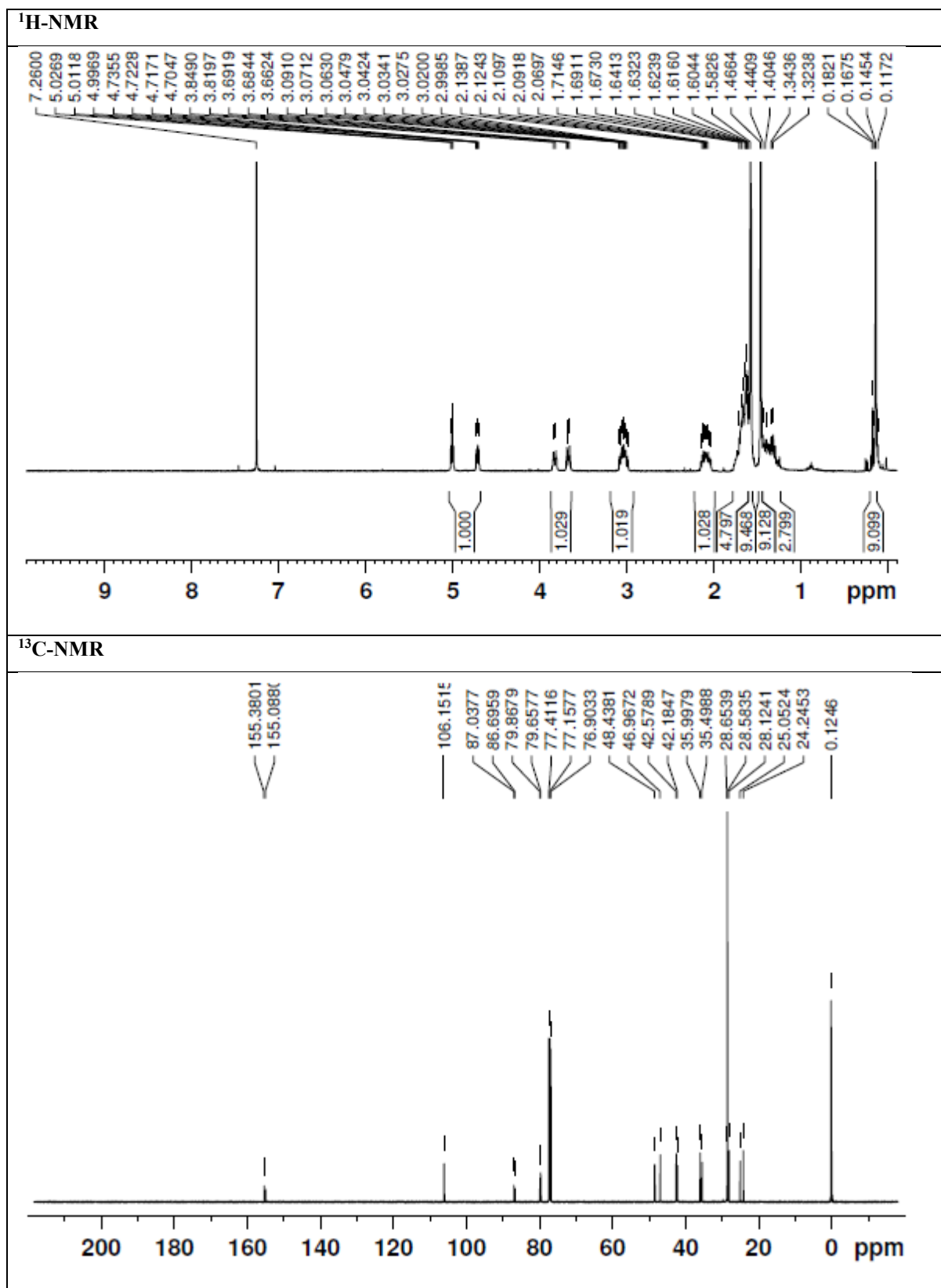
tert-Butyl 2-ethynylazonane-1-carboxylate (**5d**)



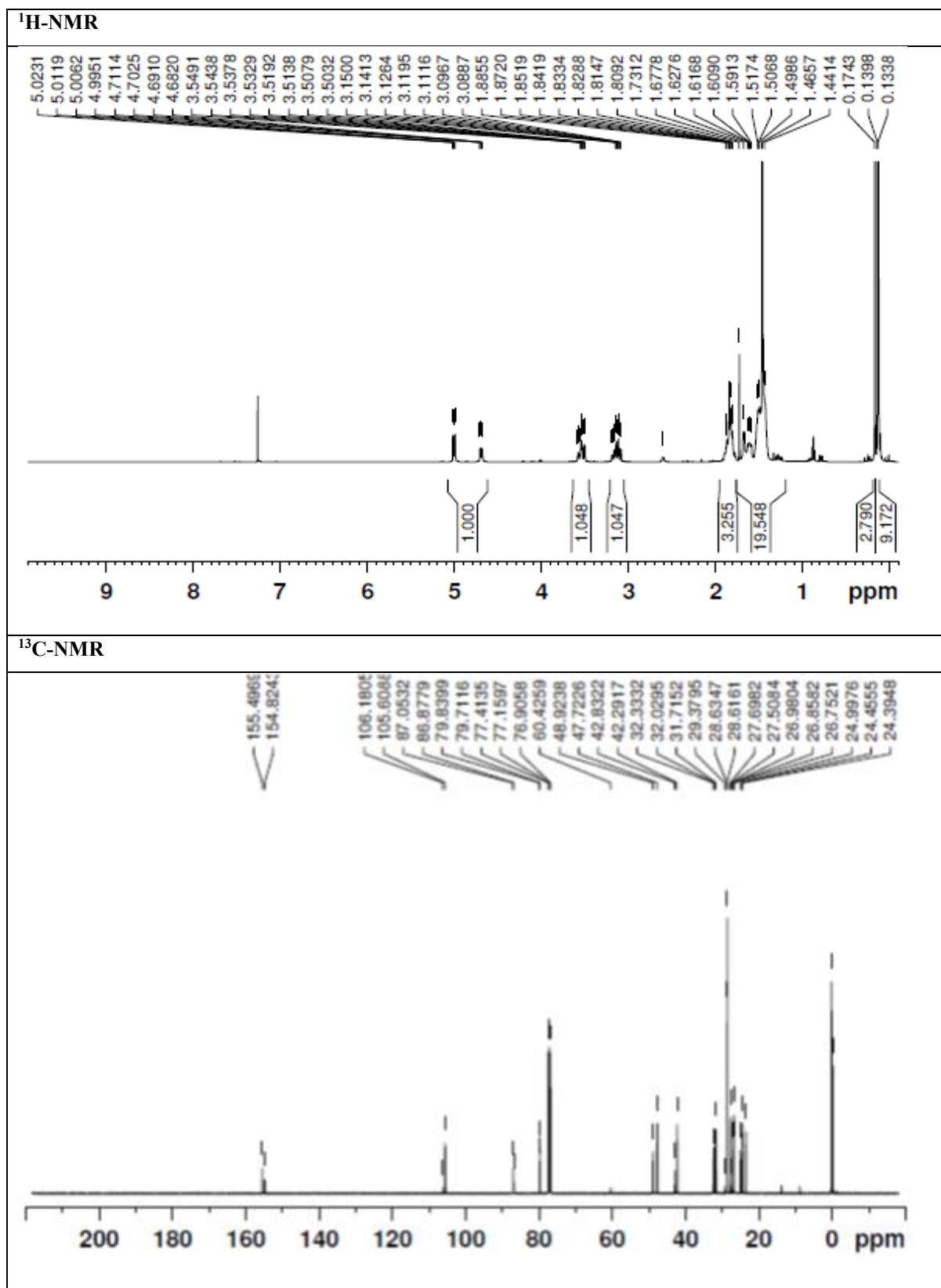
tert-Butyl 2-((trimethylsilyl)ethynyl)piperidine-1-carboxylate (**5e**)



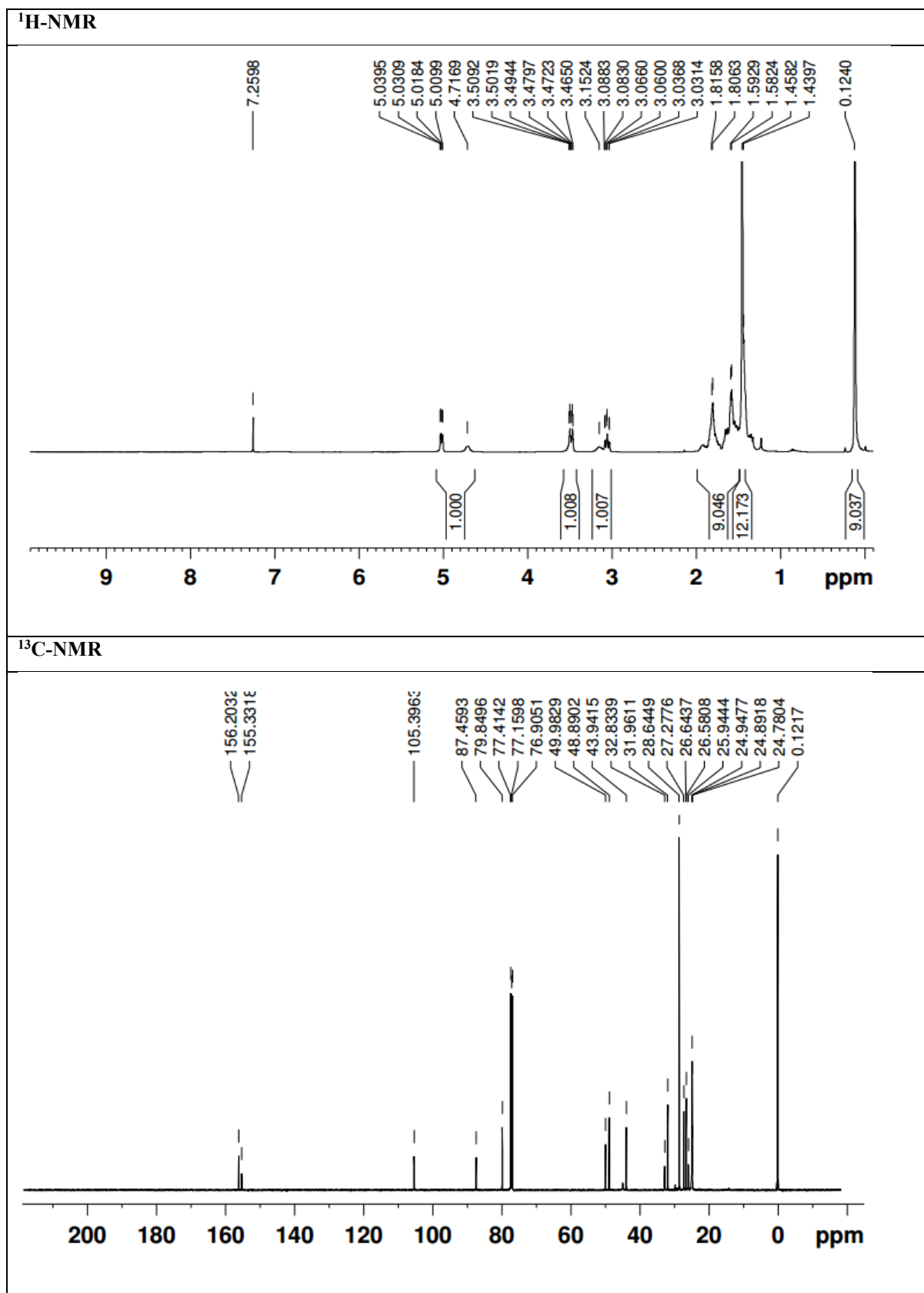
tert-Butyl 2-((trimethylsilyl)ethynyl)azepane-1-carboxylate (**5f**)



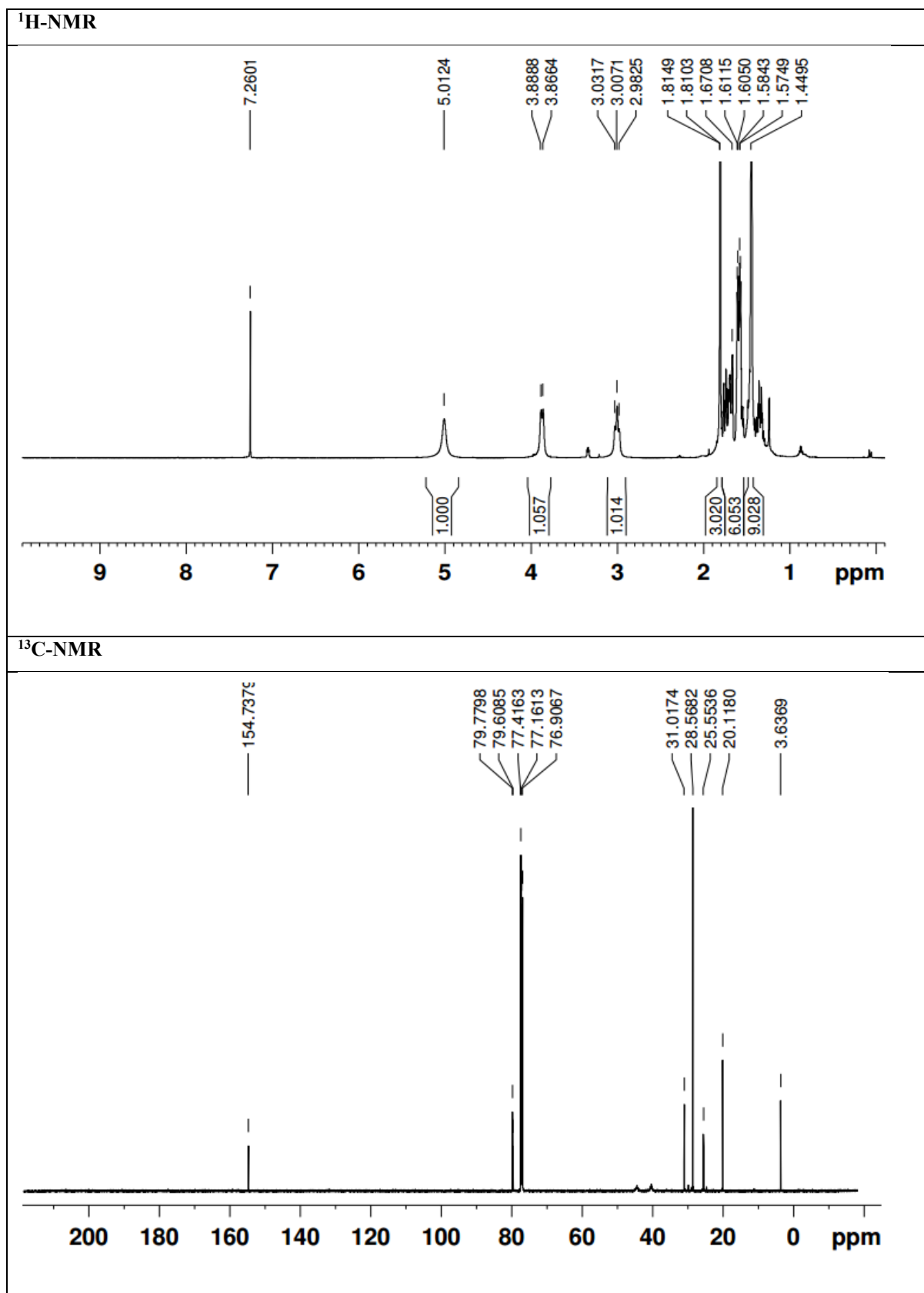
tert-Butyl 2-((trimethylsilyl)ethynyl)azocane-1-carboxylate (**5g**)



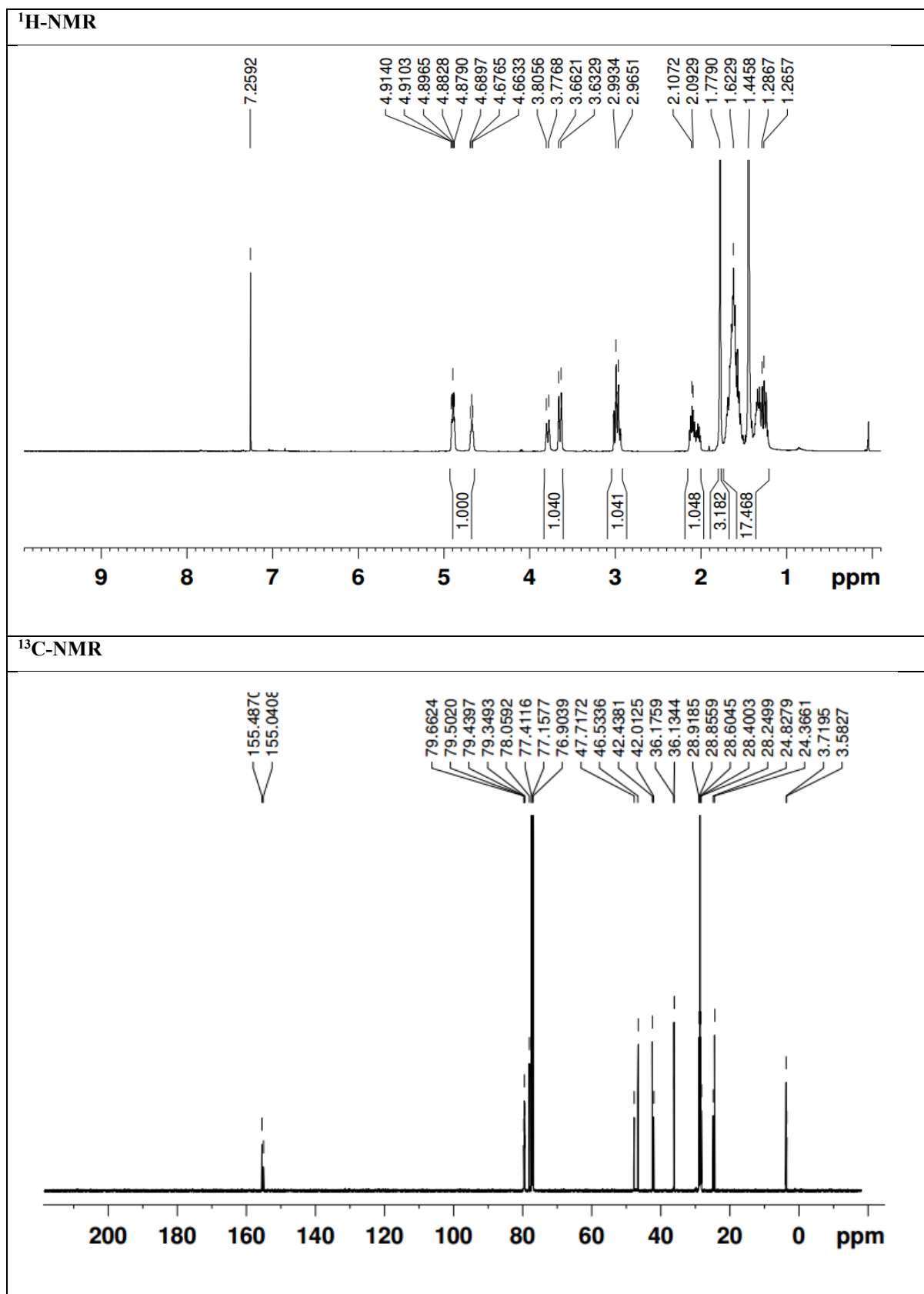
tert-Butyl 2-((trimethylsilyl)ethynyl)azonane-1-carboxylate (**5h**)



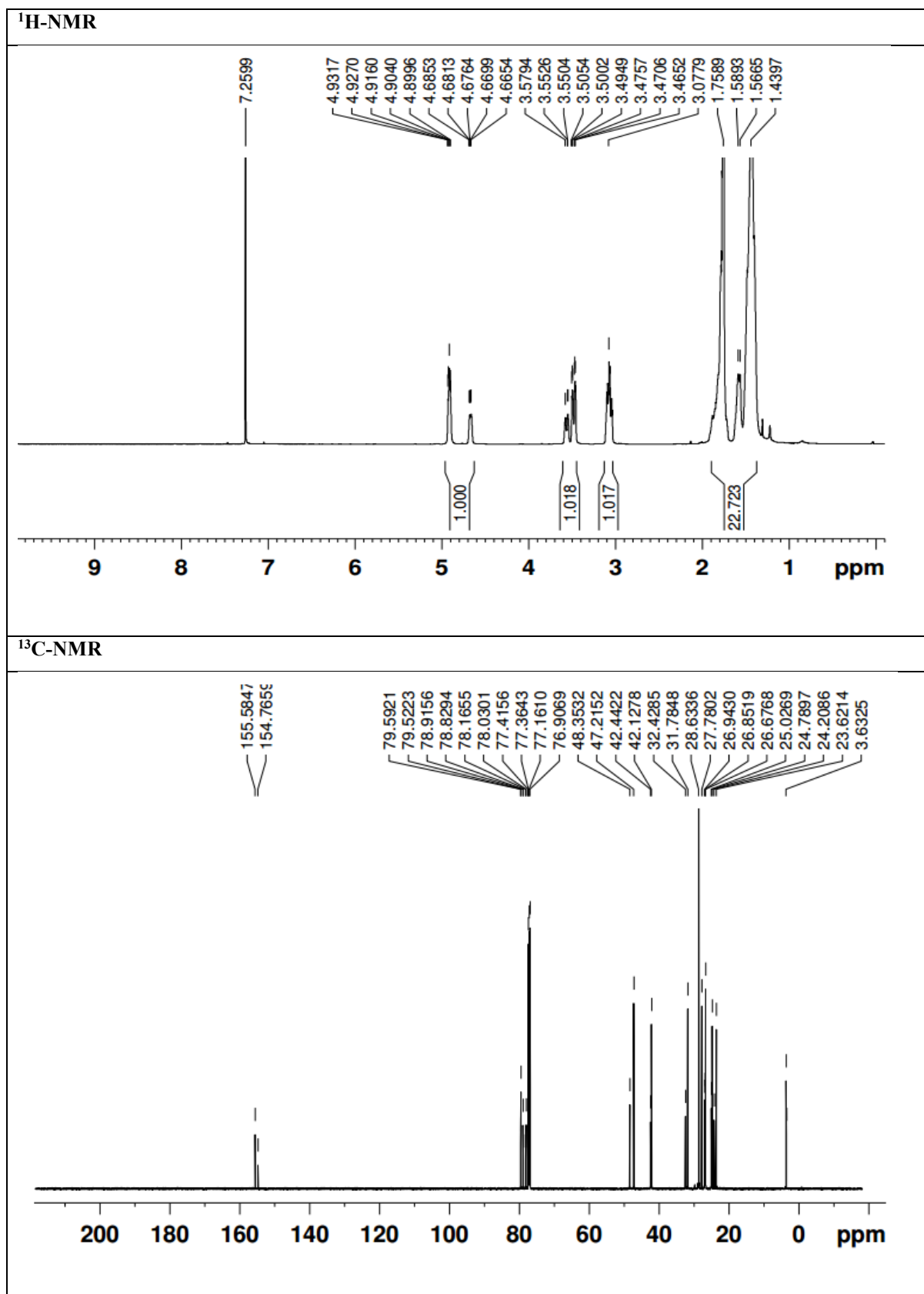
tert-Butyl 2-(prop-1-yn-1-yl)piperidine-1-carboxylate (**5i**)



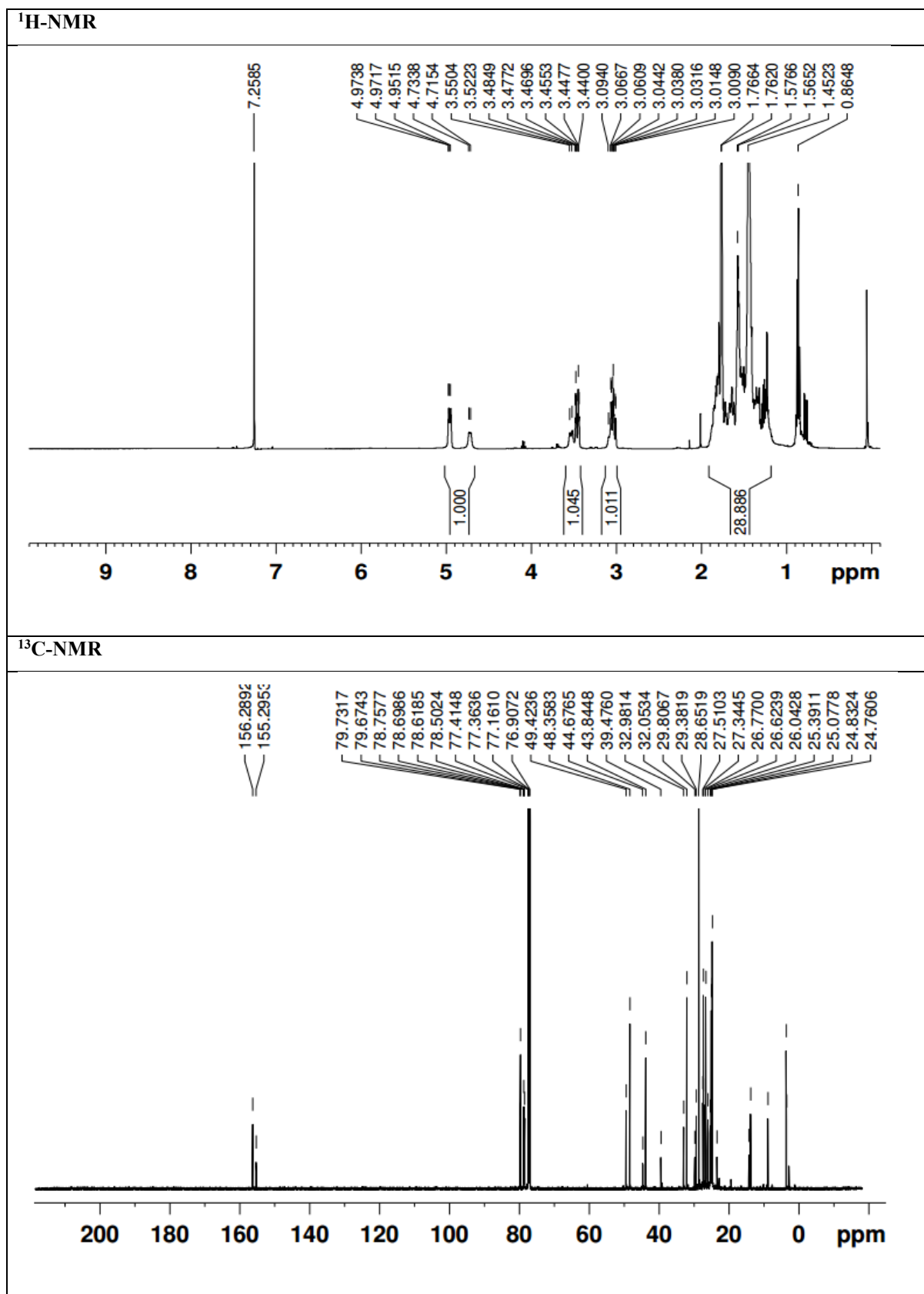
tert-Butyl 2-(prop-1-yn-1-yl)azepane-1-carboxylate (**5j**)



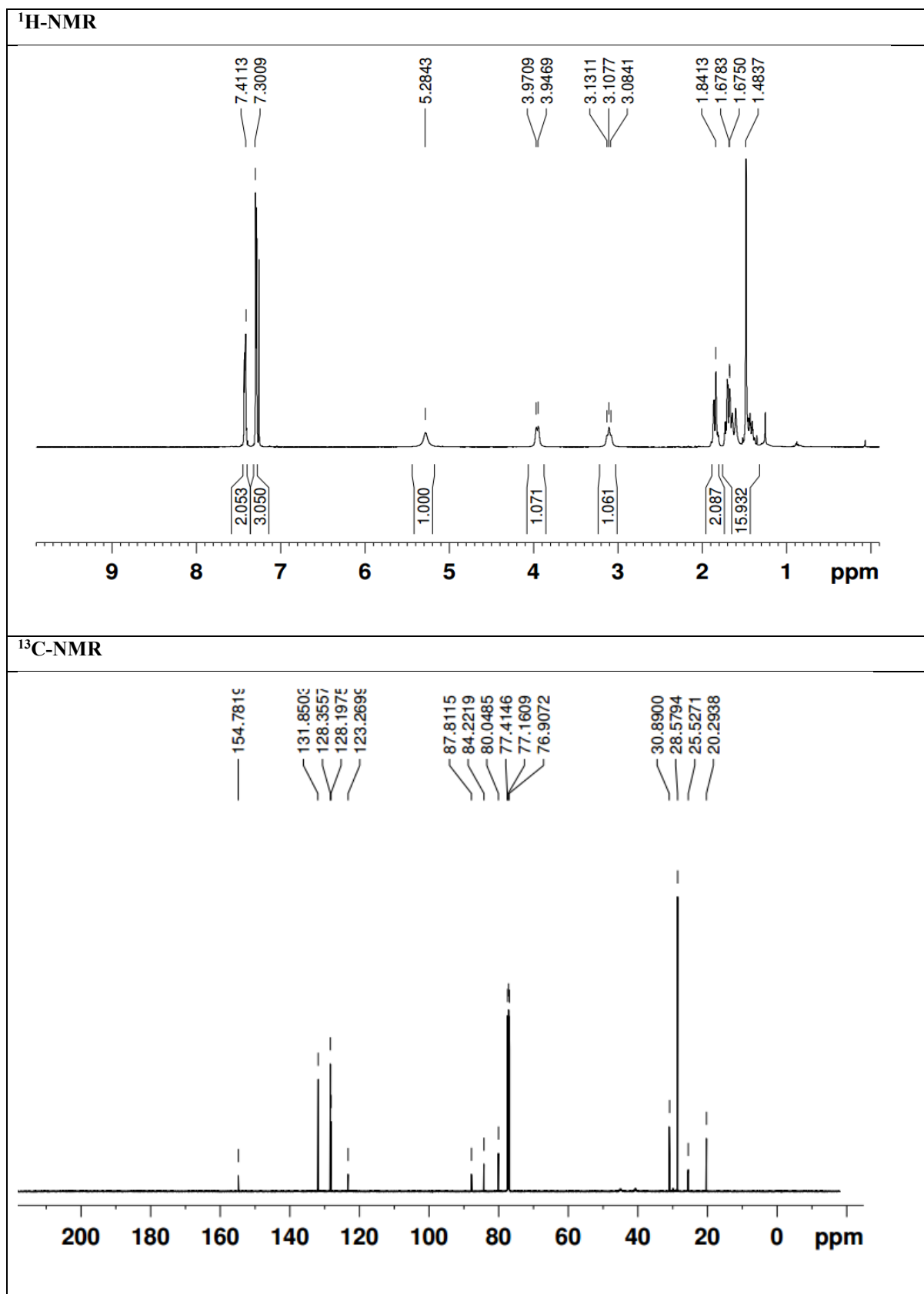
tert-Butyl 2-(prop-1-yn-1-yl)azocane-1-carboxylate (**5k**)



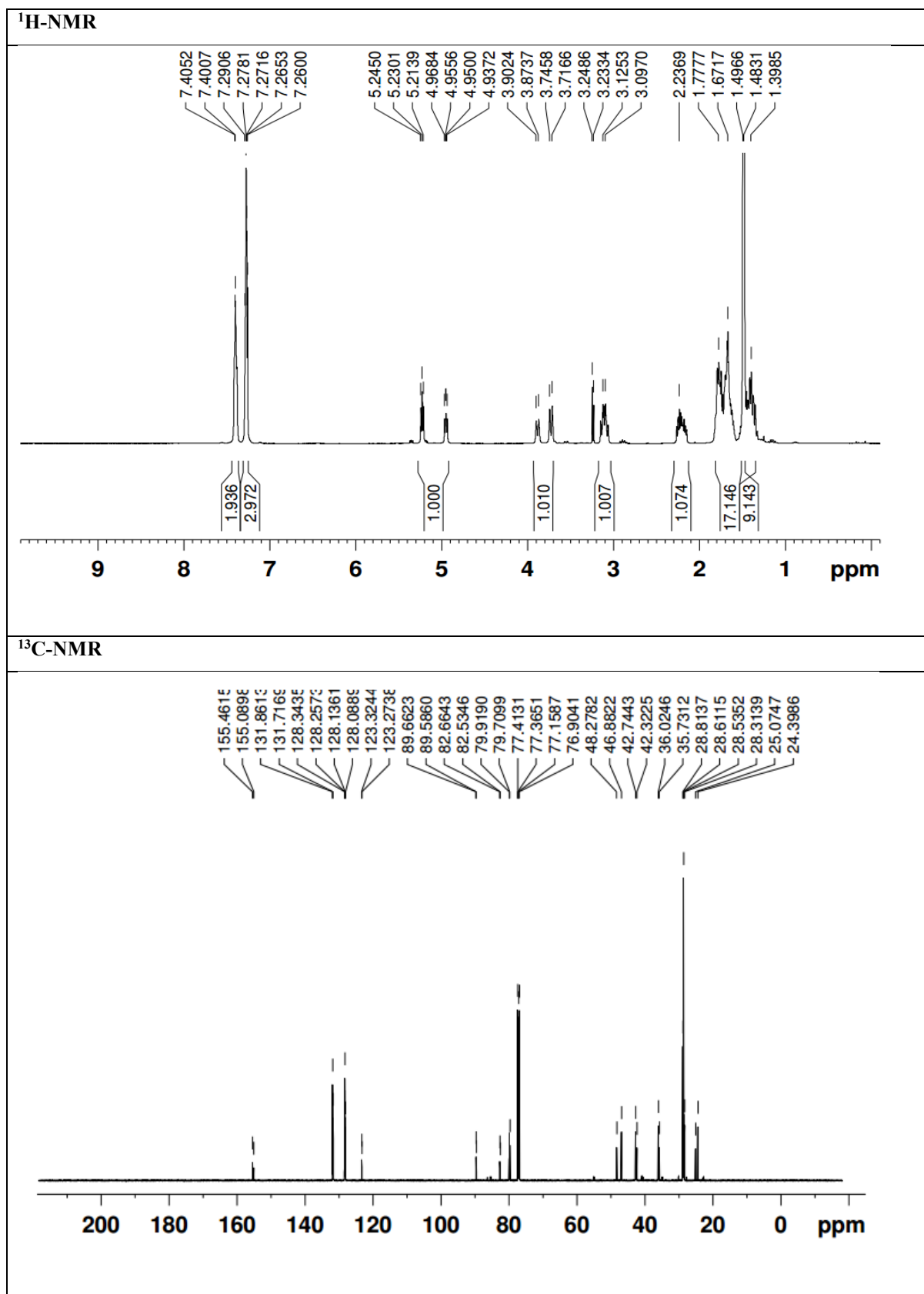
tert-Butyl 2-(prop-1-yn-1-yl)azonane-1-carboxylate (**51**)



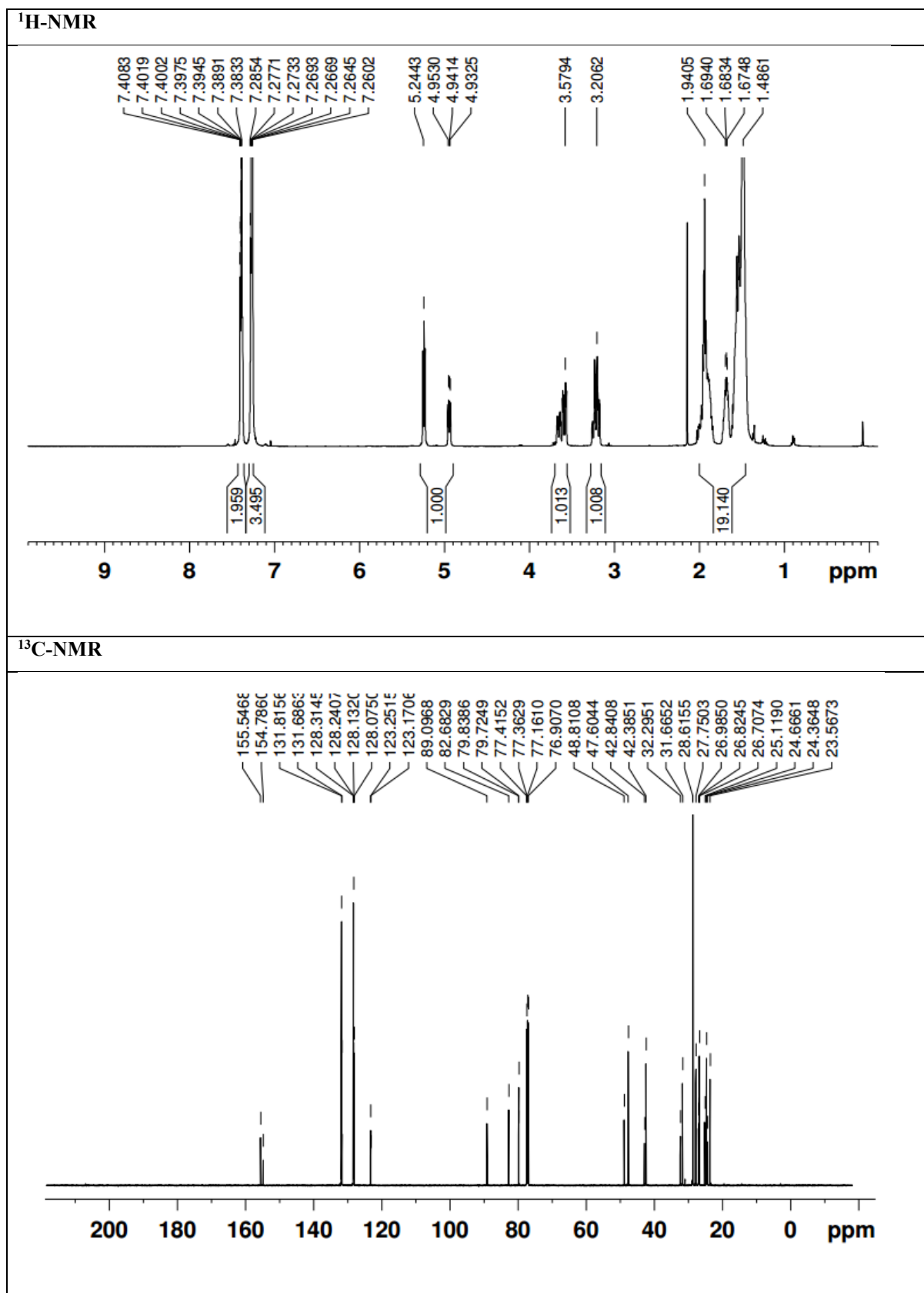
tert-Butyl 2-(phenylethynyl)piperidine-1-carboxylate (**5m**)



tert-Butyl 2-(phenylethynyl)azepane-1-carboxylate (**5n**)



tert-Butyl 2-(phenylethynyl)azocane-1-carboxylate (**5o**)



tert-Butyl 2-(phenylethynyl)azonane-1-carboxylate (**5p**)

