

Electronic Supplementary Information

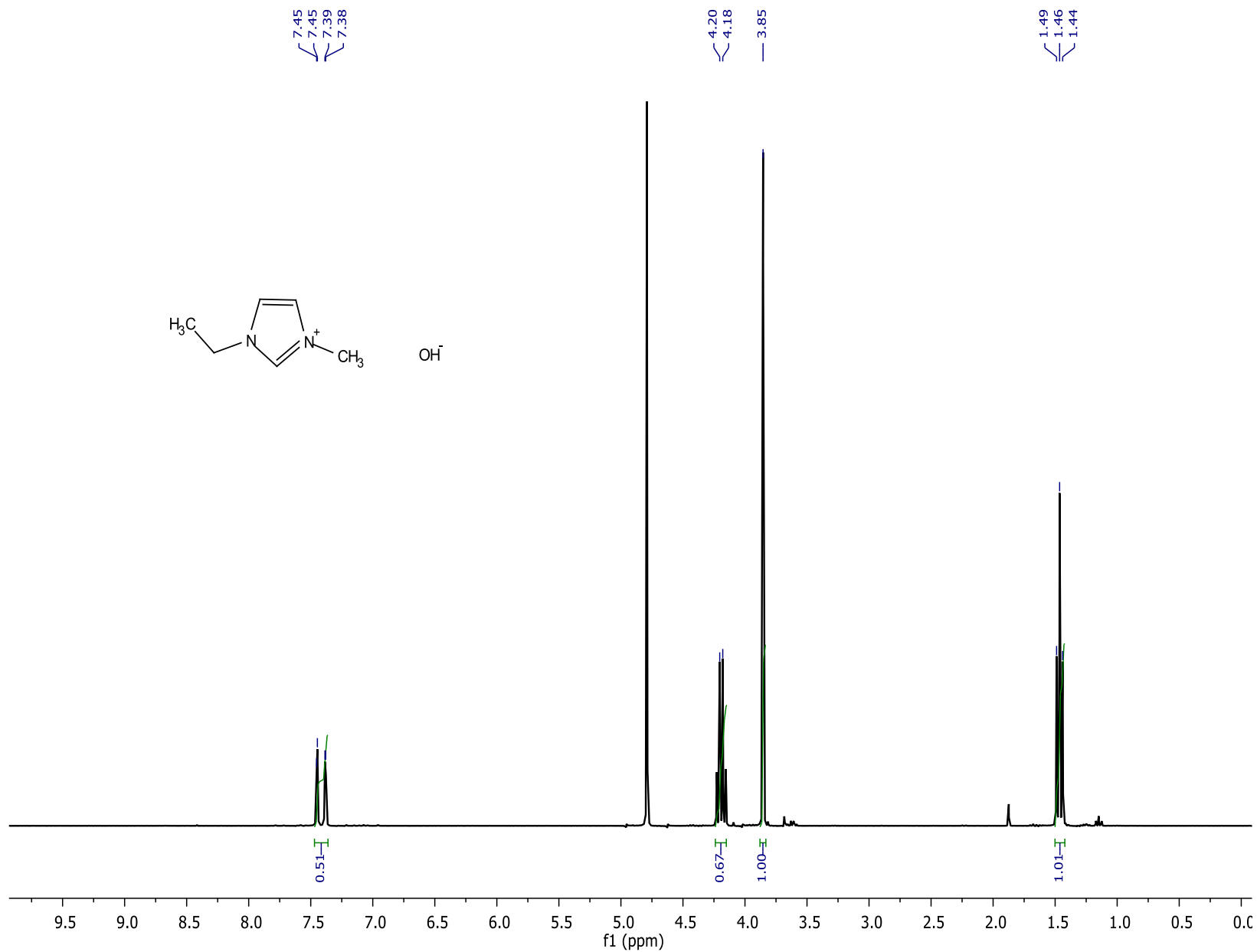
1-Ethyl-3-methylimidazolium tartrate chiral ionic liquids: preparation, characterization and opportunities thereof

Tessa Castellan, Claire Cuyamendous, Juliette Fitremann, Jean-Marie Galano, Camille Oger, Thierry Durand,
Frédéric Guillen and Yves Génisson*

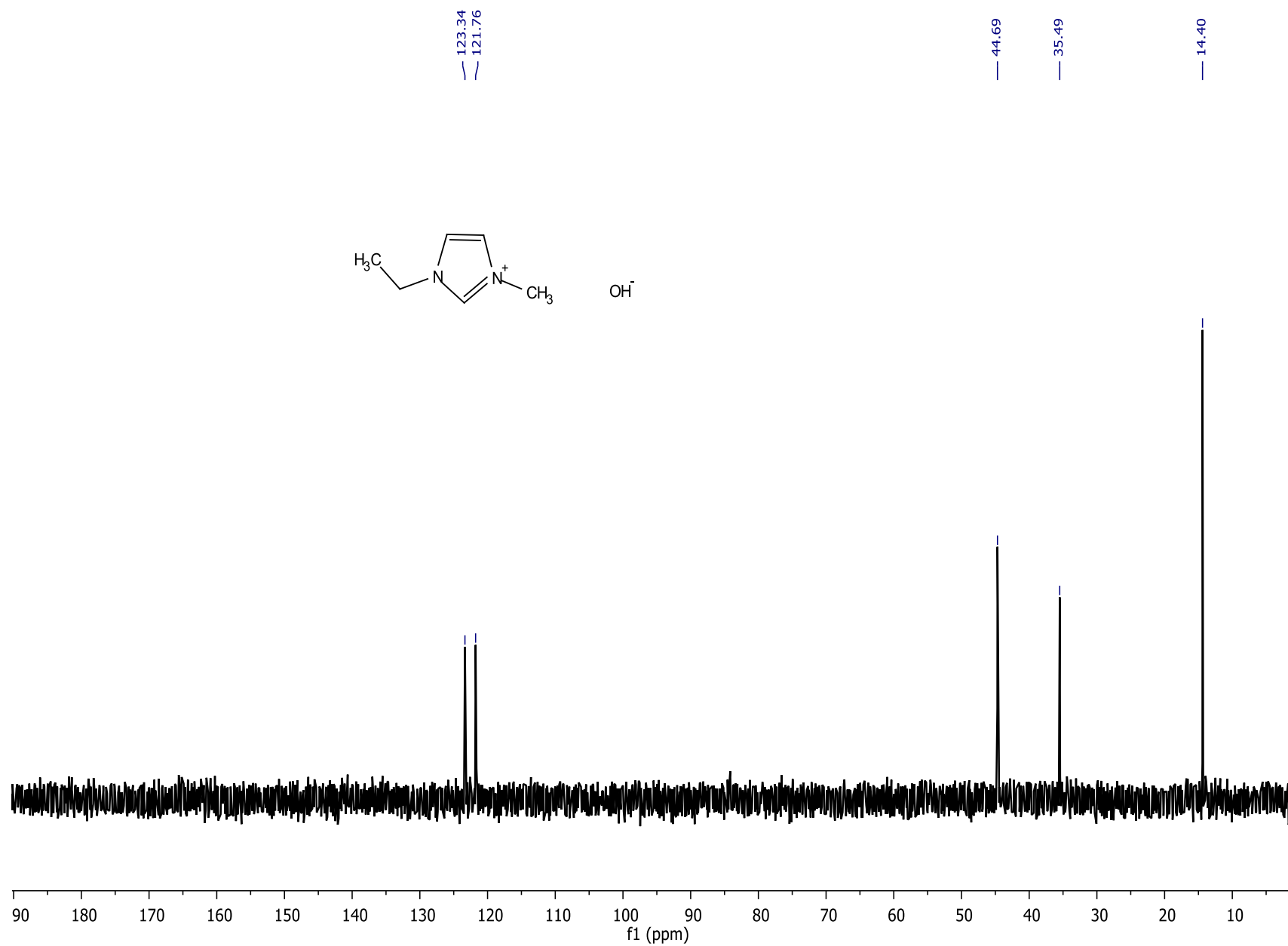
New Journal of Chemistry

Table of Contents

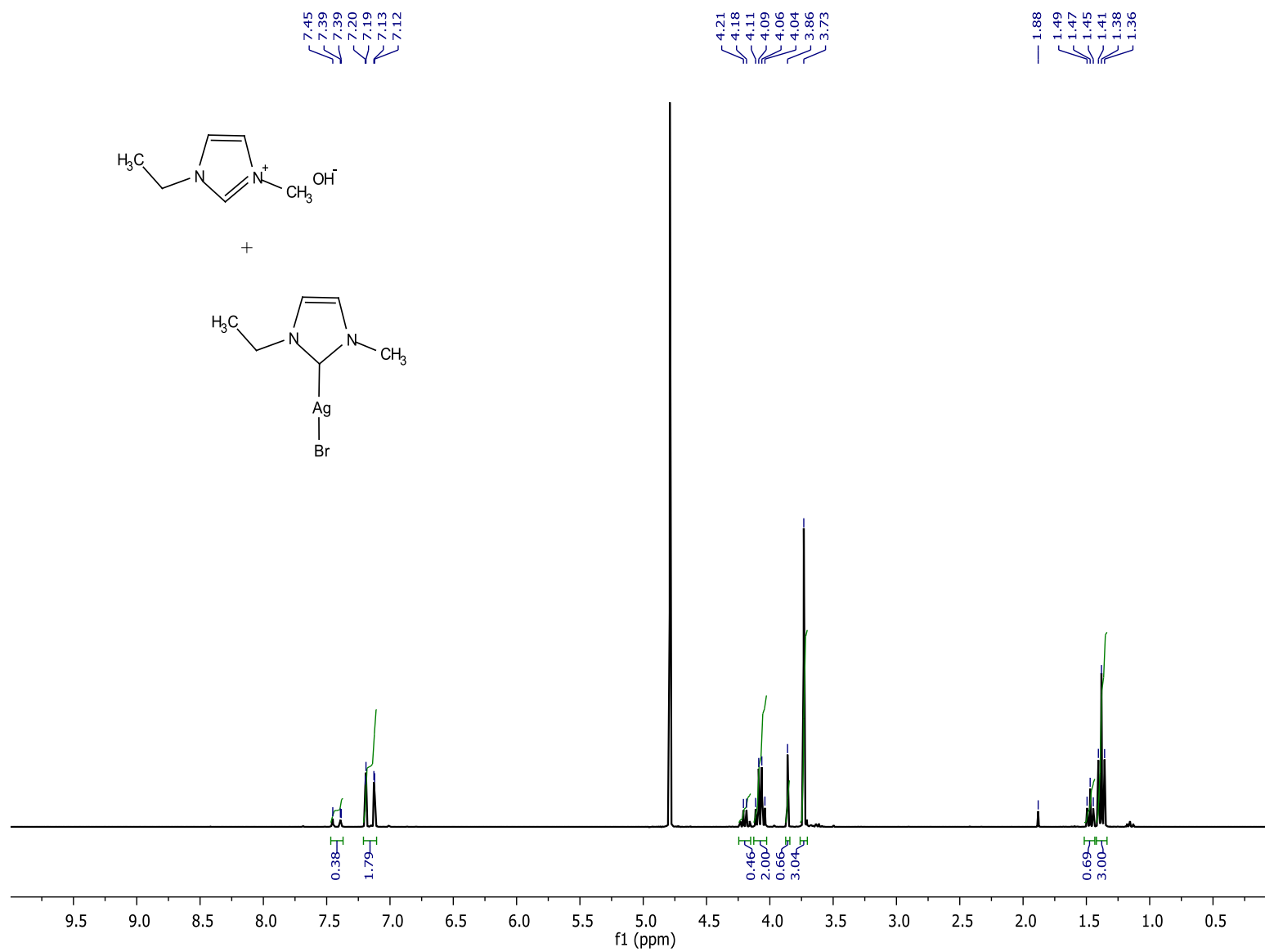
Pages	Content
2-21	^1H and ^{13}C NMR spectra of [EMIM]OH, a crude mixture of [EMIM]Br + AgOH (1.5 equiv.) after 5h at rt, (-), (+), (rac)- <i>meso</i> - 1 and (-), (+), (rac)- <i>meso</i> - 2 .
22	Fig SI-1. Dynamic viscosity of the EMIM tartrates IIs as a function of the shear rate.

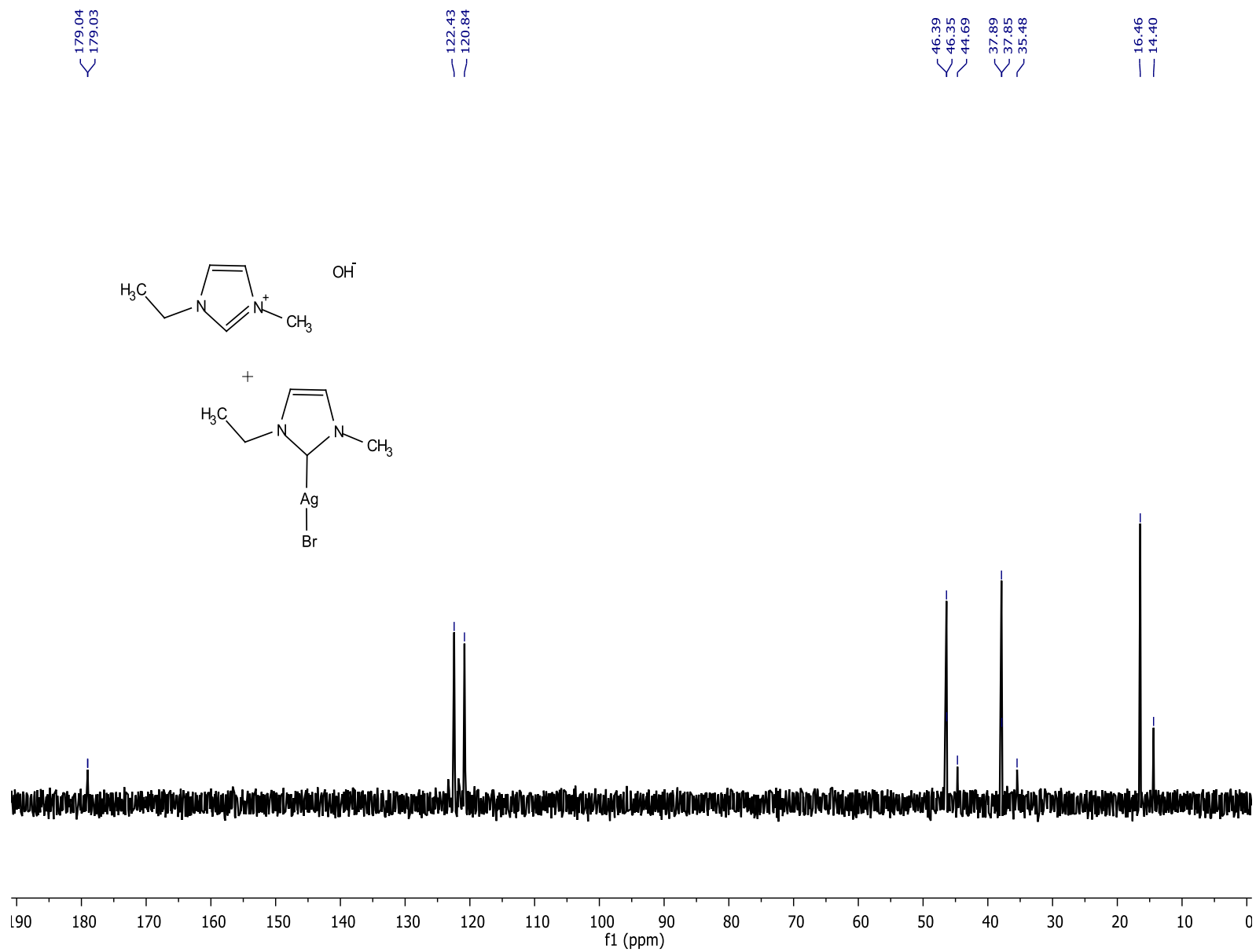


$^1\text{H-NMR}$ (300 MHz, D_2O) of [EMIM]OH

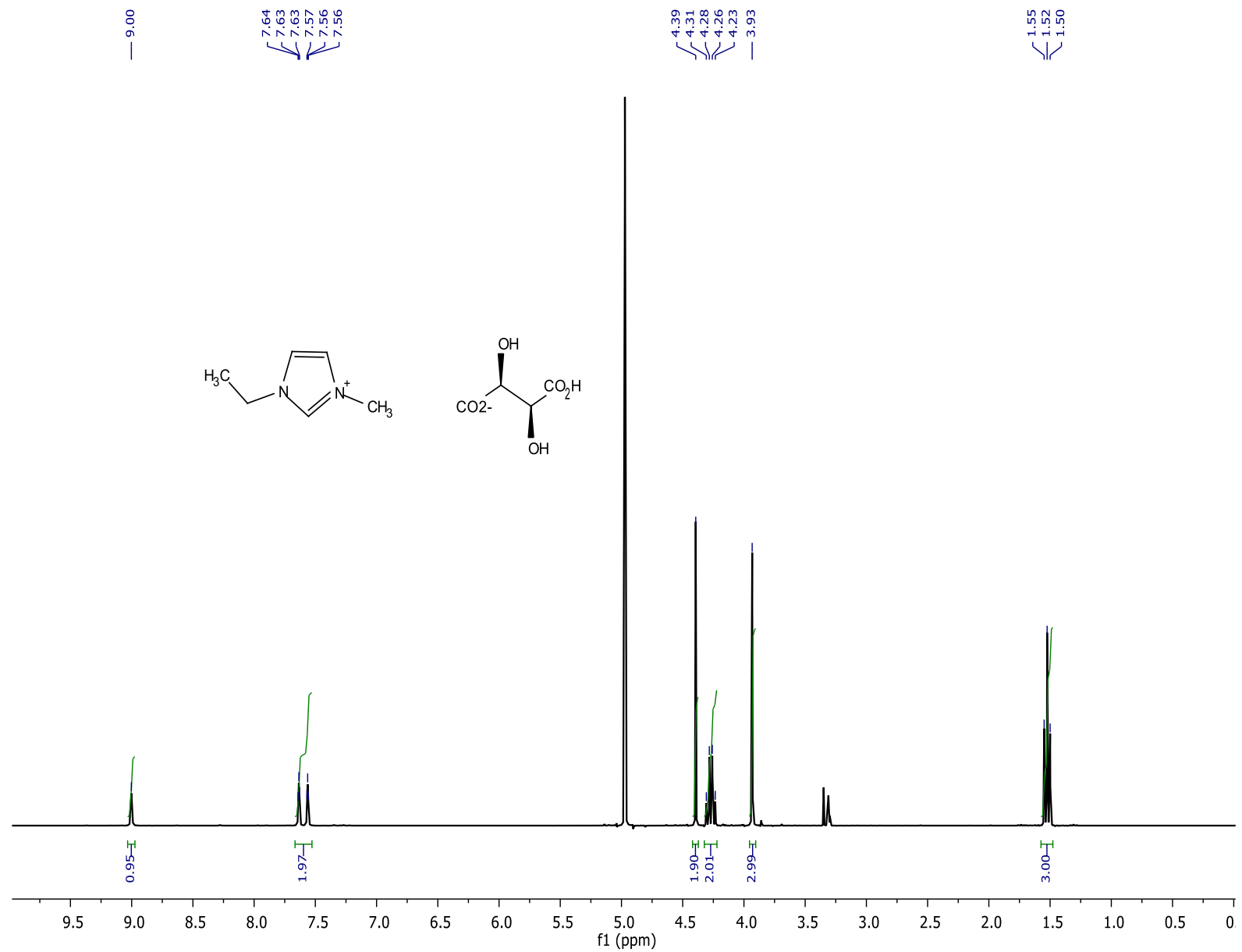


¹³C-NMR (75 MHz, D₂O) of [EMIM]OH

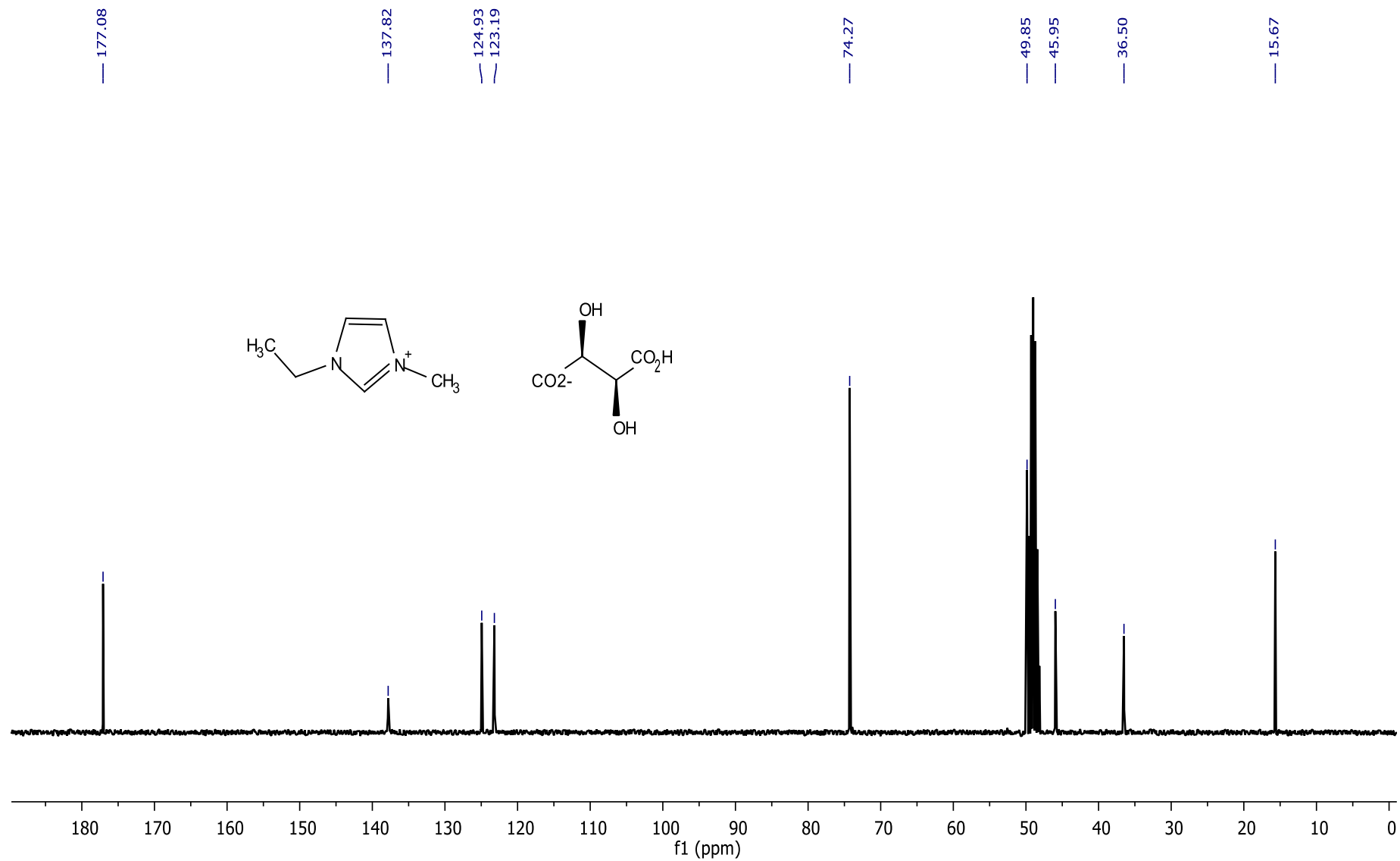




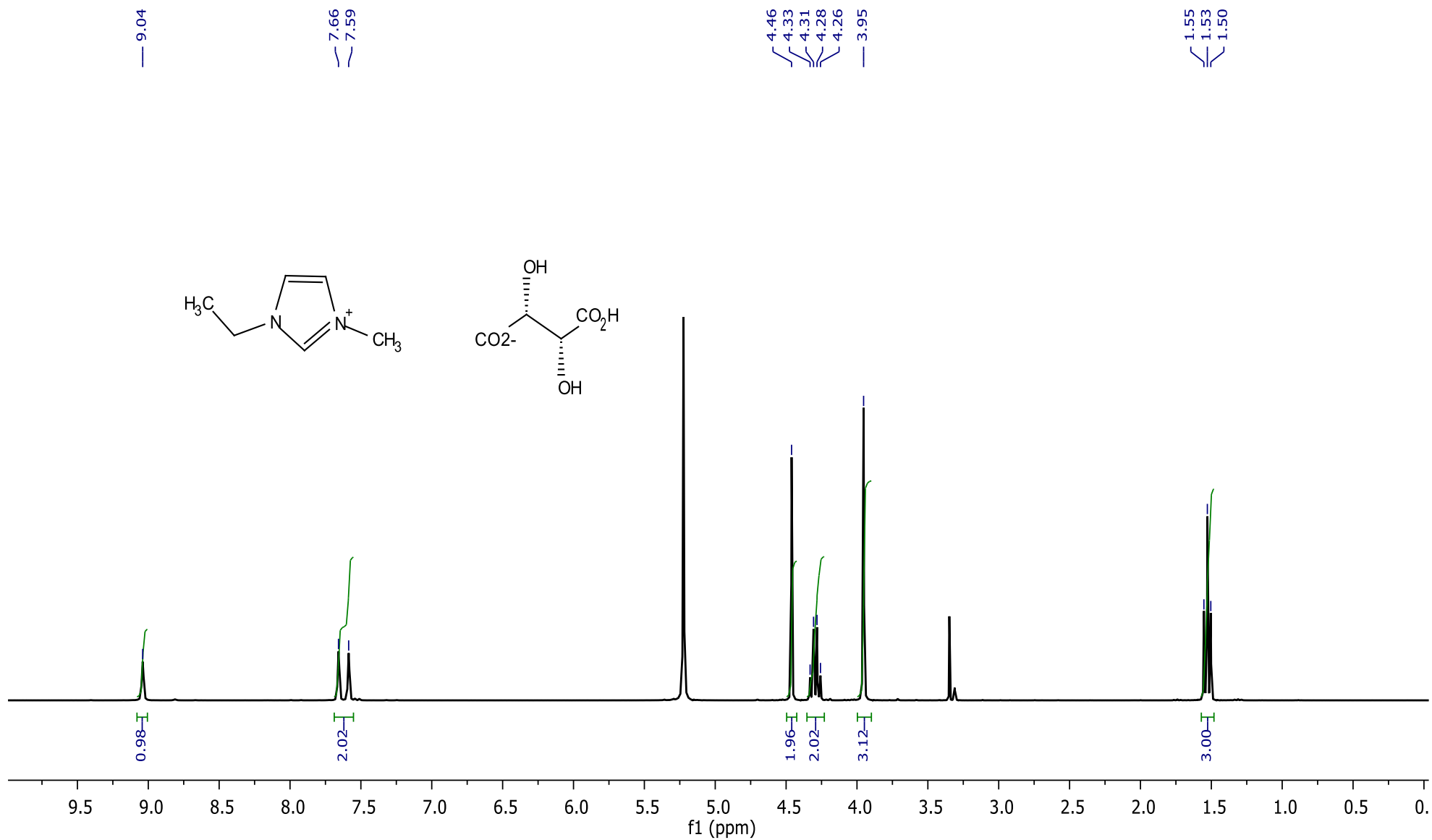
¹³C-NMR (75 MHz, D₂O) of a crude mixture of [EMIM]Br + AgOH (1.5 equiv.) after 5h at rt



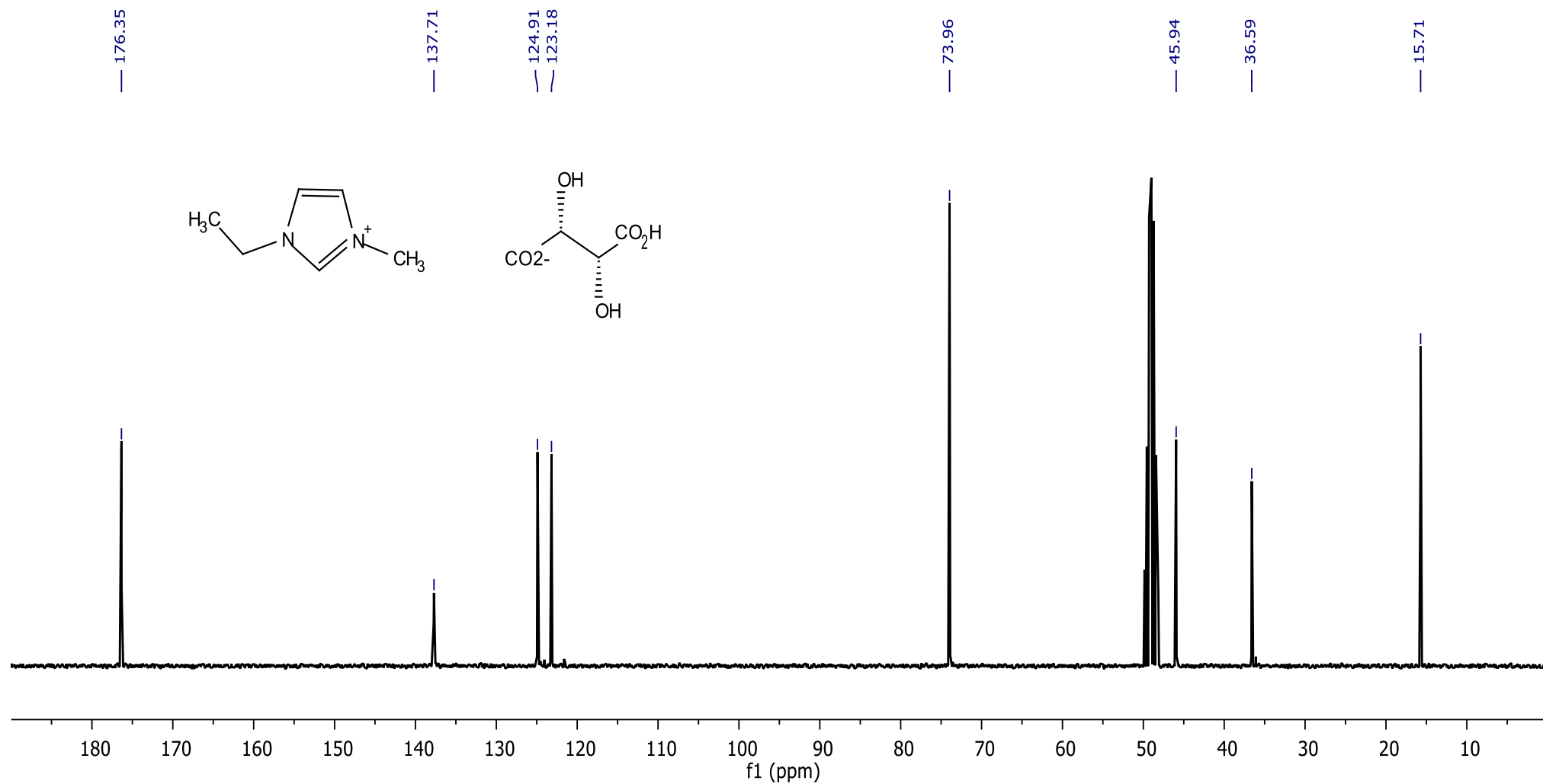
¹H-NMR (300 MHz, CD₃OD) of [EMIM](2S,3S)-HTar, (-)-1



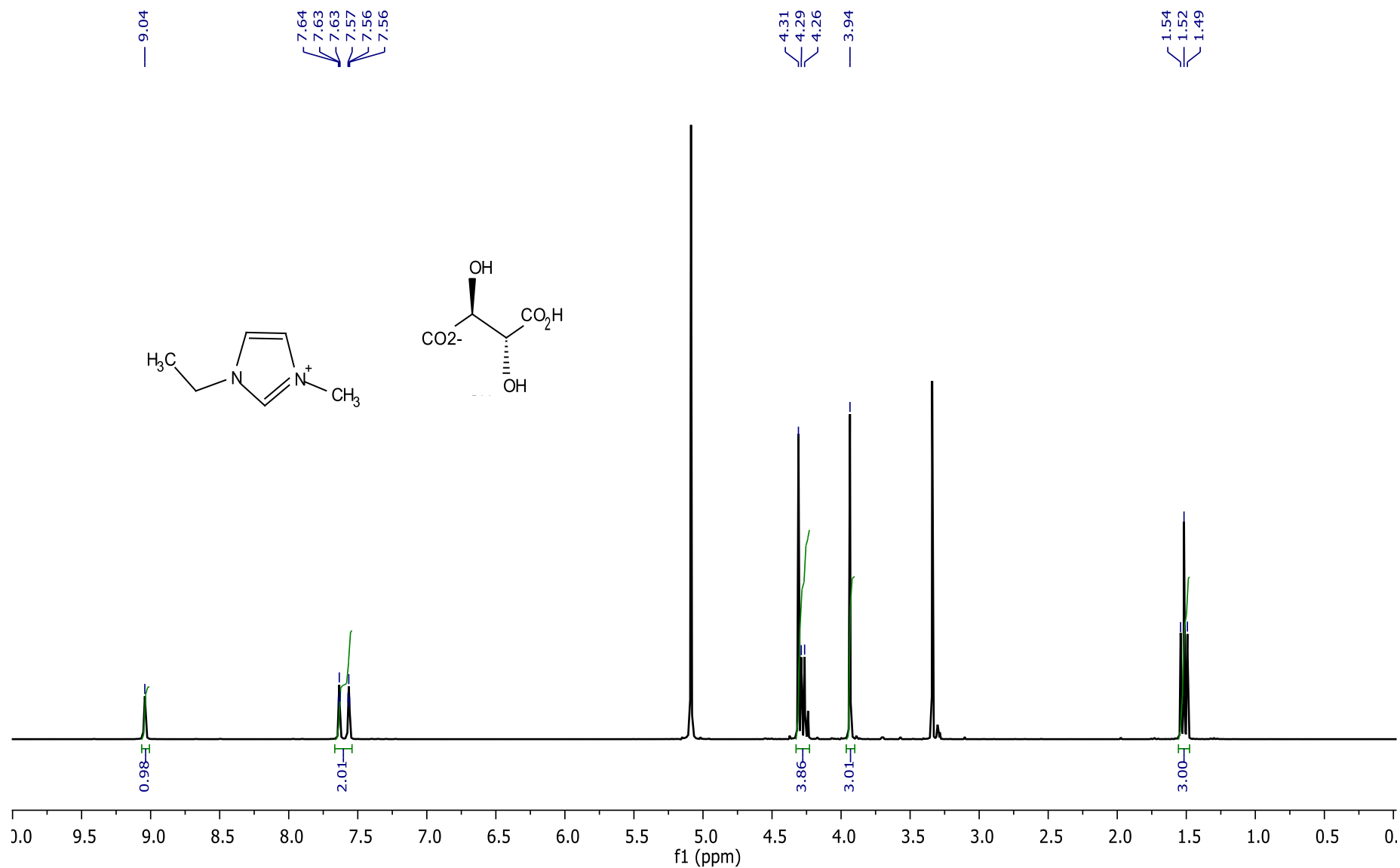
^{13}C -NMR (75 MHz, CD_3OD) of [EMIM](2S,3S)-HTar, (-)-1

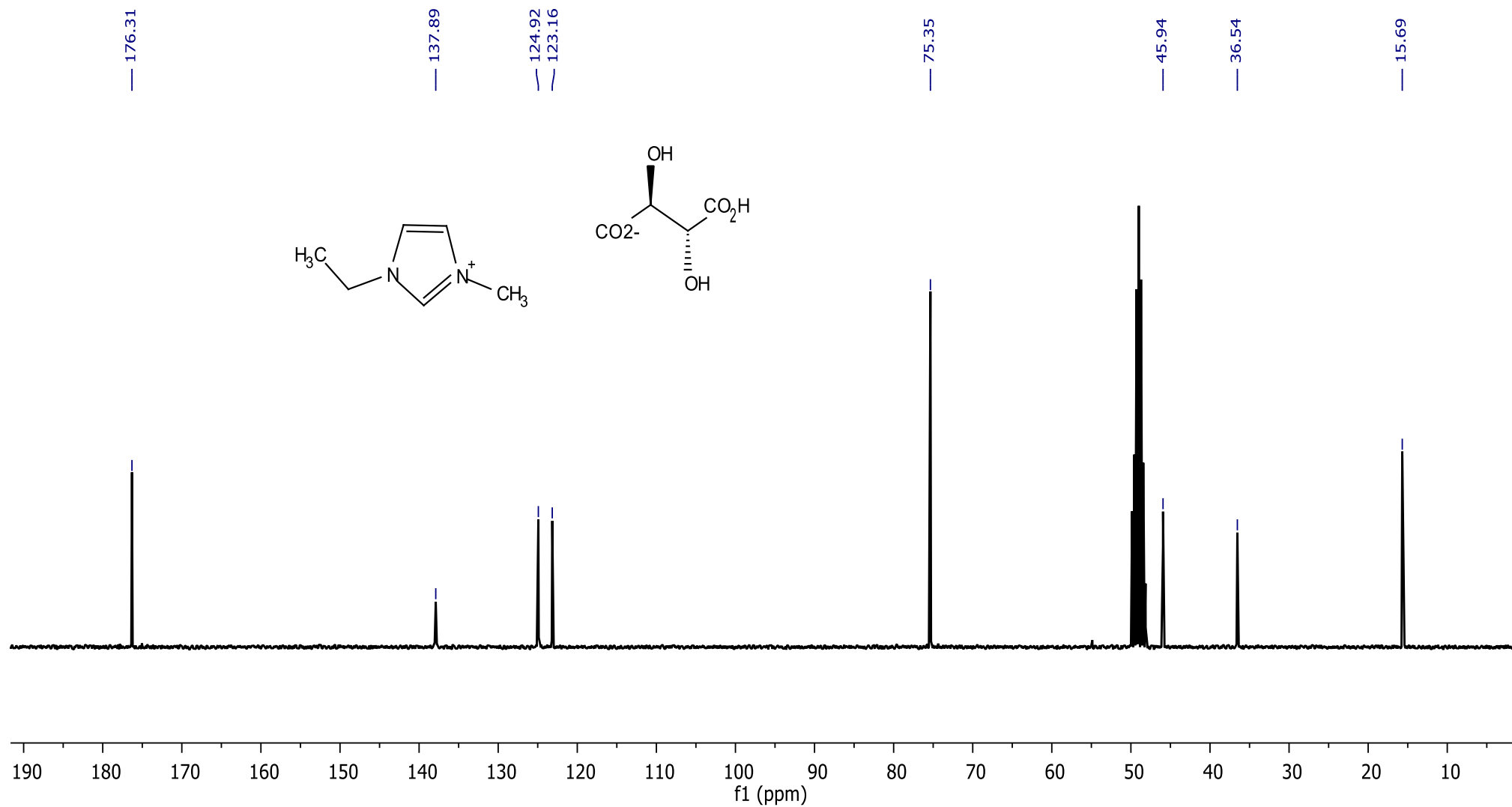


¹H-NMR (300 MHz, CD₃OD) of [EMIM](2R,3R)-HTar, (+)-1

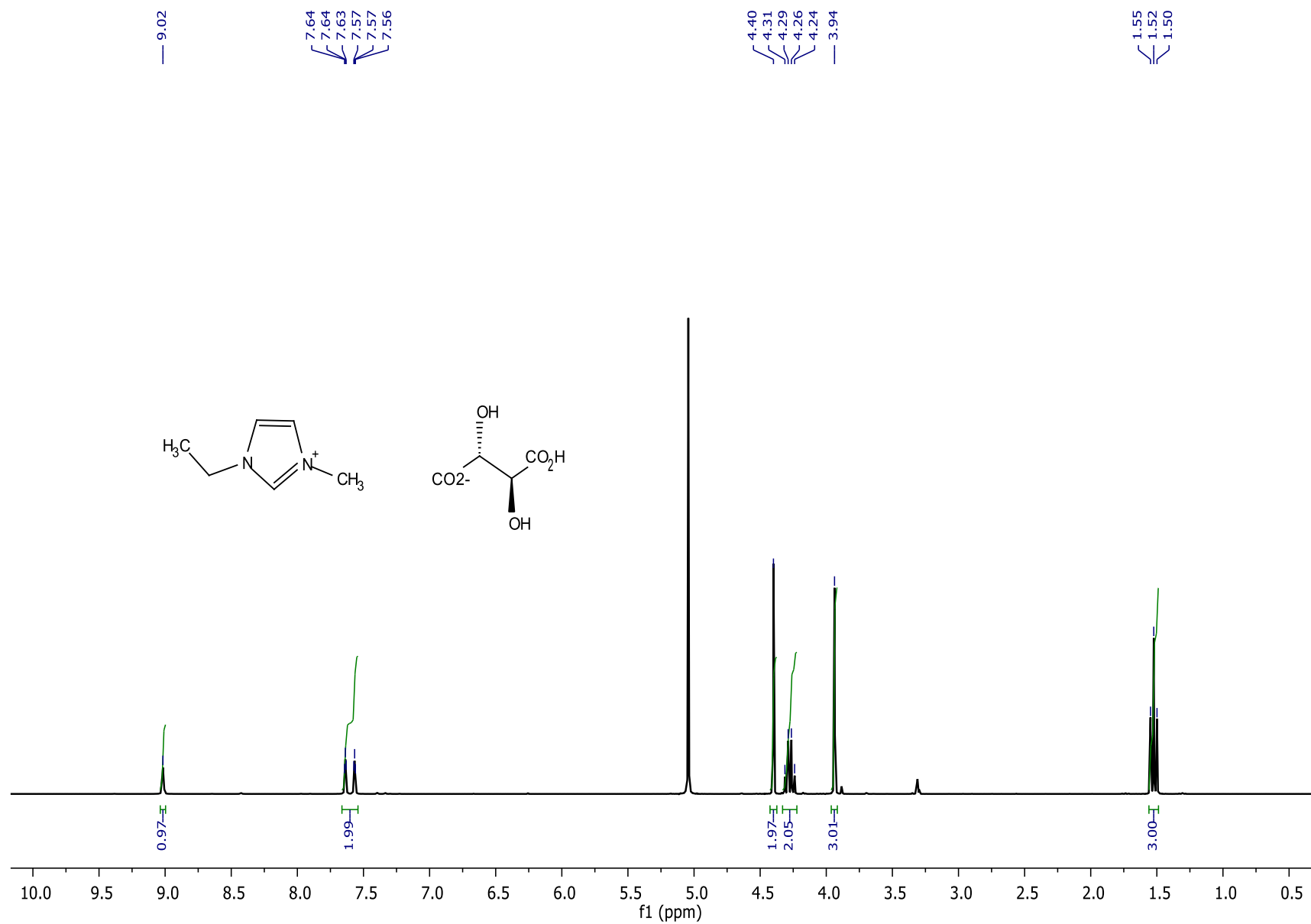


¹³C-NMR (75 MHz, CD₃OD) of [EMIM](2R,3R)-HTar, (+)-1

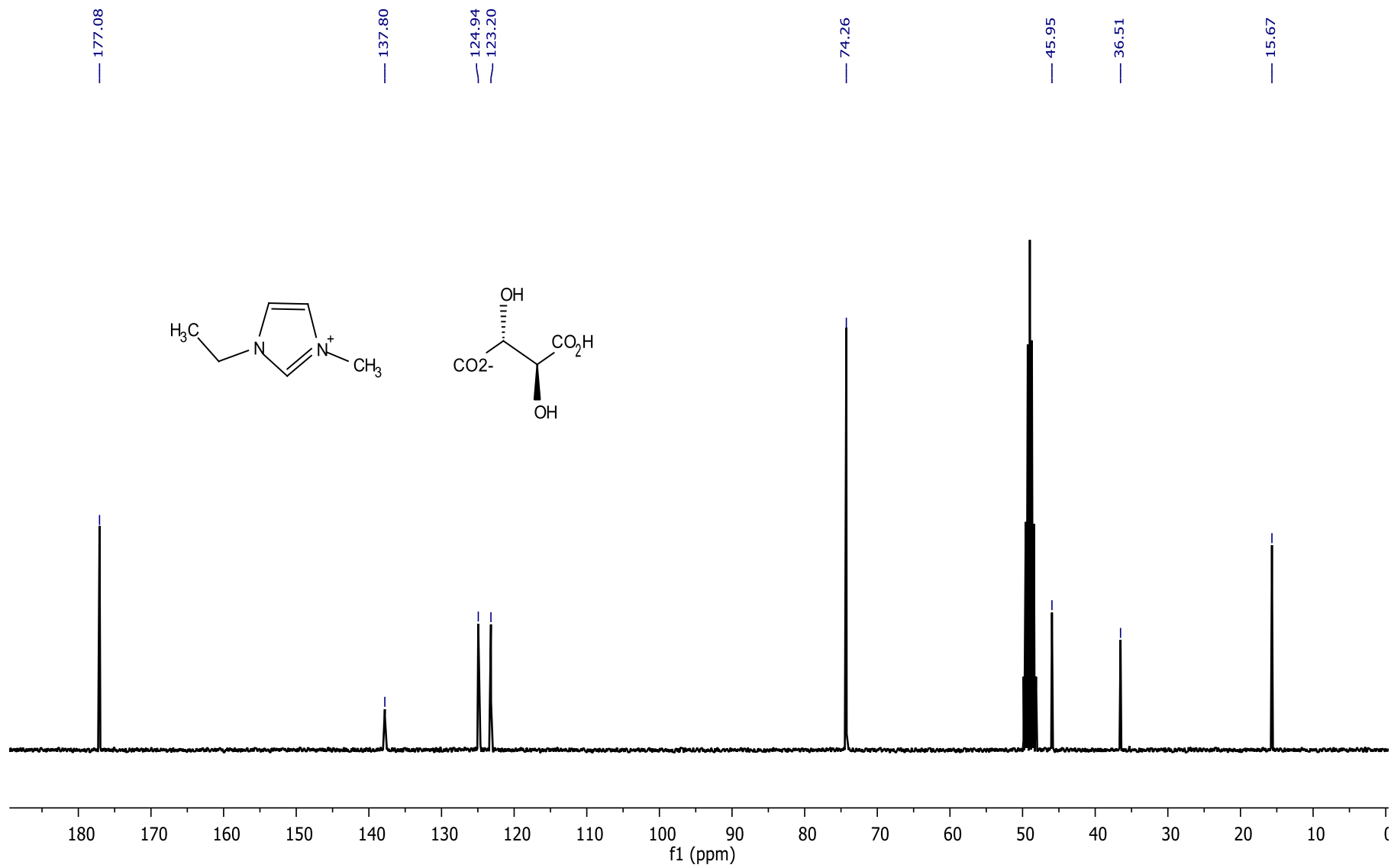




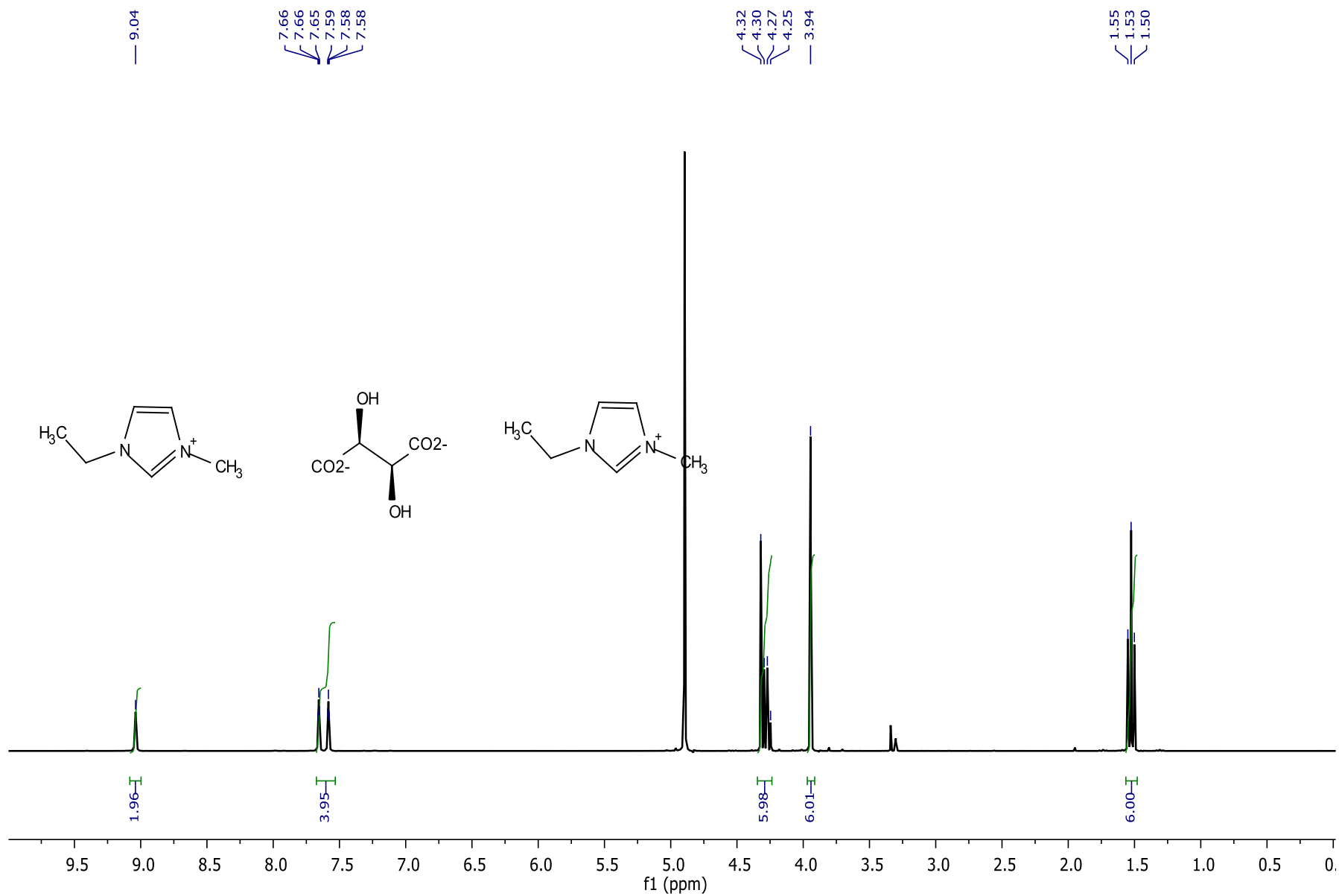
¹³C-NMR (75 MHz, CD₃OD) of [EMIM]*rac*-HTar, (*rac*)-1



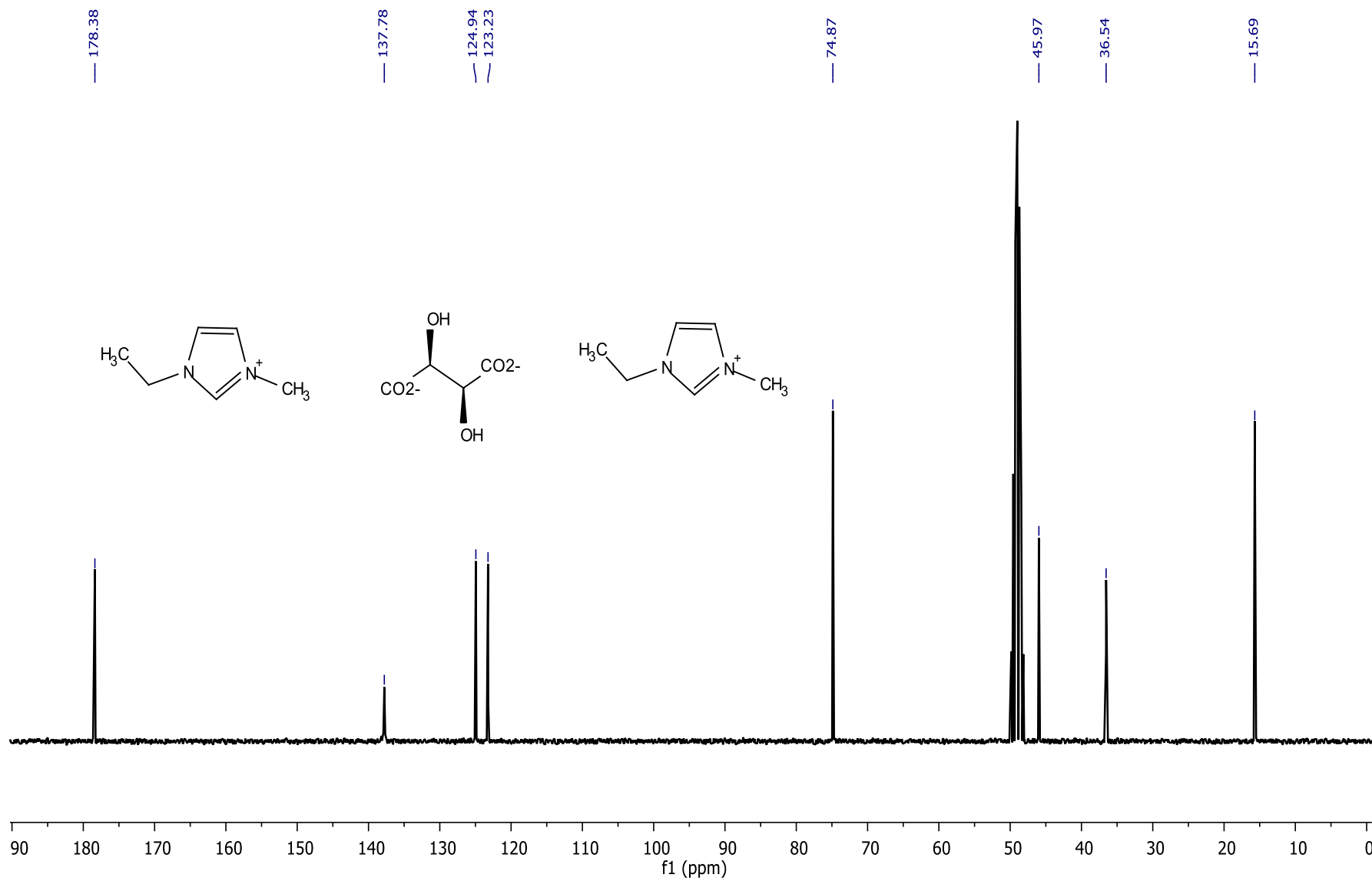
^1H -NMR (300 MHz, CD_3OD) of $[\text{EMIM}]\text{meso-HTar}$, *meso*-1



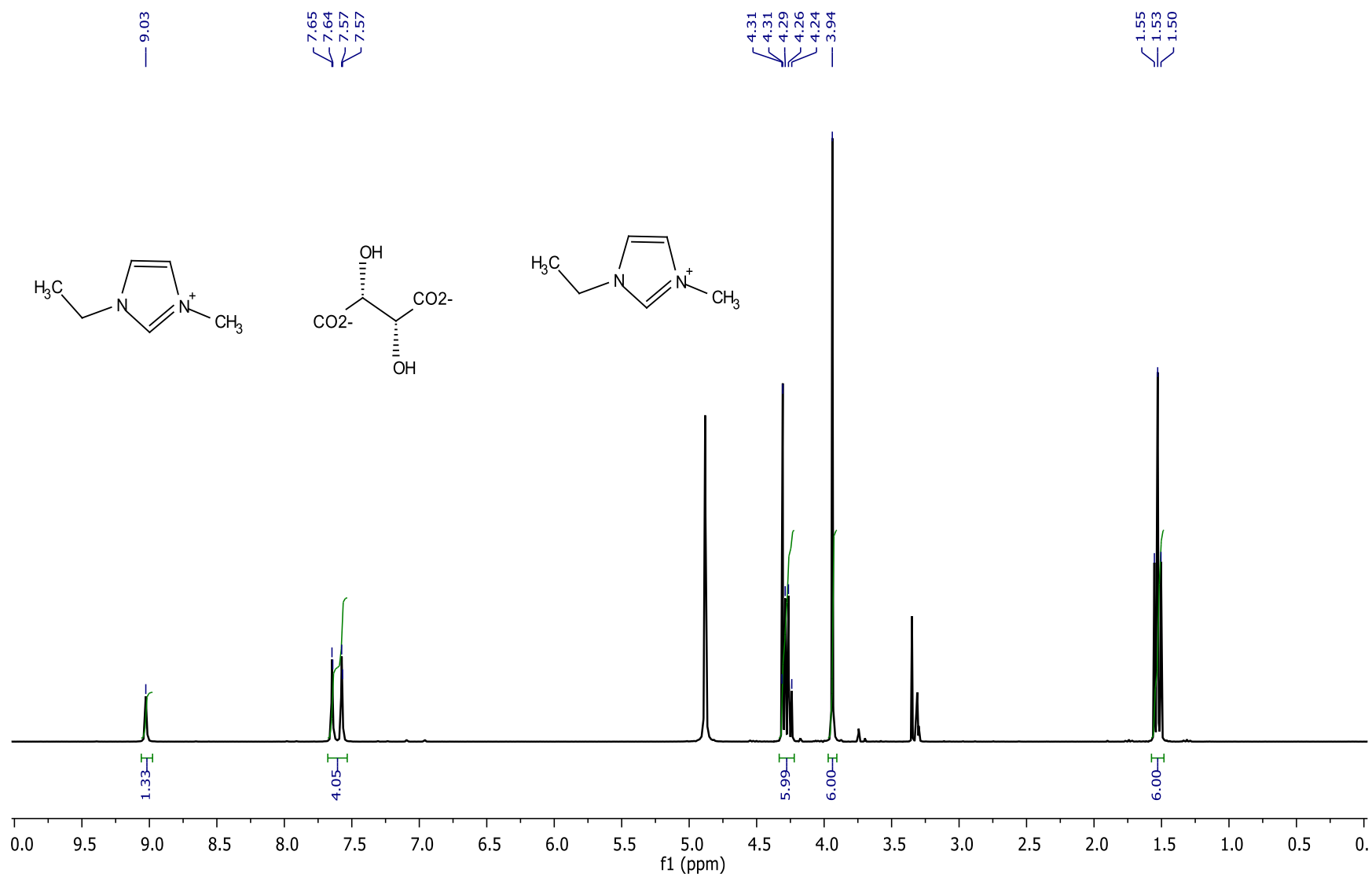
^{13}C -NMR (75 MHz, CD_3OD) of [EMIM]*meso*-HTar, *meso*-1



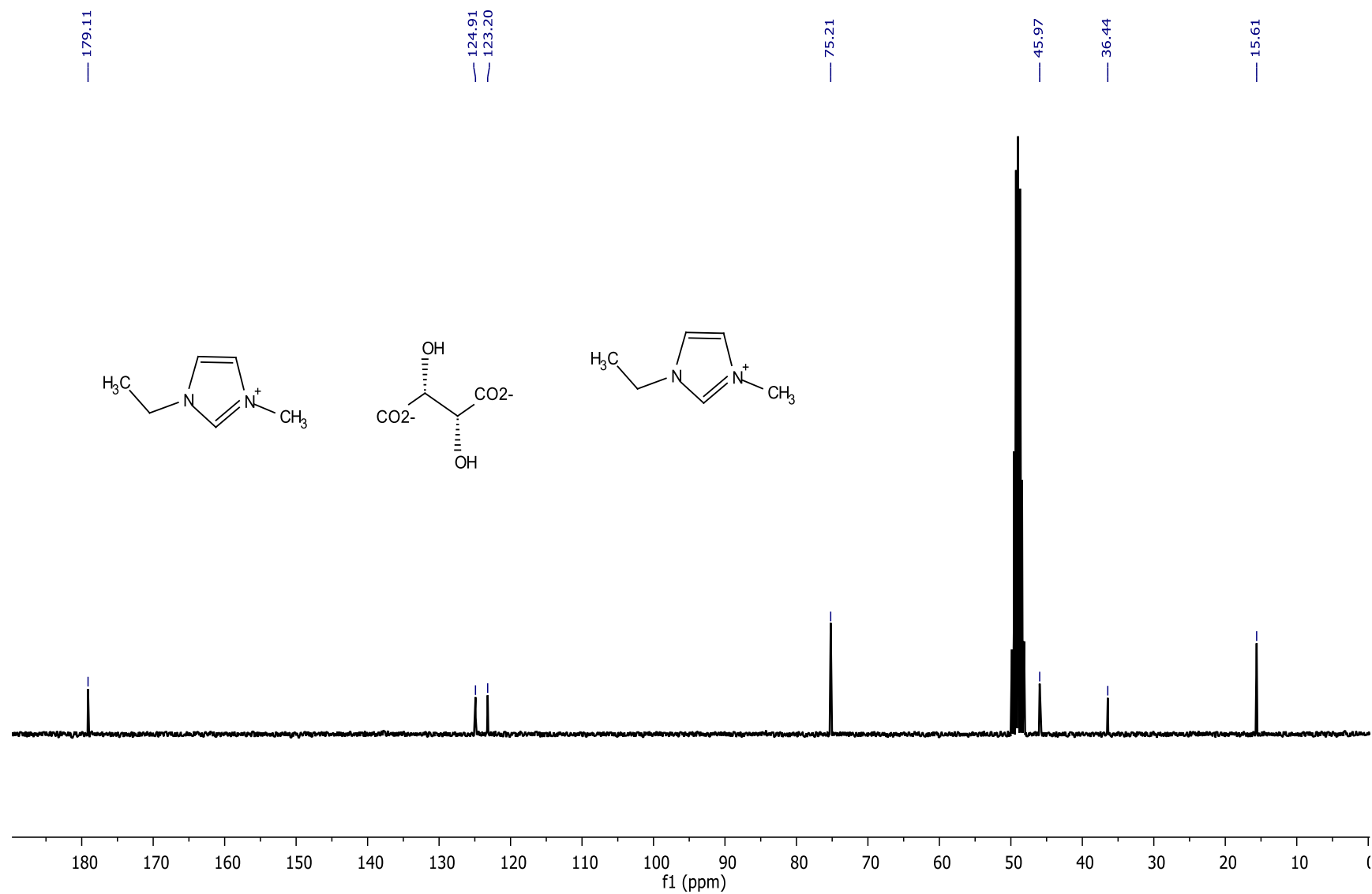
¹H-NMR (300 MHz, CD₃OD) of [EMIM]₂(2S,3S)-Tar, (-)-2



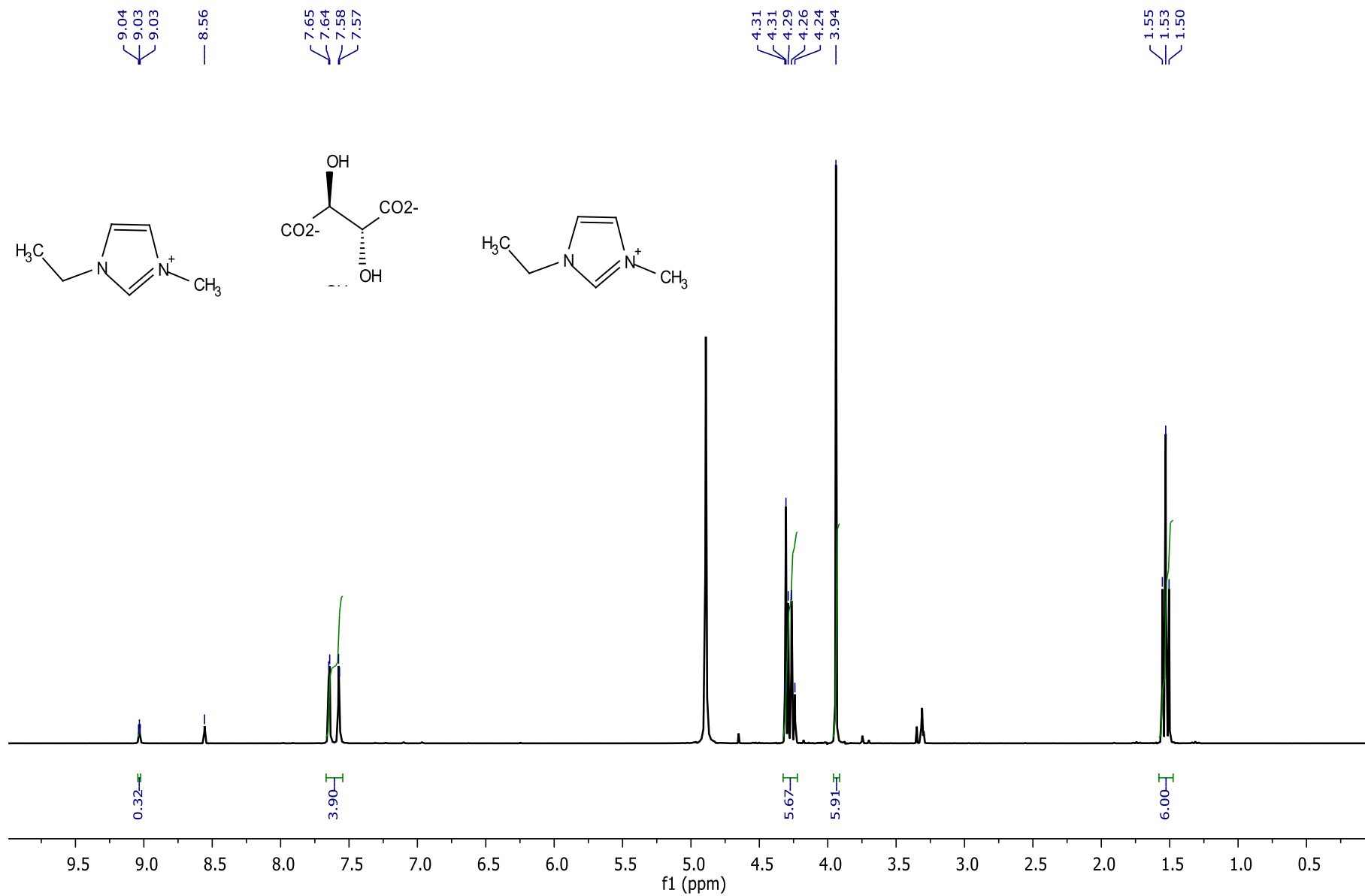
^{13}C -NMR (75 MHz, CD_3OD) of $[\text{EMIM}]_2(2\text{S},3\text{S})\text{-Tar, (-)-2}$



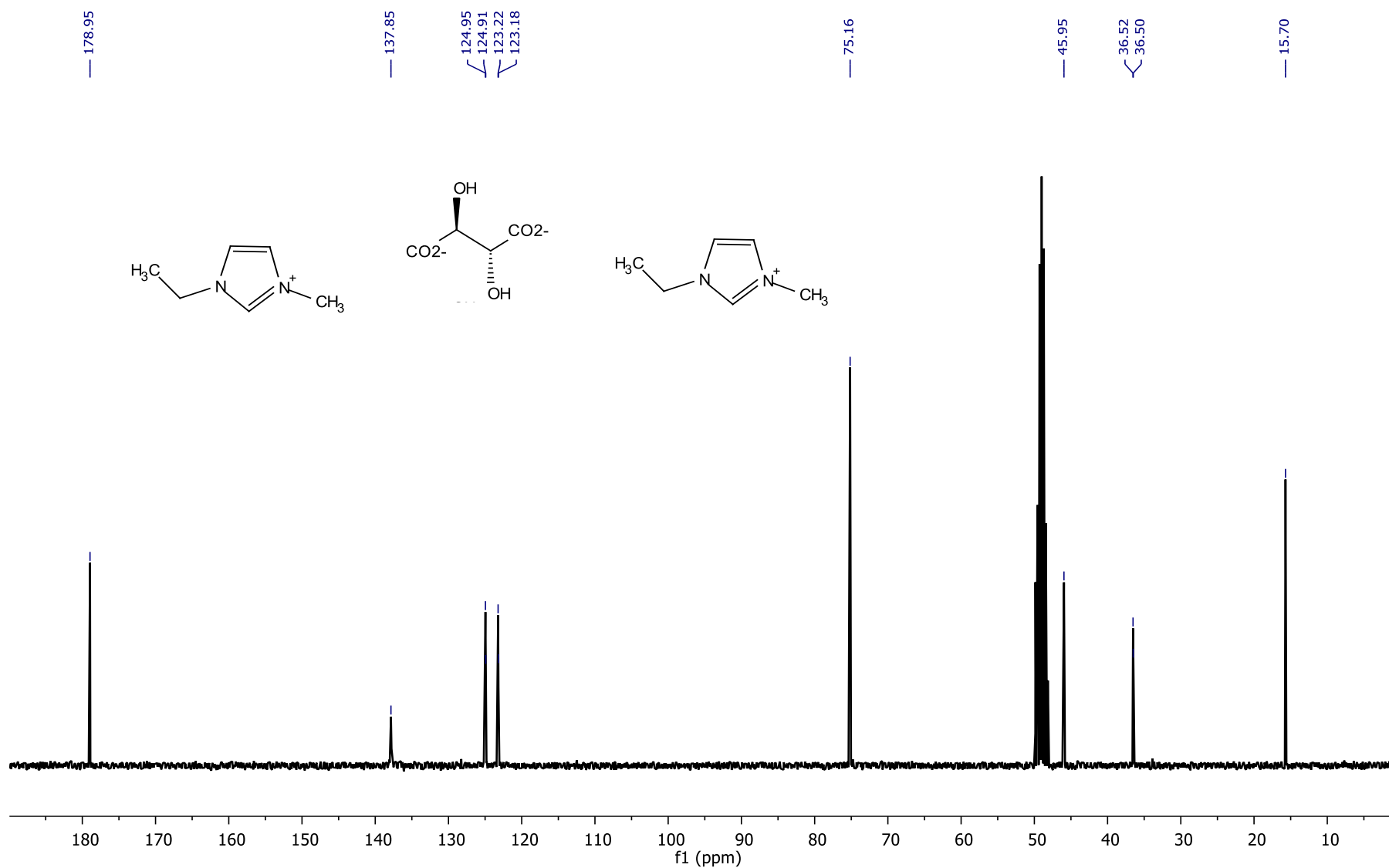
^1H -NMR (300 MHz, CD_3OD) of $[\text{EMIM}]_2(2R,3R)\text{-Tar, (+)-2}$



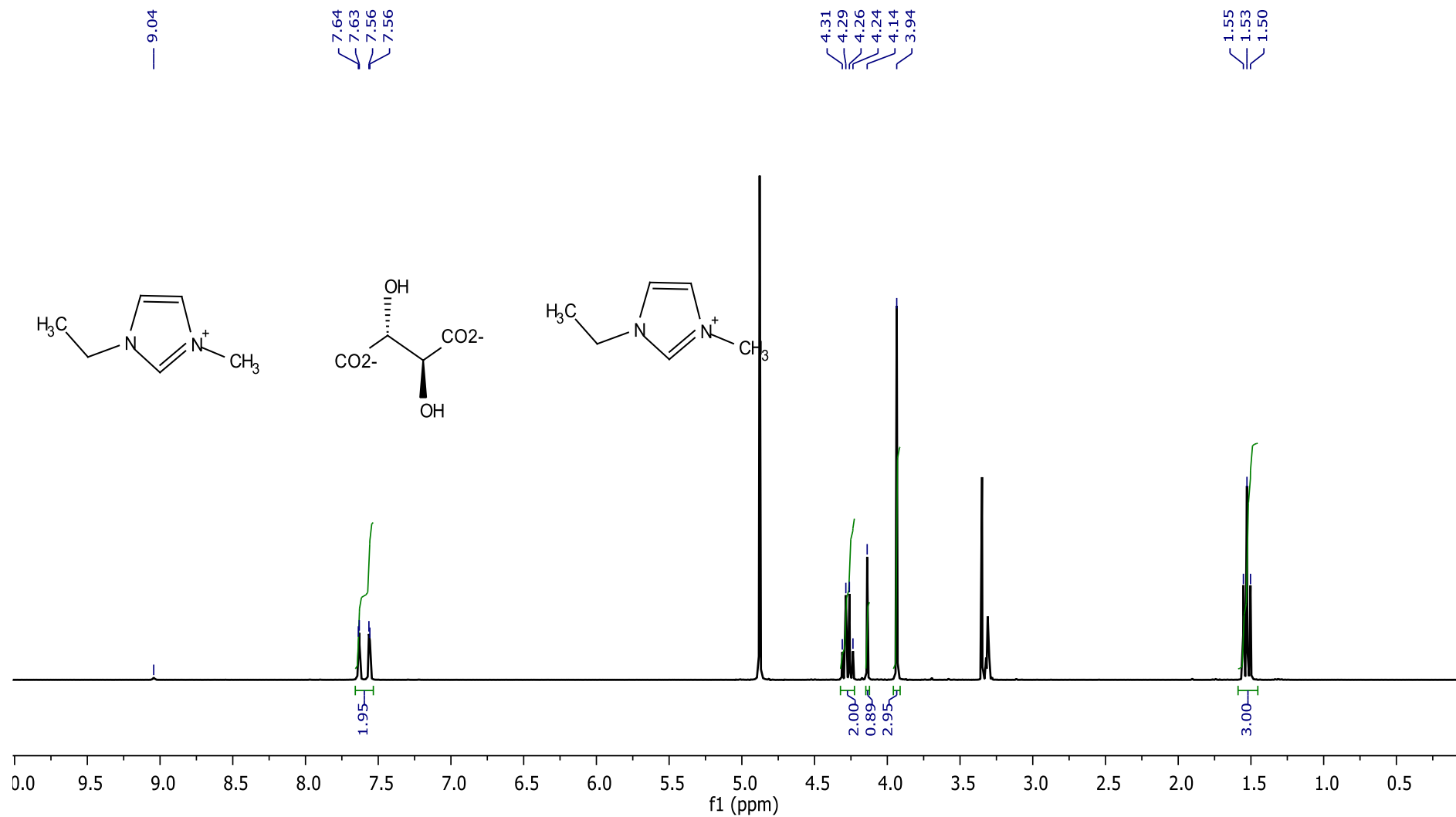
^{13}C -NMR (75 MHz, CD_3OD) of $[\text{EMIM}]_2(2R,3R)\text{-Tar, (+)-2}$



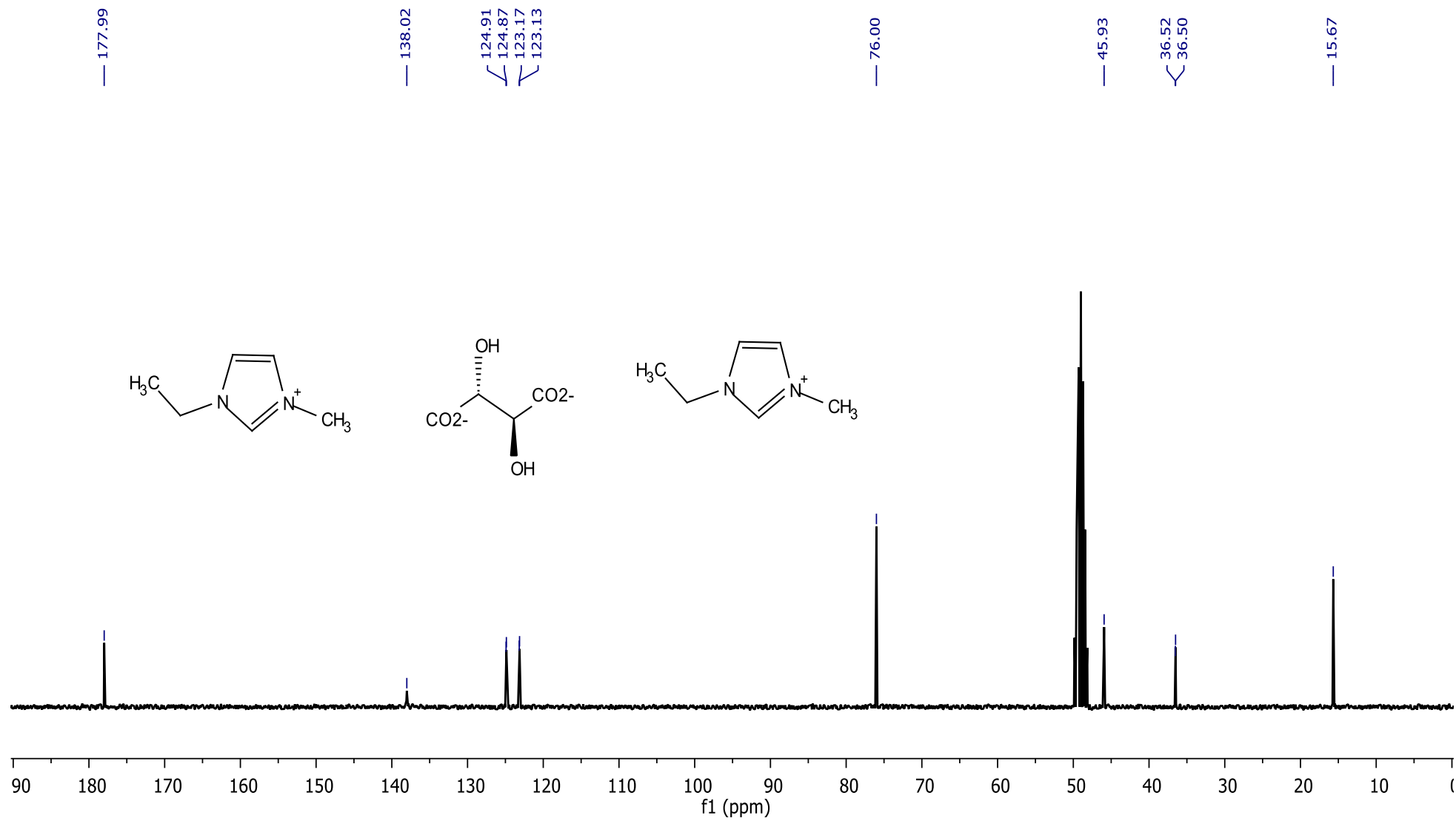
¹H-NMR (300 MHz, CD₃OD) of [EMIM]₂*rac*-Tar, (*rac*)-2



^{13}C -NMR (75 MHz, CD_3OD) of $[\text{EMIM}]_2\text{rac-Tar}$, (*rac*)-2



^1H -NMR (300 MHz, CD_3OD) of $[\text{EMIM}]_2\text{meso-Tar, meso-2}$



¹³C-NMR (75 MHz, CD₃OD) of [EMIM]₂meso-Tar, meso-2

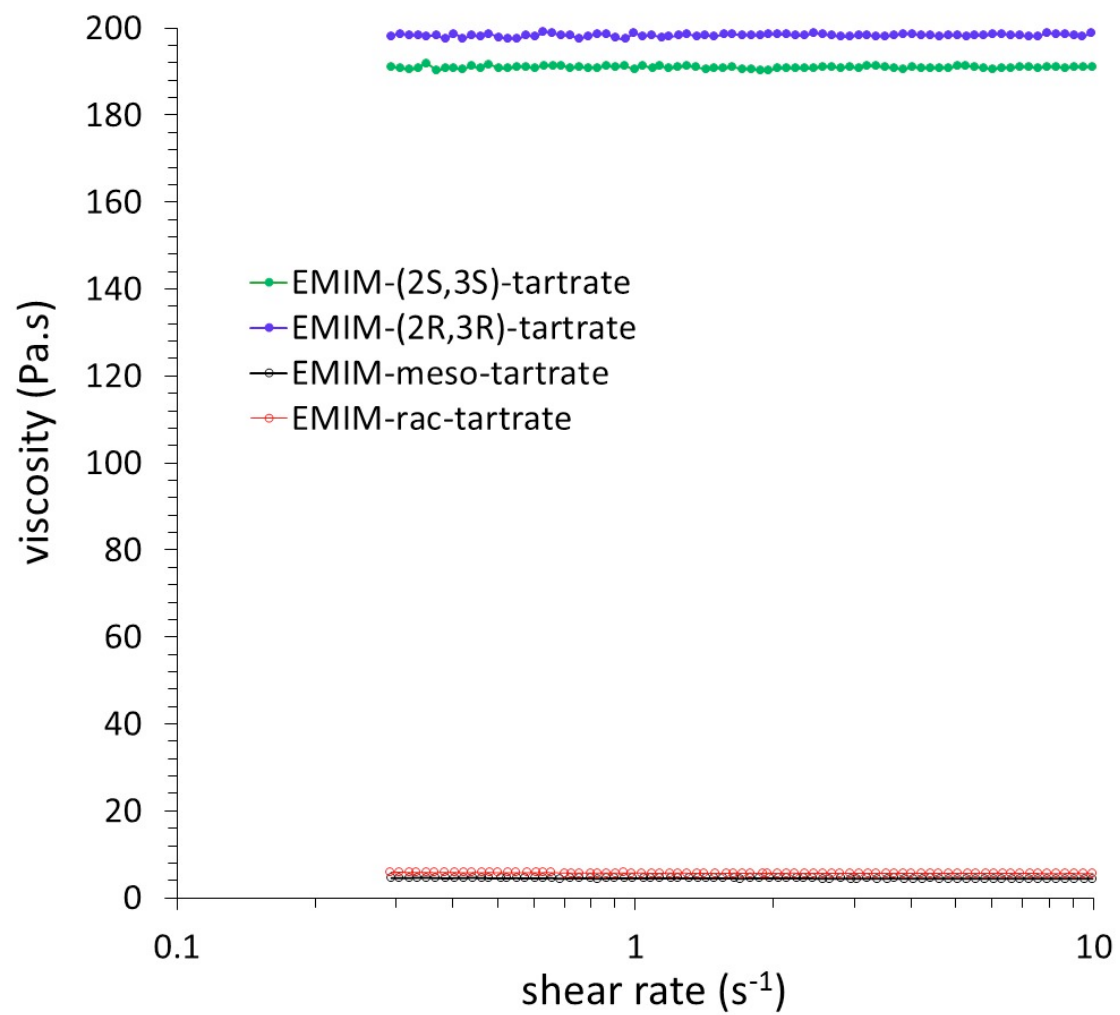


Fig SI-1. Dynamic viscosity of the EMIM tartrates IIs as a function of the shear rate. All ILs displayed a newtonian behavior.