The ^{1}H NMR and ^{13}C NMR spectra of synthesized organosulfate standards are shown in Figure S1-S8 below. These ^{1}H NMR and ^{13}C NMR spectra were recorded on a Bruker Advance-III 400 MHz spectrometer at 400 and 100 MHz, respectively using trimethylsilane (TMS) as an internal standard.

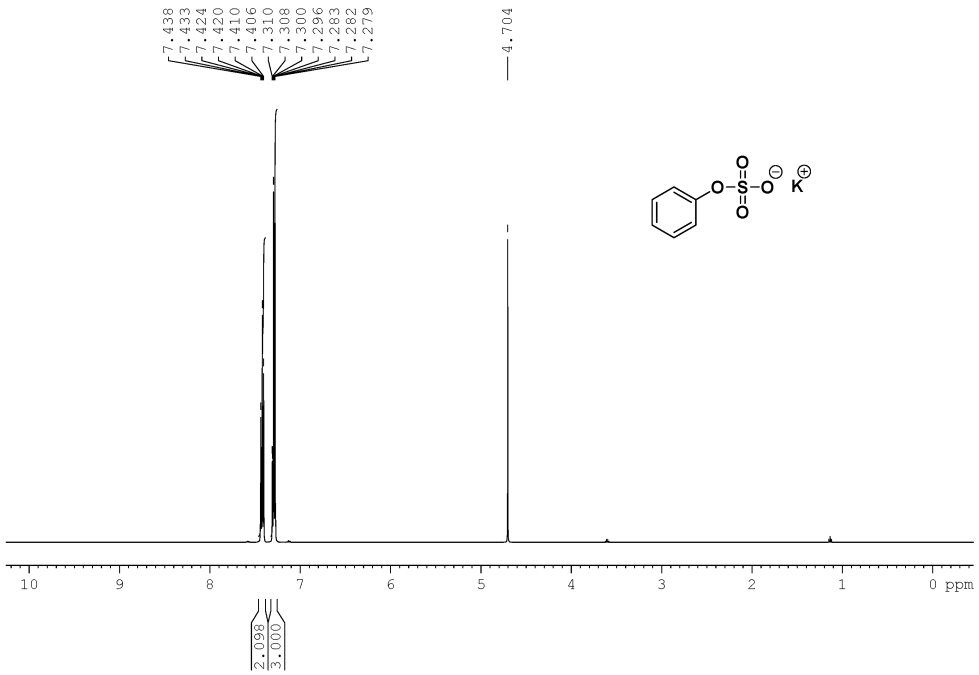

Figure S1. ^{1}H NMR spectrum of potassium phenyl sulfate in D_2O.

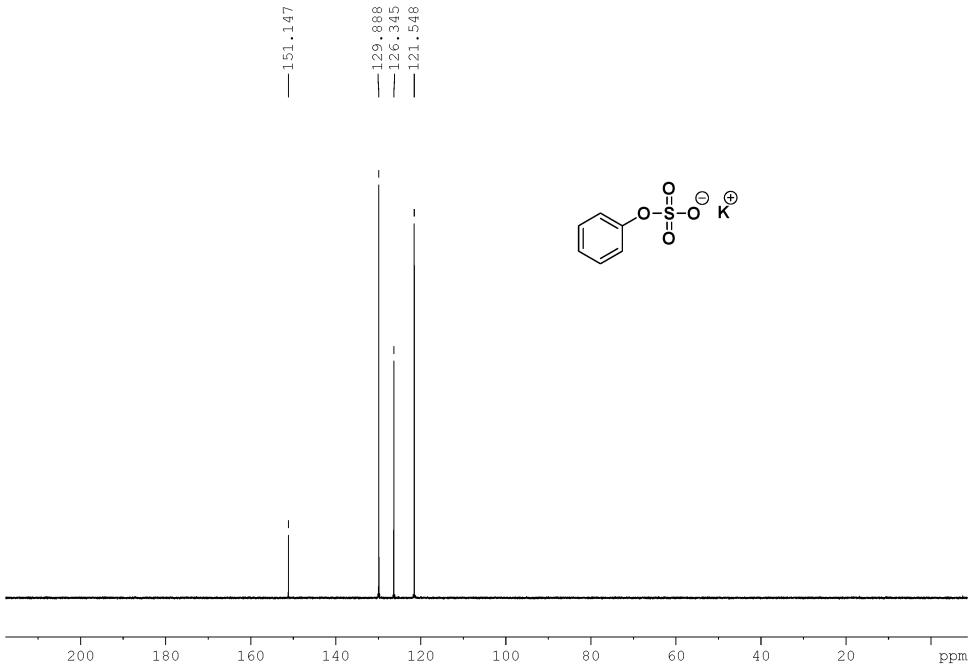

Figure S2. ^{13}C NMR spectrum of potassium phenyl sulfate in D_2O.

Figure S3. ^{1}H NMR spectrum of potassium benzyl sulfate in DMSO-*d*6.

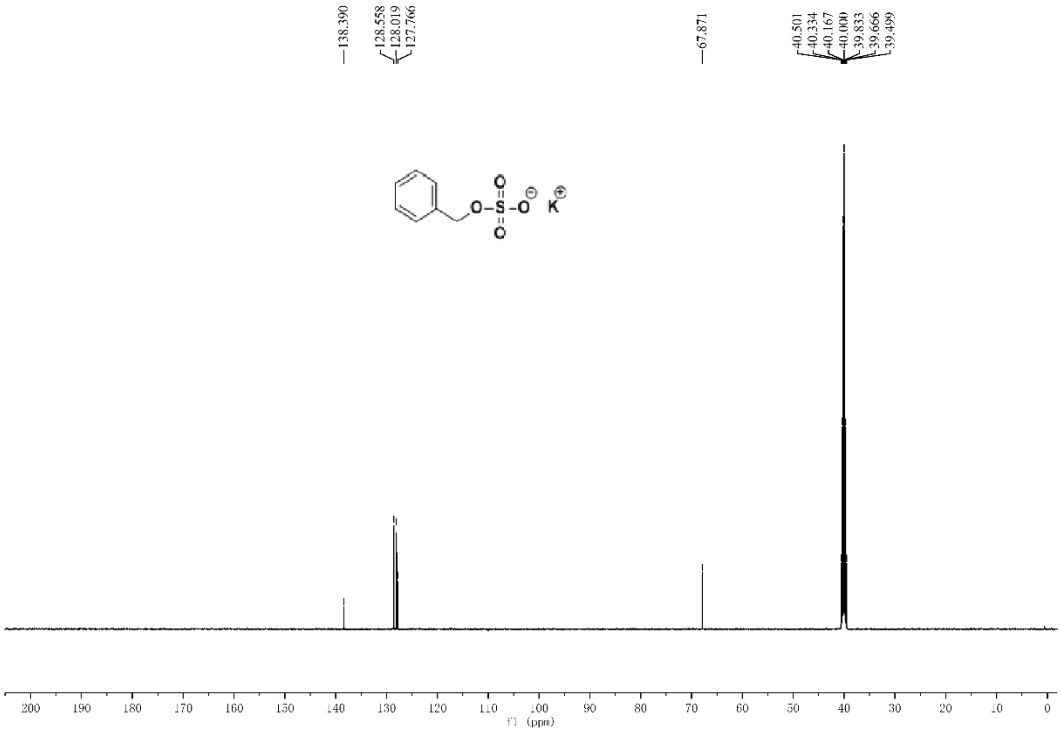

Figure S4. ^{13}C NMR spectrum of potassium benzyl sulfate in DMSO-*d*6.

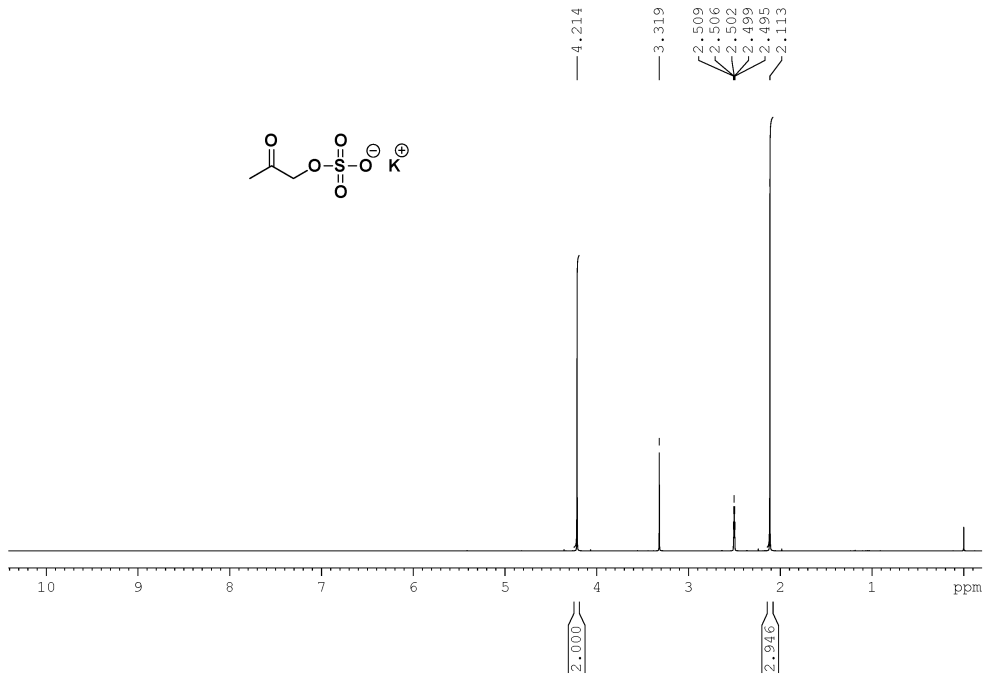

Figure S5. ^{1}H NMR spectrum of potassium hydroxyacetone sulfate in DMSO-*d*6.

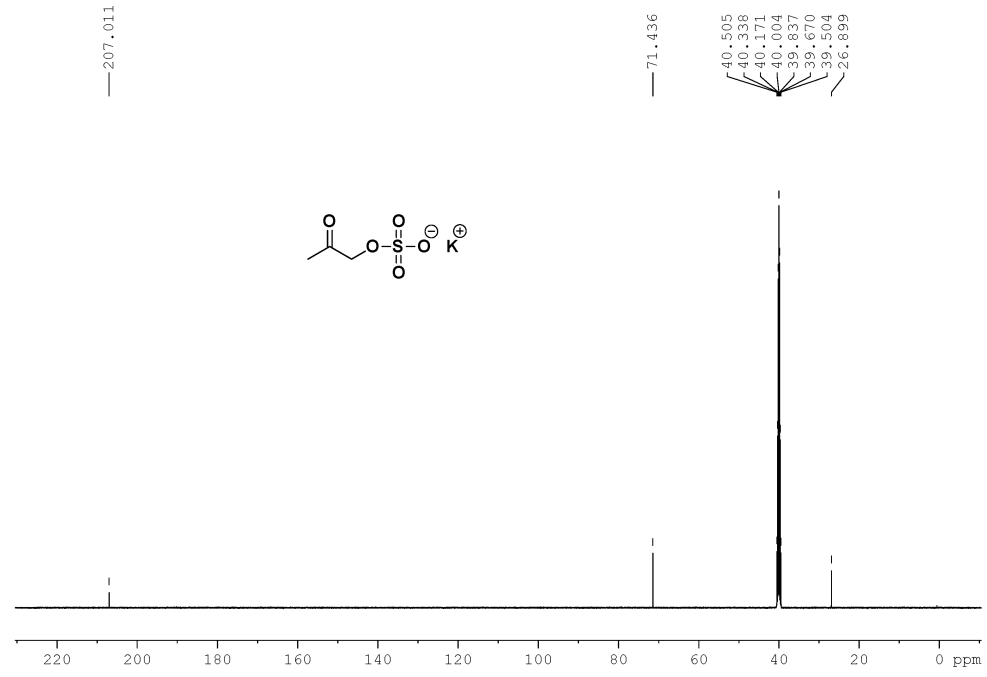

Figure S6. ^{13}C NMR spectrum of potassium hydroxyacetone sulfate in DMSO-*d*6.

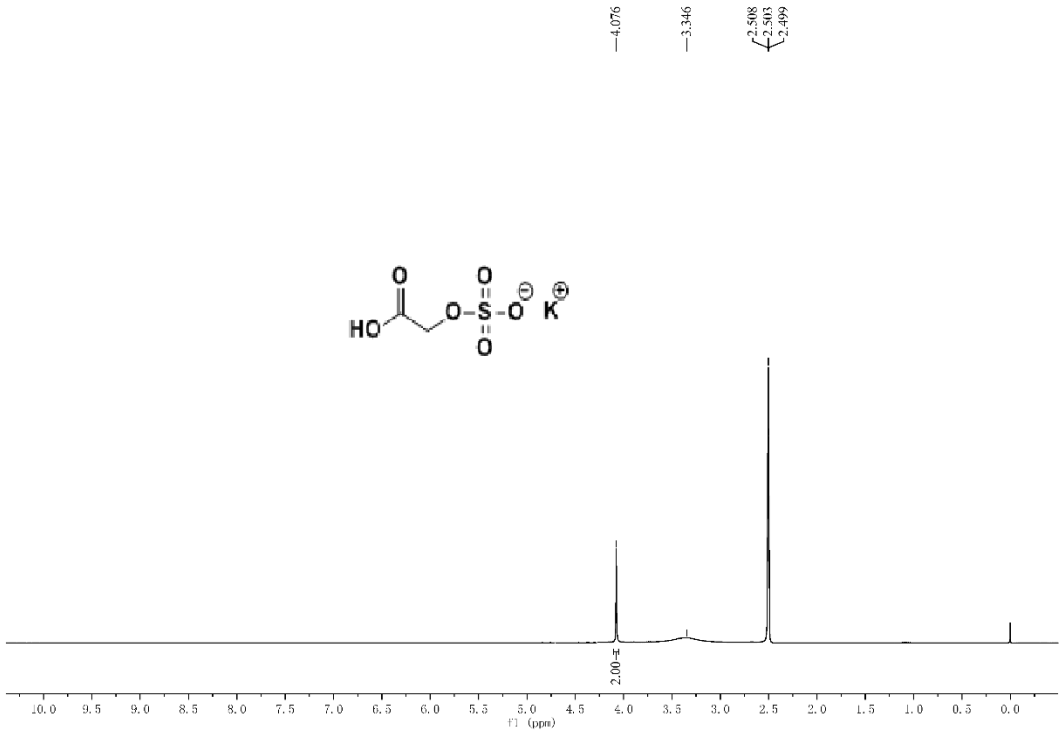

Figure S7. ^{1}H NMR spectrum of potassium glycolic acid sulfate in DMSO-*d*6.

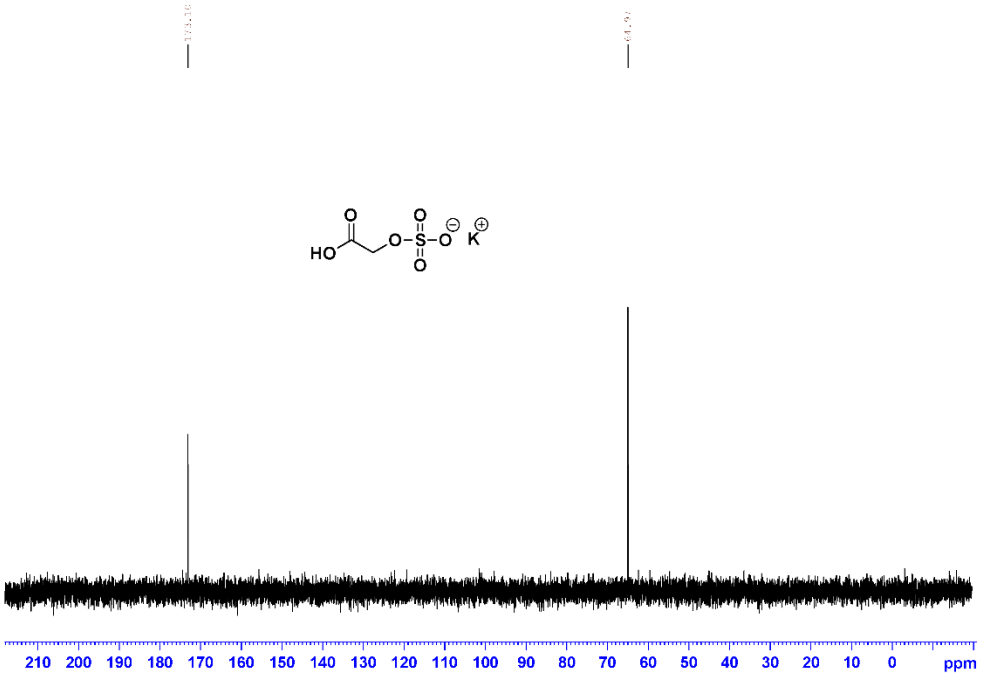

Figure S8. ^{13}C NMR spectrum of potassium glycolic acid sulfate in D_2O.