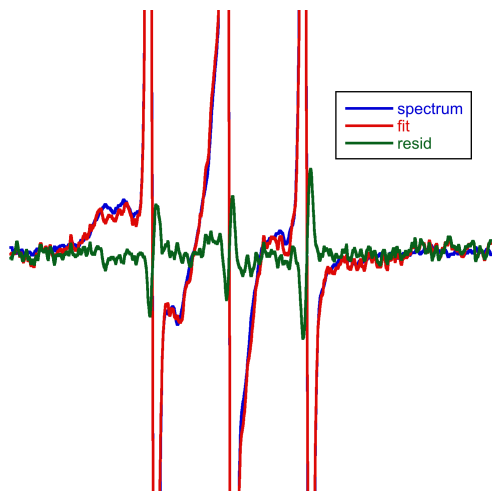


Supplemental Figure 1. All raw EPR spectra in this study. A text file of raw data available upon request. a. Example plots of deconvolution of EPR spectra as described in Methods. Raw spectrum in blue, fit in red, and residual in green. b. Spectra of SNF2h without nucleosomes or DNA. c. Spectra of SNF2h with N+60 nucleosomes. d. Spectra of SNF2h with N nucleosomes. e. Spectra of SNF2h with $N^{\Delta\text{tail}}+60$ nucleosomes. f. Spectra of SNF2h with $N^{\Delta\text{patch}}+60$ nucleosomes. g. Spectra of SNF2h with 60 a basepair duplex DNA fragment. h. Spectra of the SNF2h Walker B (E309A) mutant with N+60 nucleosomes.

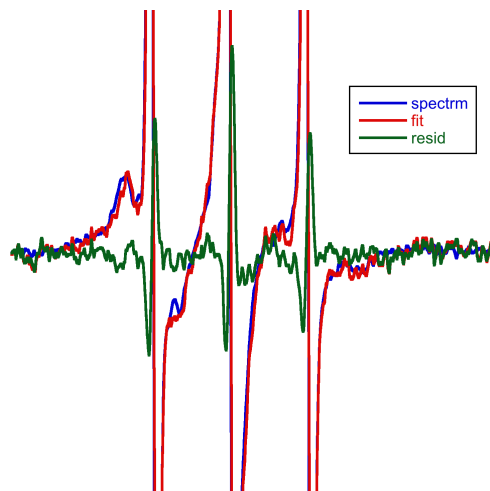
SUPPLEMENTAL FIGURE 1

(a)

Fit of SNF2h•DNA•ADP•BeFx Spectrum 1



Fit of SNF2h(E309A)•N+60•ADP Spectrum 1



(b)

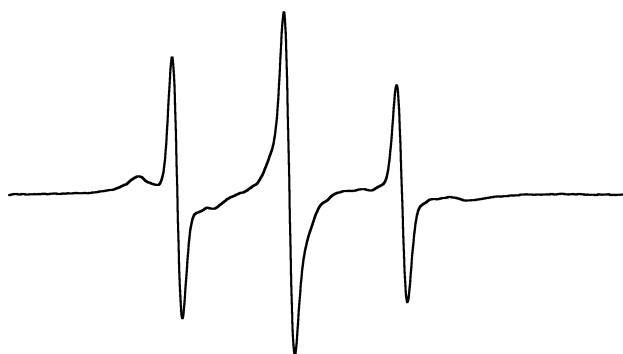
SNF2h•ADP Spectrum 1



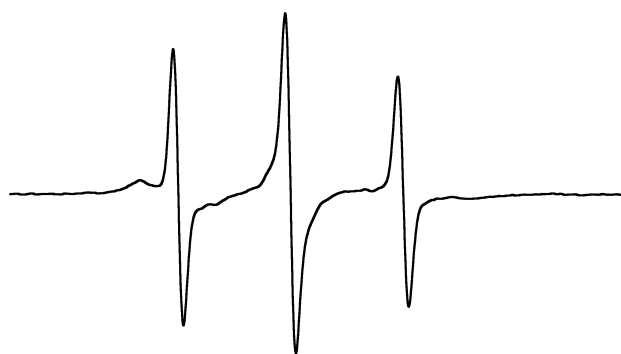
SNF2h•ADP Spectrum 2



SNF2h•ADP•BeFx Spectrum 1

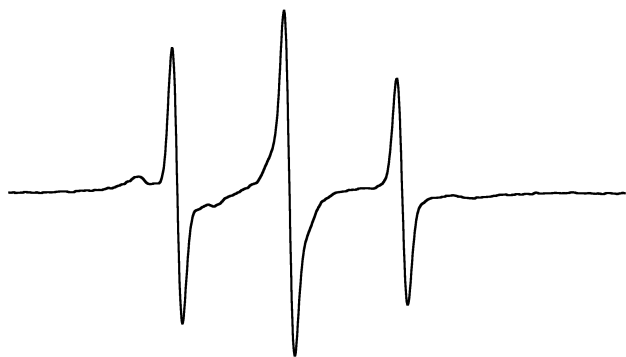


SNF2h•ADP•BeFx Spectrum 2

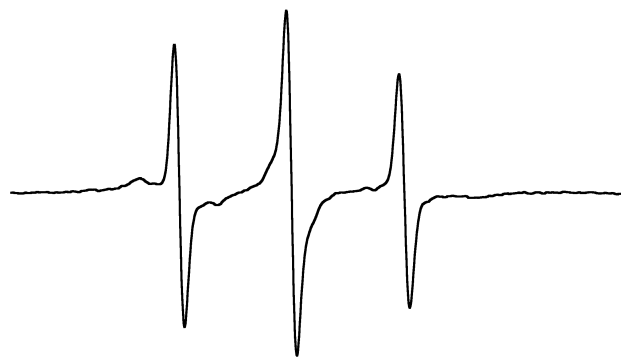


(c)

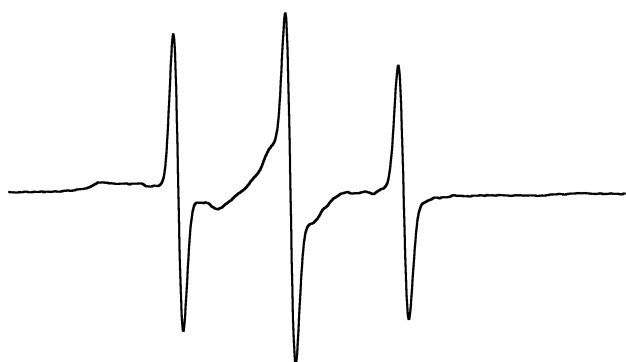
SNF2h•N+60•ADP Spectrum 1



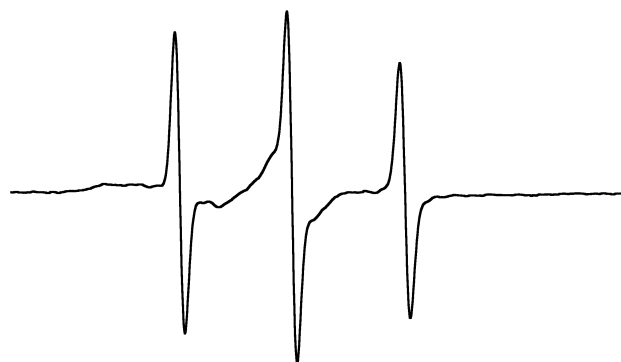
SNF2h•N+60•ADP Spectrum 2



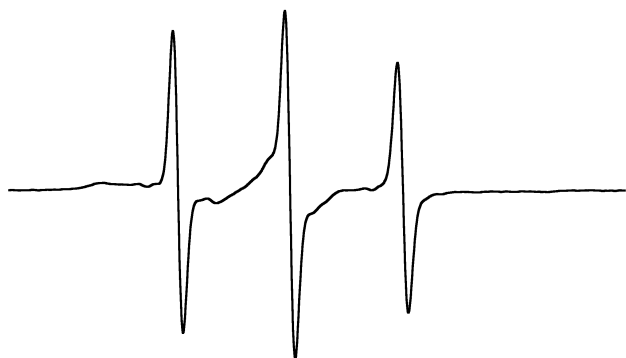
SNF2h•N+60•ADP•BeFx Spectrum 1



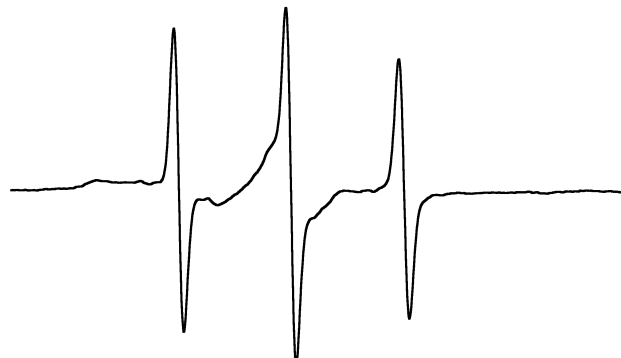
SNF2h•N+60•ADP•BeFx Spectrum 2



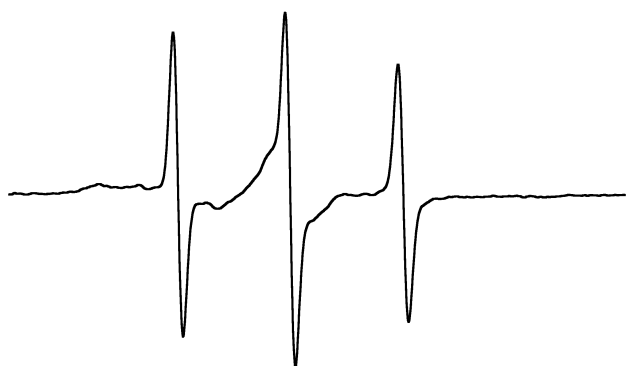
SNF2h•N+60•ADP•BeFx Spectrum 3



SNF2h•N+60•ADP•AlFx Spectrum 1

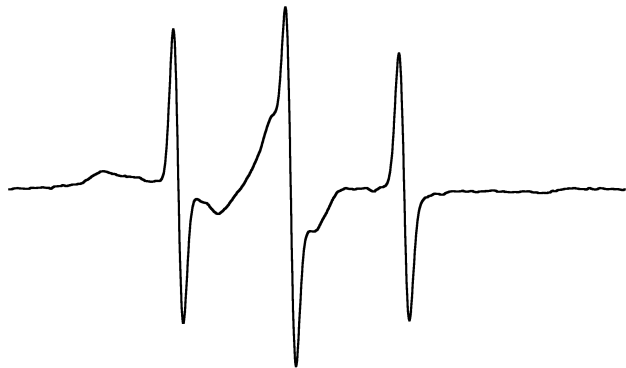


SNF2h•N+60•ADP•AlFx Spectrum 2

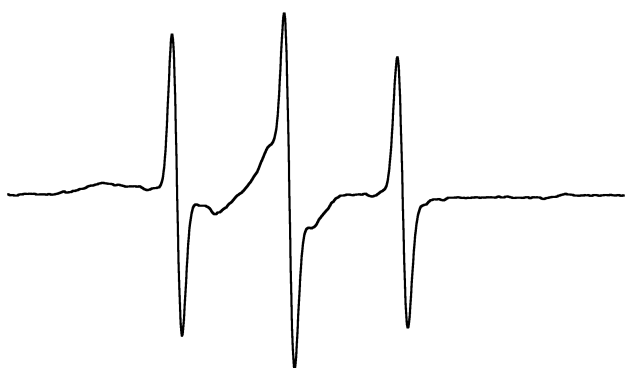


(d)

SNF2h•N•ADP•BeFx Spectrum 1



SNF2h•N•ADP•BeFx Spectrum 2



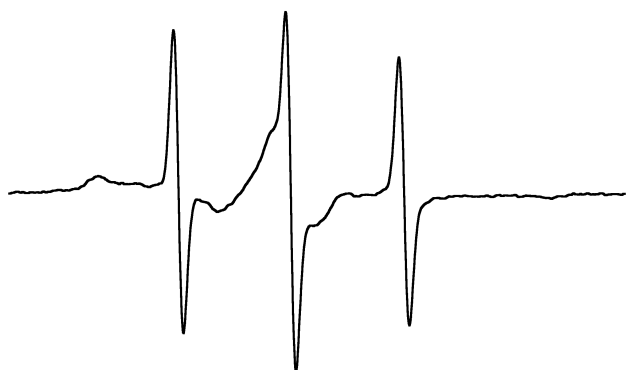
SNF2h•N•ADP•BeFx Spectrum 3



SNF2h•N•ADP•AlFx Spectrum 1

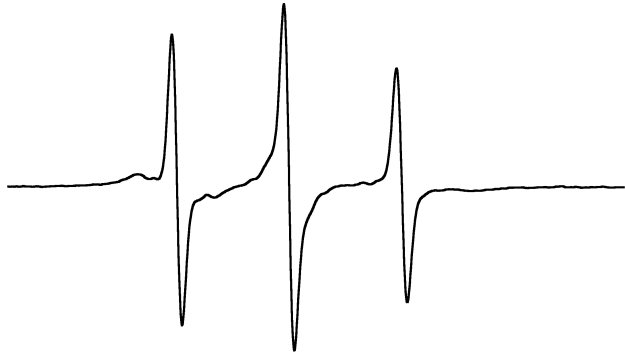


SNF2h•N•ADP•AlFx Spectrum 2

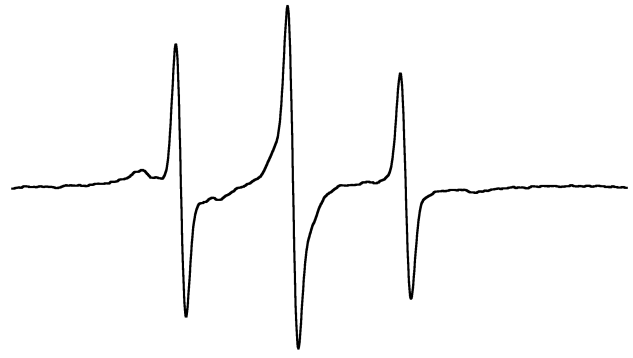


(e)

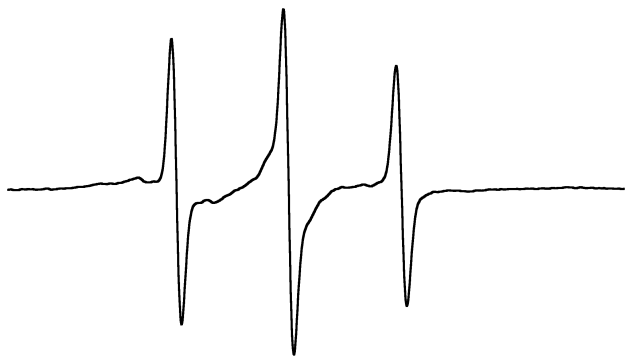
SNF2h•N^{Δtail}+60•ADP Spectrum 1



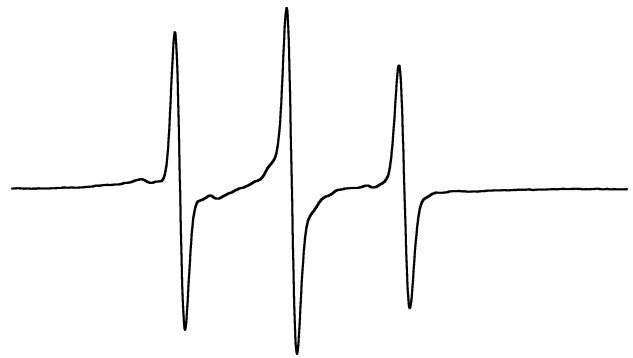
SNF2h•N^{Δtail}+60•ADP Spectrum 2



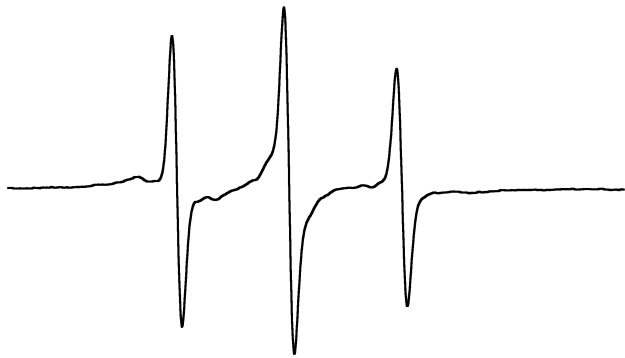
SNF2h•N^{Δtail}+60•ADP•BeFx Spectrum 1



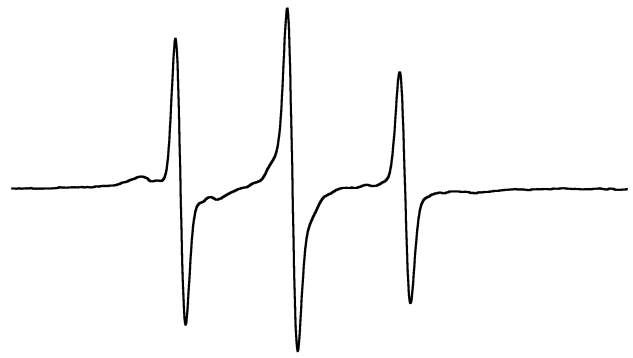
SNF2h•N^{Δtail}+60•ADP•BeFx Spectrum 2



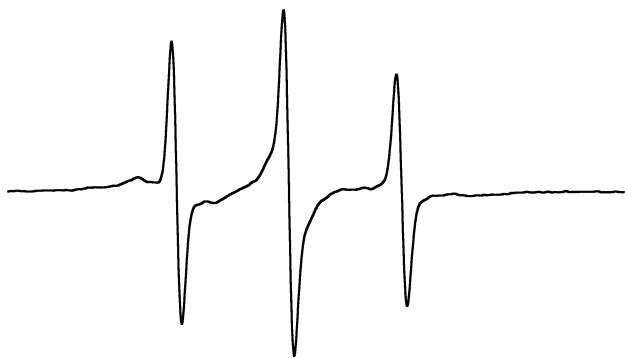
SNF2h•N^{Δtail}+60•ADP•BeFx Spectrum 3



SNF2h•N^{Δtail}+60•ADP•AlFx Spectrum 1



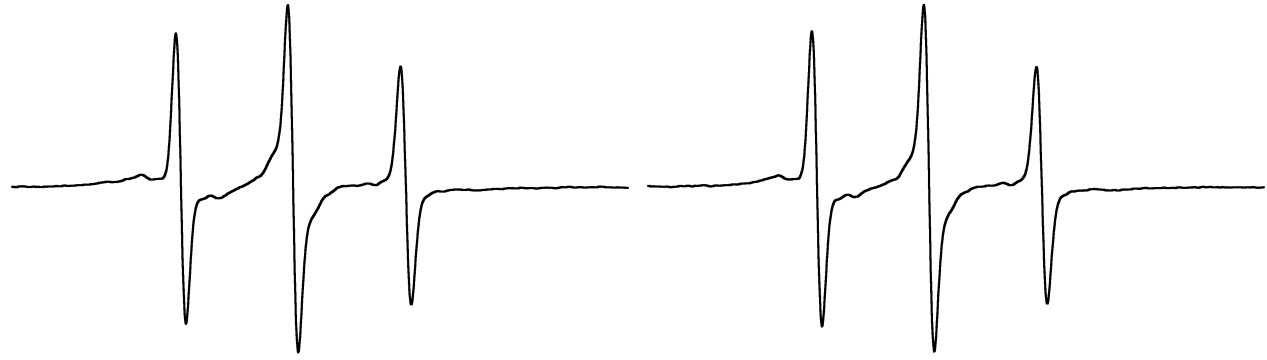
SNF2h•N^{Δtail}+60•ADP•AlFx Spectrum 2



(f)

SNF2h•N^{Δpatch}+60•ADP•BeFx Spectrum 1

SNF2h•N^{Δpatch}+60•ADP•BeFx Spectrum 2



(g)

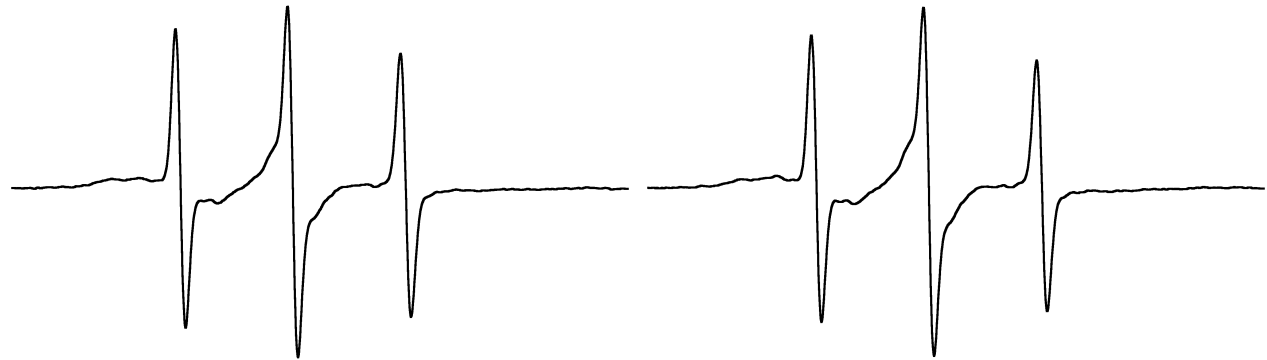
SNF2h•DNA•ADP Spectrum 1

SNF2h•DNA•ADP Spectrum 2



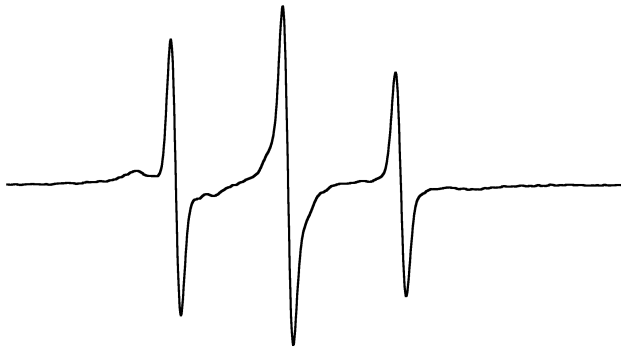
SNF2h•DNA•ADP•BeFx Spectrum 1

SNF2h•DNA•ADP•BeFx Spectrum 2

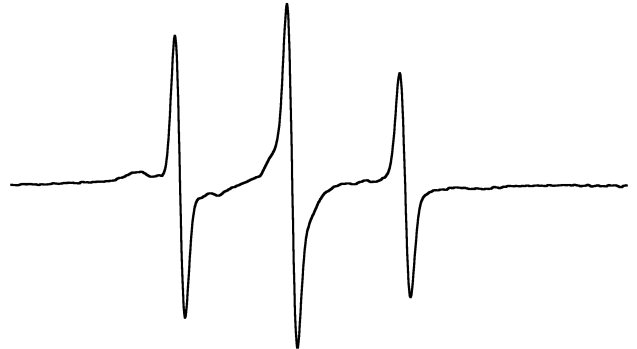


(h)

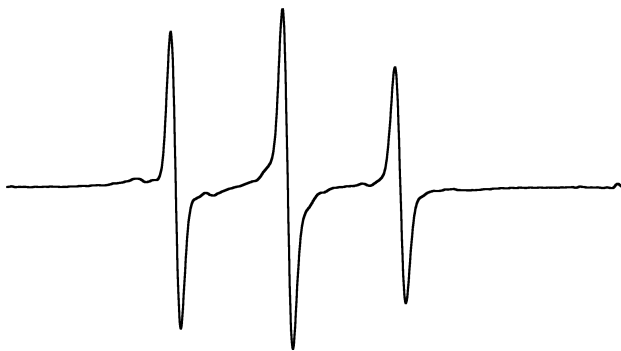
SNF2h(E309A)•N+60•ADP Spectrum 1



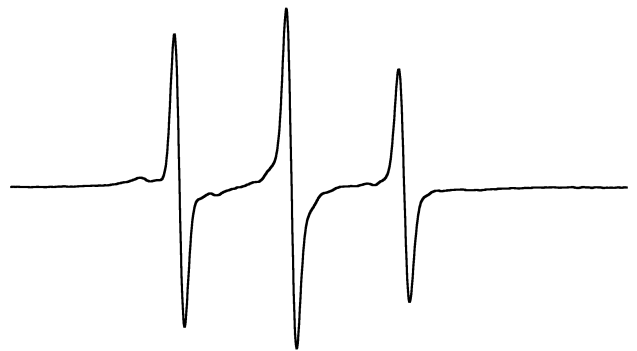
SNF2h(E309A)•N+60•ADP Spectrum 2



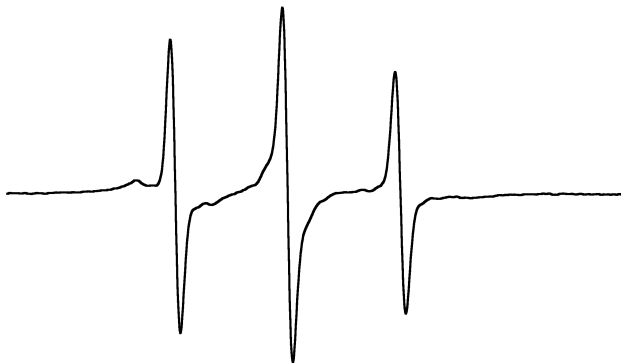
SNF2h(E309A)•N+60•ADP•BeFx Spectrum 1



SNF2h(E309A)•N+60•ADP•BeFx Spectrum 2



SNF2h(E309A)•N+60•ADP•AlFx Spectrum 1



SNF2h(E309A)•N+60•ADP•AlFx Spectrum 2