

Changes in the  $^{19}F$  NMR spectra throughout the isotopic exchange labelling process: in neutral solution, in acidified labelling solution, and after passing over both Ag and alumina cartridges (top to bottom). At neutral pH, F would be visible at  $\delta$  -121 ppm as a singlet while at acidic pH (1 M HCl) would appear at  $\delta$  -131 ppm as a broad singlet. Conditions given in Methods section of main manuscript.