

Figure S1: Elution profile of the 144Nd signal (JNd1-1 standard solution) by LC-MC-ICPMS in gradient mode (integration time 0.262 s) and uncorrected  $14x\text{Nd}/144\text{Nd}$  isotope ratios across the transient signals. The approximate amplitude of the drift was estimated by the variation of isotope ratios between the two horizontal lines.

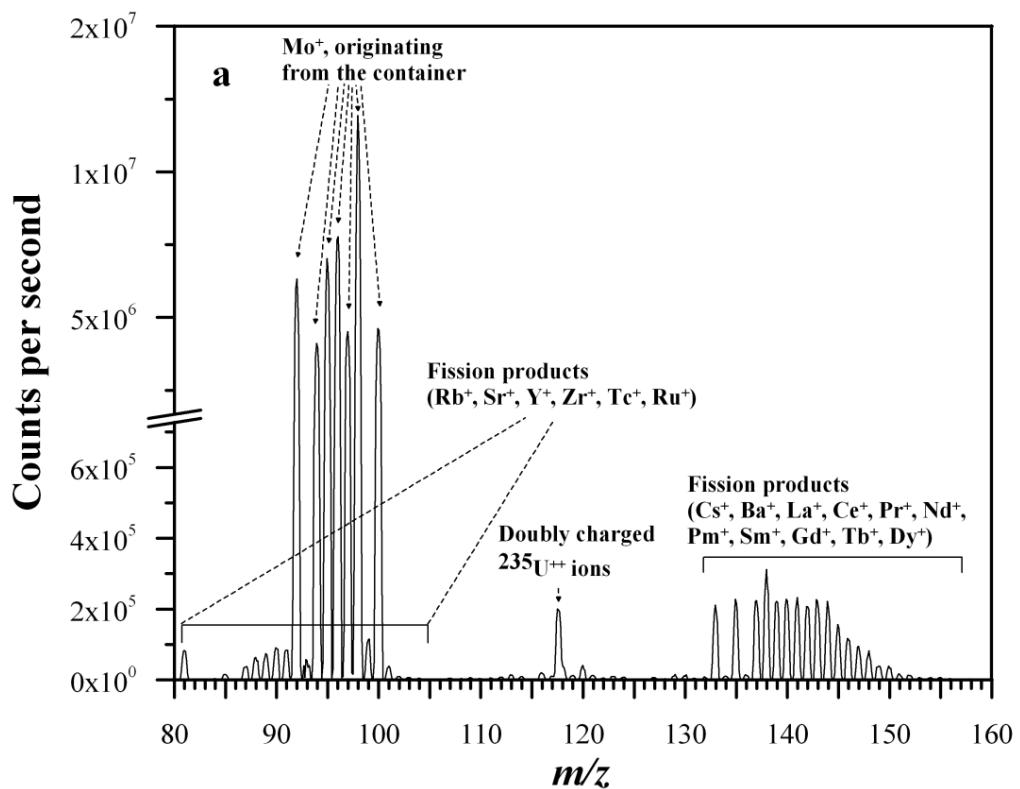


Figure S2: Mass spectrum by Q-ICP-MS of the  $^{235}\text{U}$  target sample between 80 and 160 amu.

Mo is a fission product element but its presence was essentially due to the 2% of Mo present in the steel container incorporating the  $^{235}\text{U}$  target.