

Supporting Information

Lanthanide Complexes with a New Tetraazamacrocyclic Containing Methylcarboxylate and Thiolate Pendant Arms

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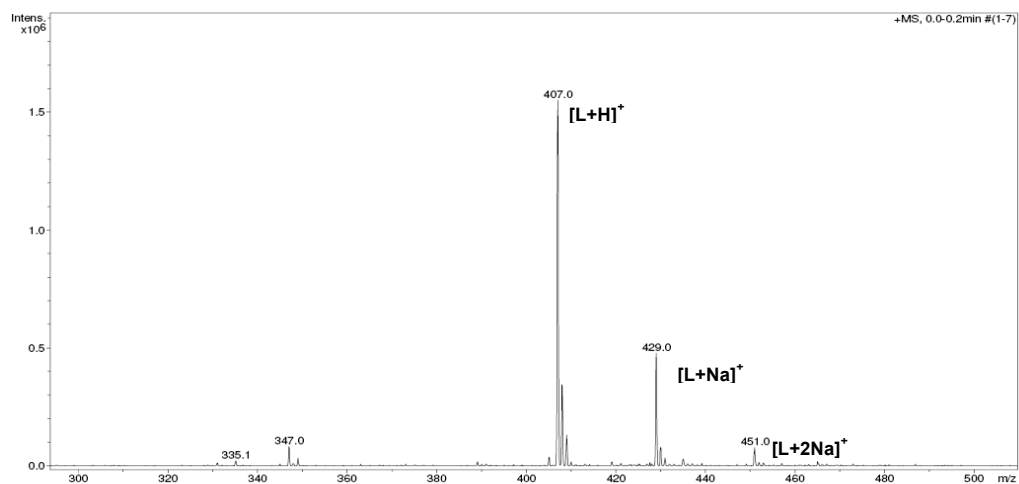


Figure S1: MS-spectrum of $\text{H}_4\text{DO}_3\text{ASH}$ (positive mode).

The labeling yield decreases to 85% - 90% when the reactions are carried out at $\text{pH} < 6$ and $\text{pH} > 7$, being these yields only achieved after at least 4h at room temperature. Figure S2 shows the pH dependence in the labelling of $\text{H}_4\text{do3aSH}$ with ^{153}Sm at pH 5, 6 and 9 (30 min reaction, room temperature) and figure S3 represents the kinetics of formation of ^{153}Sm -do3aSH at pH 5 and at pH 9, both at room temperature.

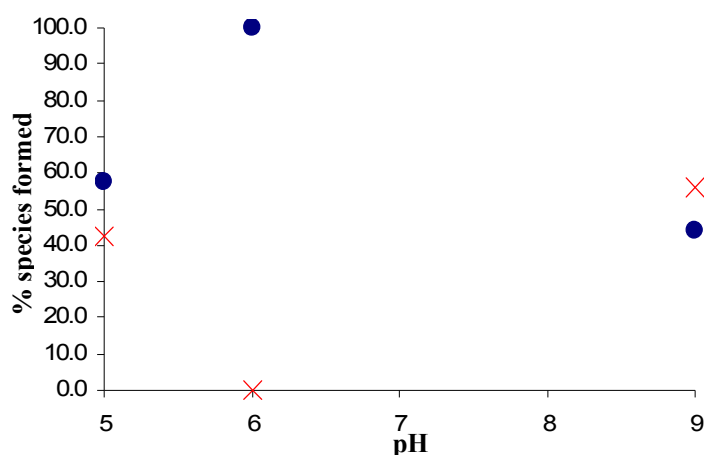


Figure S2: pH dependence in the labeling of do3aSH with ^{153}Sm (30 min., room temperature): \times $^{153}\text{Sm}(\text{NO}_3)_3$, \bullet ^{153}Sm -do3aSH.

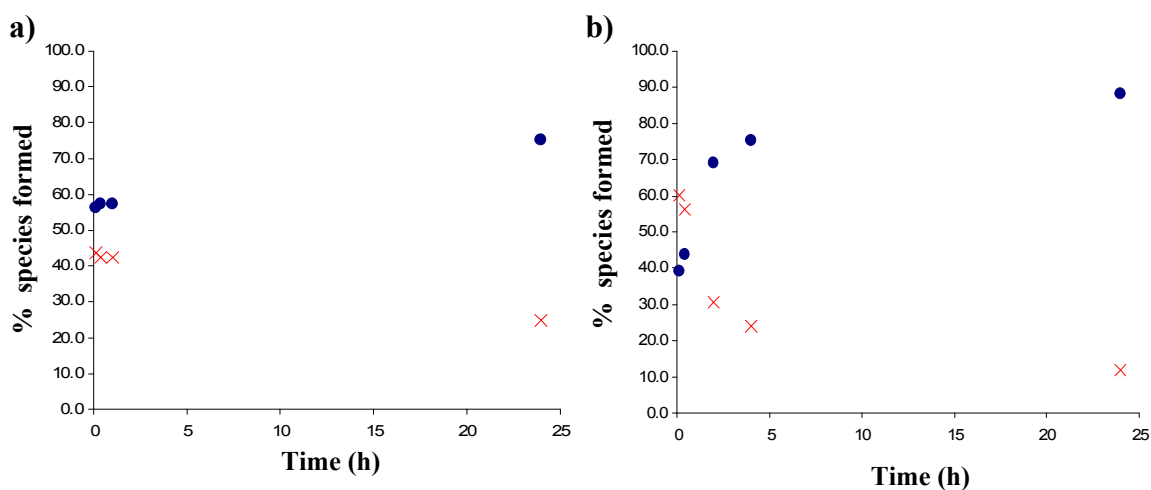


Figure S3: Kinetics of the labelling reaction at: (a) pH 5 and (b) pH 9 (room temperature): \times $^{153}\text{Sm}(\text{NO}_3)_3$, \bullet ^{153}Sm -do3aSH.

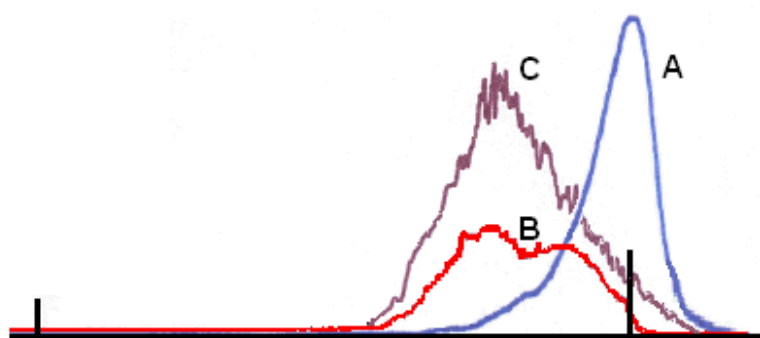


Figure S4: ^{166}Ho -DO3ASH chromatographic profile: **A:** after labelling, **B:** in human serum, after 2 days, **C:** in human serum, after 3 days.