Electronic Supplementary Material (ESI) for Dalton Transactions.

Novel candidate theranostic radiopharmaceutical based on strontium hexaferrite nanoparticles conjugated with azacrown ligand

Supplementary Information

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Proton nuclear magnetic resonance (^{1}H NMR) spectra was recorded on a Bruker DRX-600 spectrometer and referenced to the residual solvent peak ($CDCl_3$: δ 7.27).

Comparison of the NMR spectra of L2 and APTES-L2 (Fig. S1) shows that the signal of equivalent hydrogen atoms 1 and 1’ located in the pyridine fragment is shifted to a stronger field during coordination of the APTES linker and the L2 ligand. This is due to the fact that the formed amide bond exhibits weaker acceptor properties than the carboxyl group. It has a strong influence on the group of protons 1 and 1’, since it is in the α-position. Based on the obtained NMR spectra data, it can be concluded that the APTES-L conjugate synthesis technique was selected correctly and used for further particle functionalization.

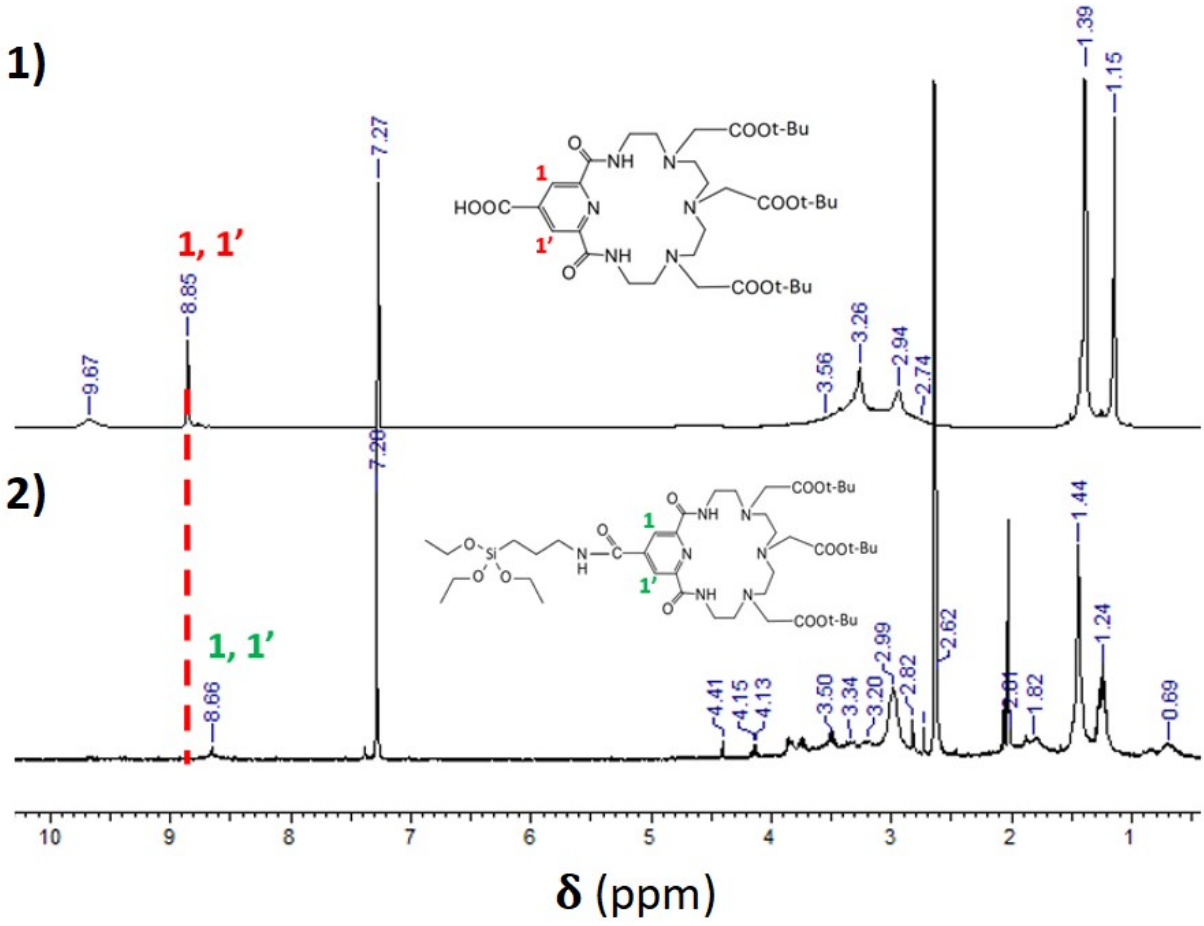

Fig. S1. ^{1}H-NMR spectra of 1) L2 ligand and 2) APTES-L2 conjugate.