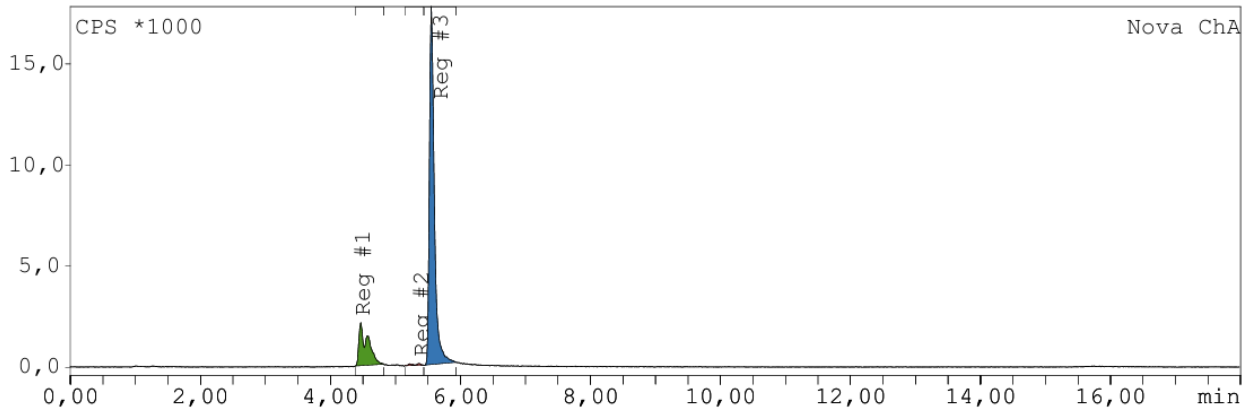
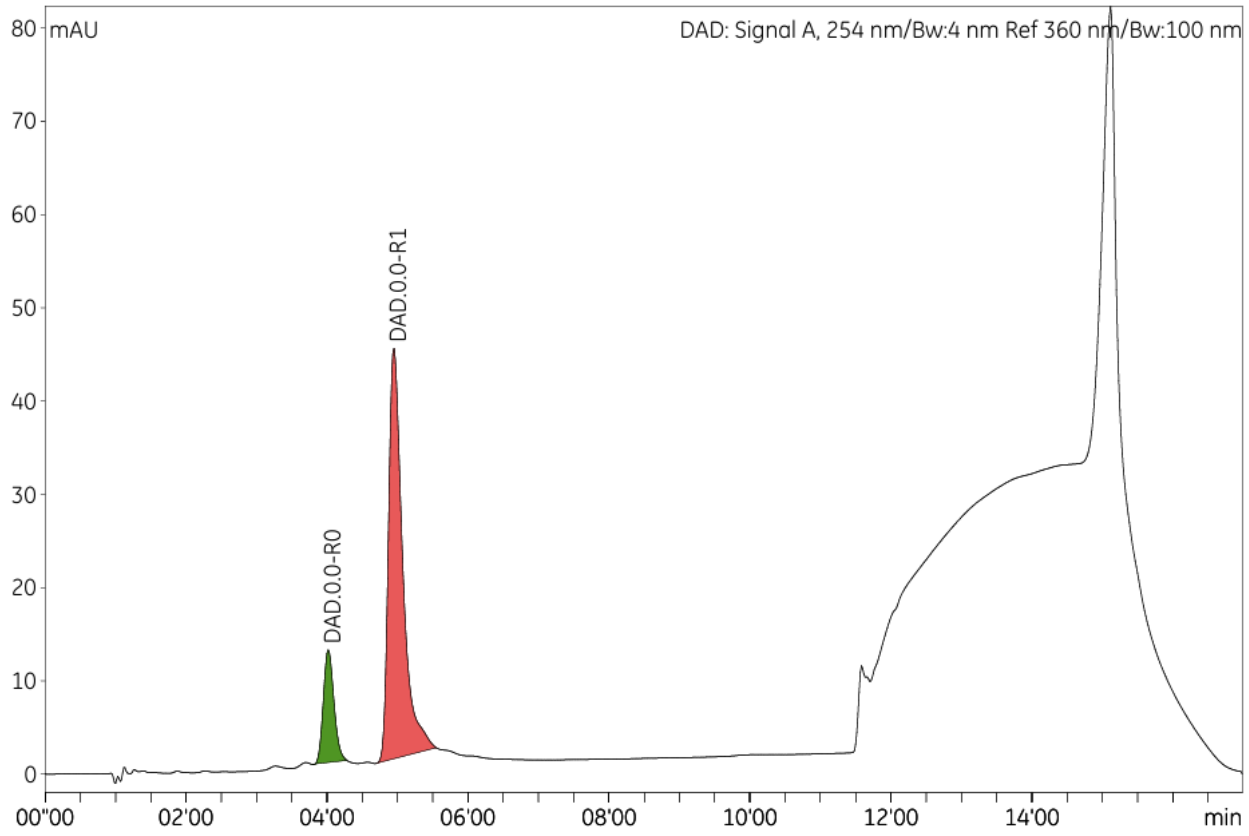
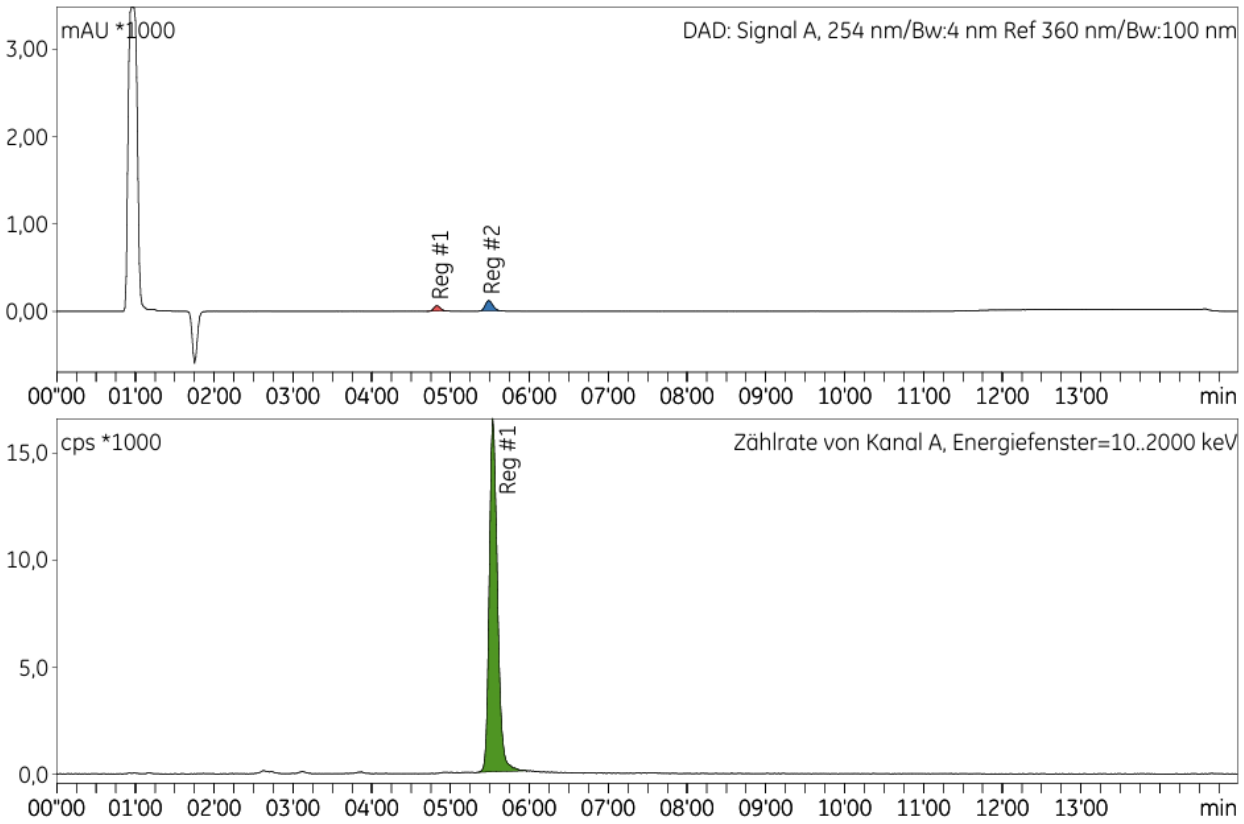
Supplemental information



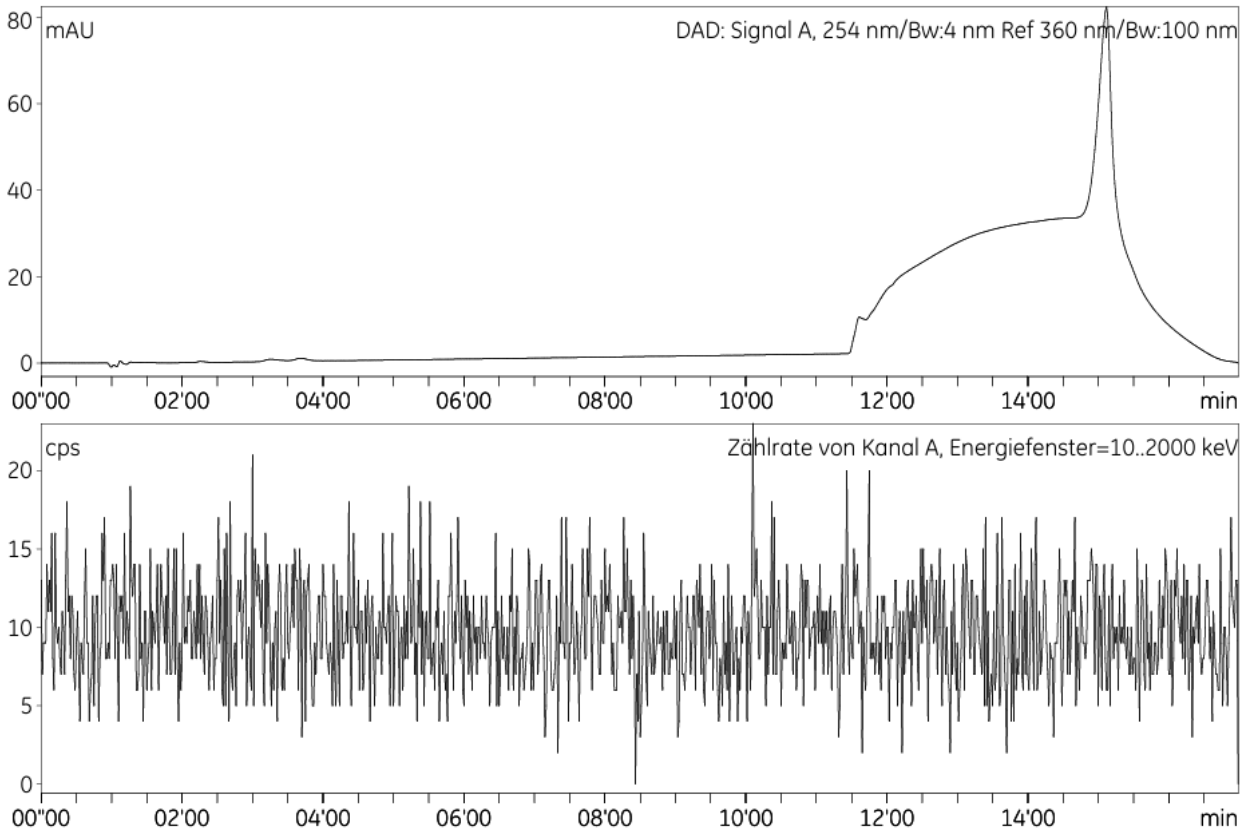
Supplemental Figure S1. Radio-HPLC chromatogram of [^{177}Lu]Lu-FAPi-mFS after labeling at 85 °C for 40 minutes whereby the desired product peak has a t_R of 5.57 min and the peak of the major side product a t_R of 4.47 min (17.5%). For better presentation a different method was used (Method: Gradient from 5% to 95% MeCN + 0.1% TFA in 10 min).



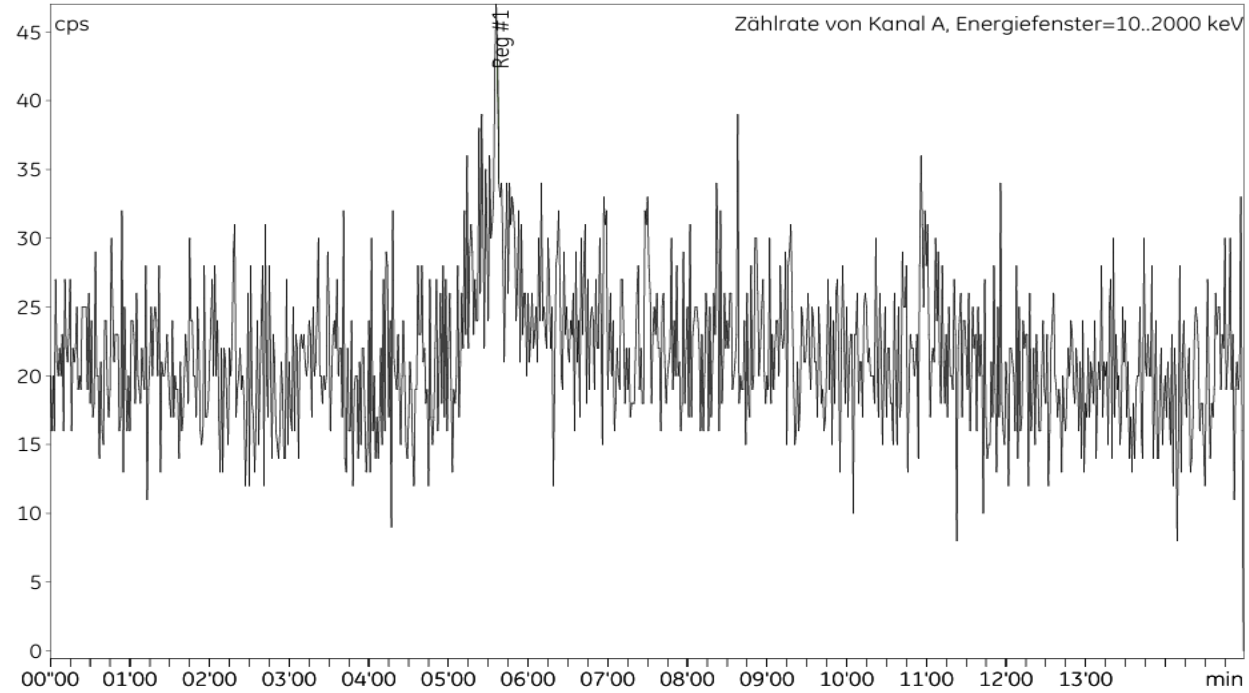
Supplemental Figure S2. Specificity measurements for UV unlabeled peptide FAPi-mFS (UV trace) in green, non-radioactive [^{nat}Ga]Ga-FAPi-mFS (UV trace) in red, related to the Methods.



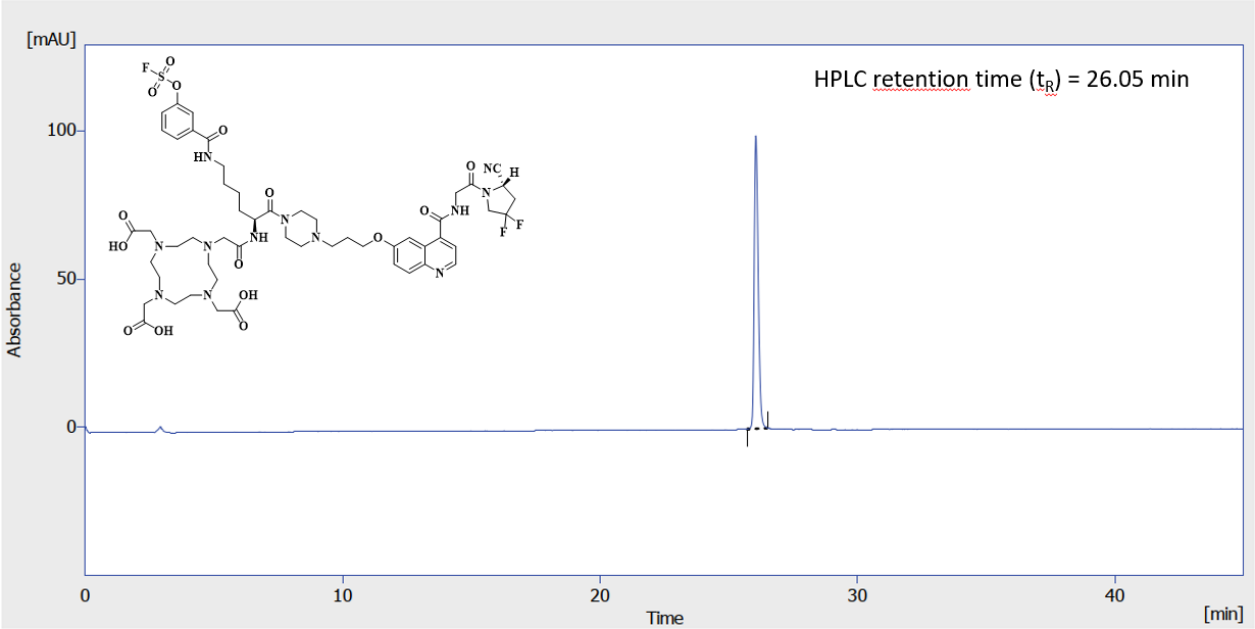
Supplemental Figure S3. Specificity measurements for UV and Radio-Detector showing unlabeled FAPi-mFS (UV trace) in red, non-radioactive [^{nat}Lu]Lu-FAPi-mFS (UV trace) in blue, drug product [^{177}Lu]Lu-FAPi-mFS (radioactivity trace) in green, related to the Methods.



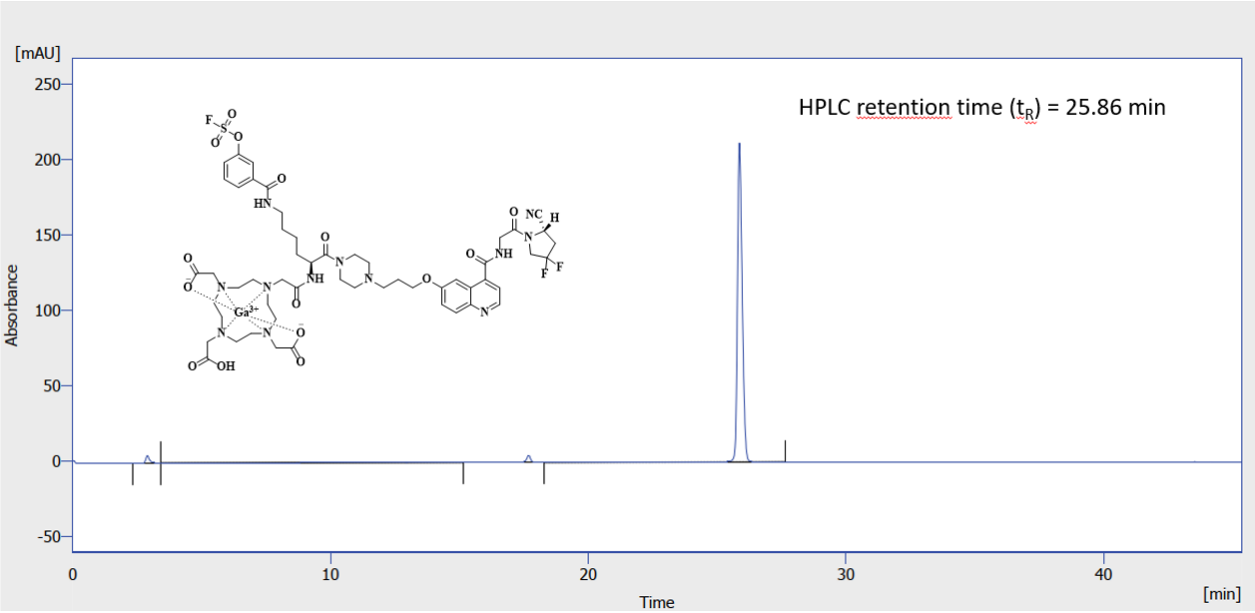
Supplemental Figure S4. Carry-Over measurement of [^{68}Ga]Ga-FAPi-mFS on analytical HPLC performed after 15 consecutive injections of [^{68}Ga]Ga-FAPi-mFS at high activities, related to the Methods.



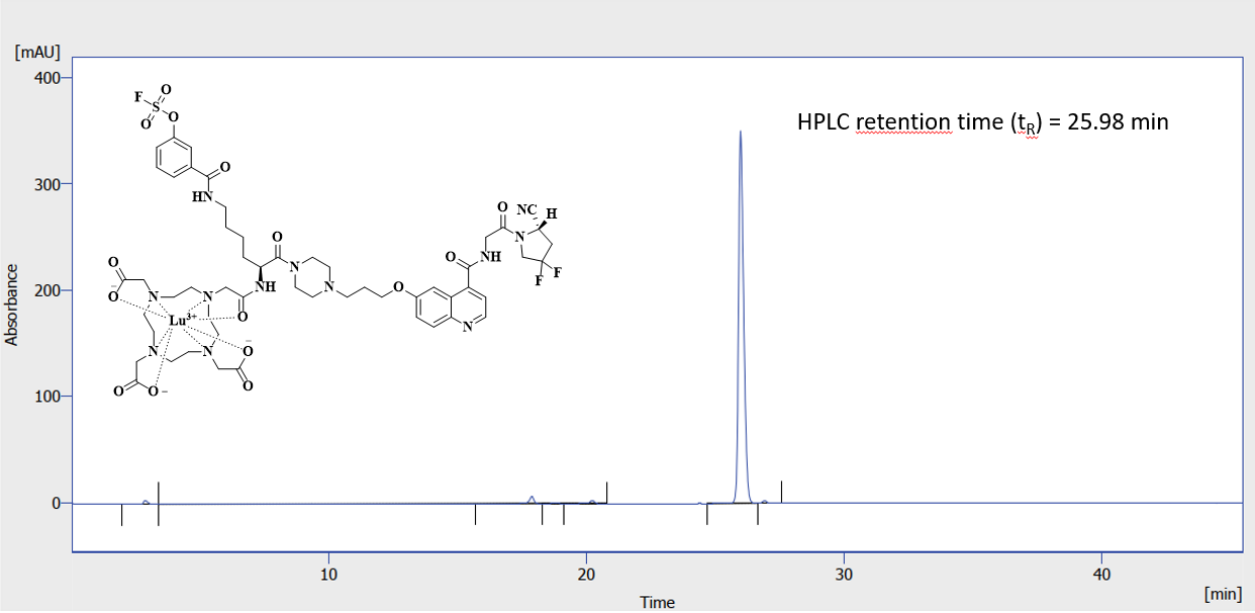
Supplemental Figure S5. Carry-Over measurement of [^{177}Lu]Lu-FAPi-mFS on analytical HPLC performed after six consecutive injections of [^{177}Lu]Lu-FAPi-mFS at high activities, related to the Methods.



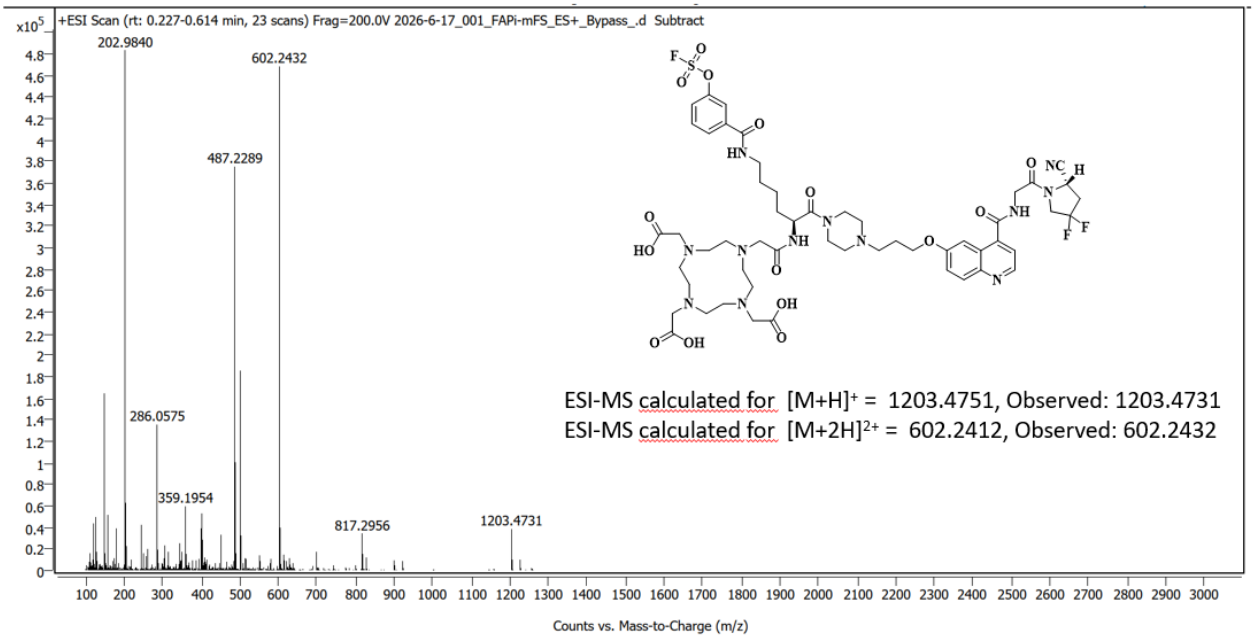
Supplemental Figure S6. HPLC data from FAPi-mFS, related to sections experimental and methods.



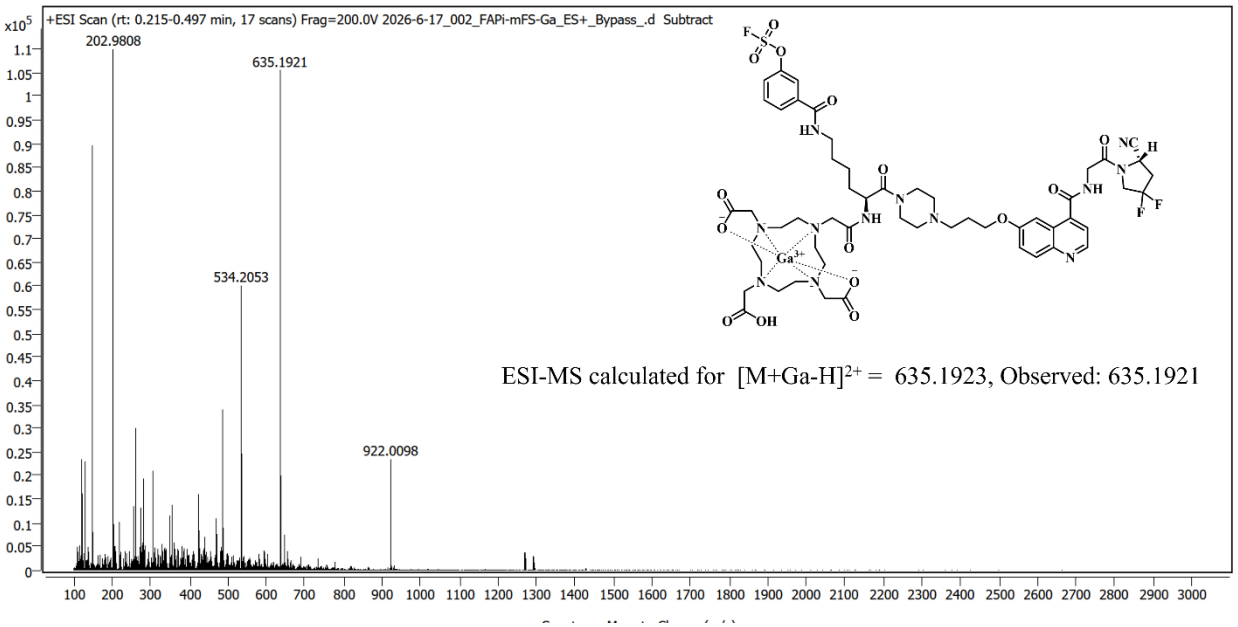
Supplemental Figure S7. HPLC data from [^{nat}Ga]GaFAPi-mFS, related to sections experimental and methods.



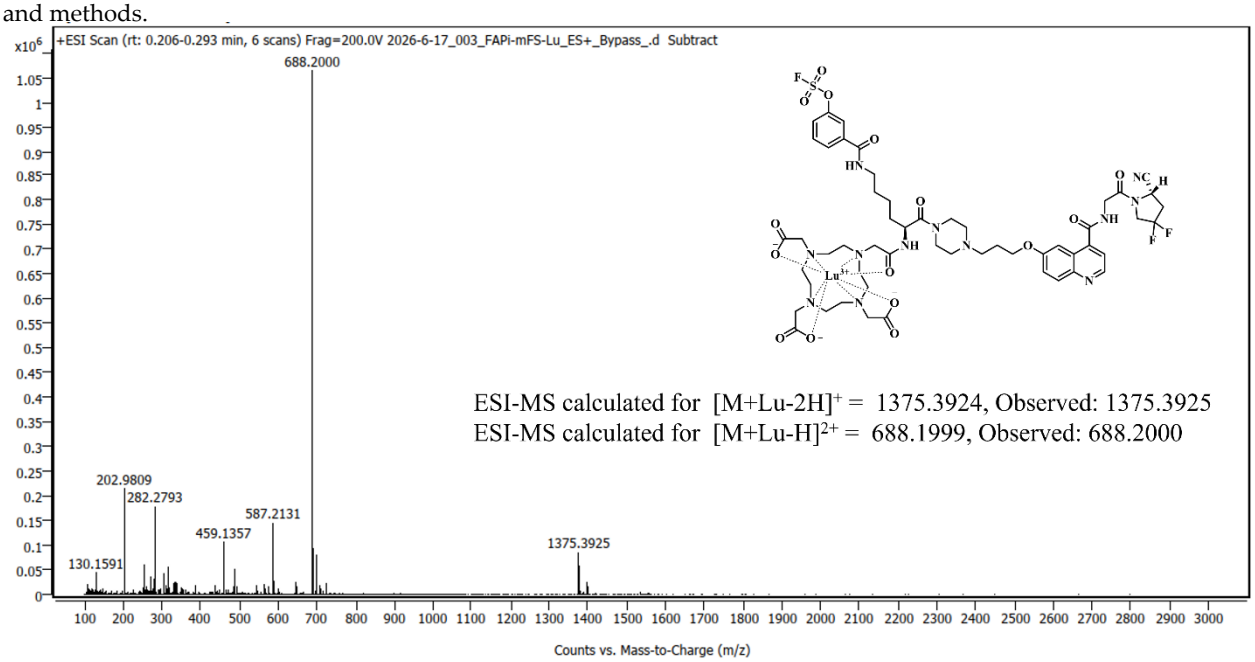
Supplemental Figure S8. HPLC data from [^{nat}Lu]LuFAPi-mFS, related to sections experimental and methods.



Supplemental Figure S9. HRMS data from FAPi-mFS, provided by the Institute for Radiopharmaceutical Cancer Research at the Helmholtz Center Dresden-Rossendorf, related to sections experimental and methods.



Supplemental Figure S10. HRMS data from [^{nat}Ga]GaFAPi-mFS, provided by the Institute for Radiopharmaceutical Cancer Research at the Helmholtz Center Dresden-Rossendorf, related to sections experimental and methods.



Supplemental Figure S11. HRMS data from [^{nat}Lu]LuFAPi-mFS, provided by the Institute for Radiopharmaceutical Cancer Research at the Helmholtz Center Dresden-Rossendorf, related to sections experimental and methods.