

Clinically Applicable Cyclotron-Produced Gallium-68 Gives High-Yield Radiolabeling of DOTA-Based Tracers

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Supplementary Materials

Table S1: ICP-MS analysis of cyclotron-produced $^{68}\text{GaCl}_3$ eluate

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Metal impurity	With ascorbate (n=1) μg/L	Without ascorbate (n = 1) μg/L
Fe	305	2100
Al	24.1	23.3
Cd	<0.04	<0.04
Cu	3.72	3.93
Ga	1.53	1.80
Ge	<0.5	<0.5
Mo	6.75	9.30
Ni	<1	<1
Pb	<0.2	0.229
Pt	0.108	0.145
Ti	<0.02	<0.02
Zn	345	327

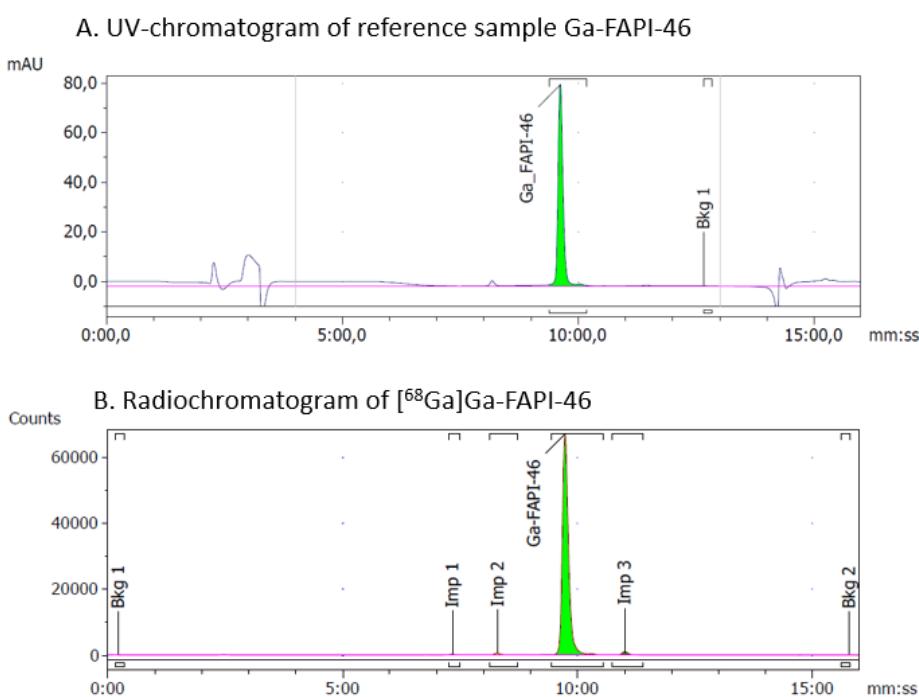


Figure S1: Representative HPLC chromatograms for the quality control of $[^{68}\text{Ga}]$ Ga-FAPI-46 where A. UV detection at 264 nm of the reference sample of Ga-FAPI-46 and B. Radiochromatogram of $[^{68}\text{Ga}]$ Ga-FAPI-46

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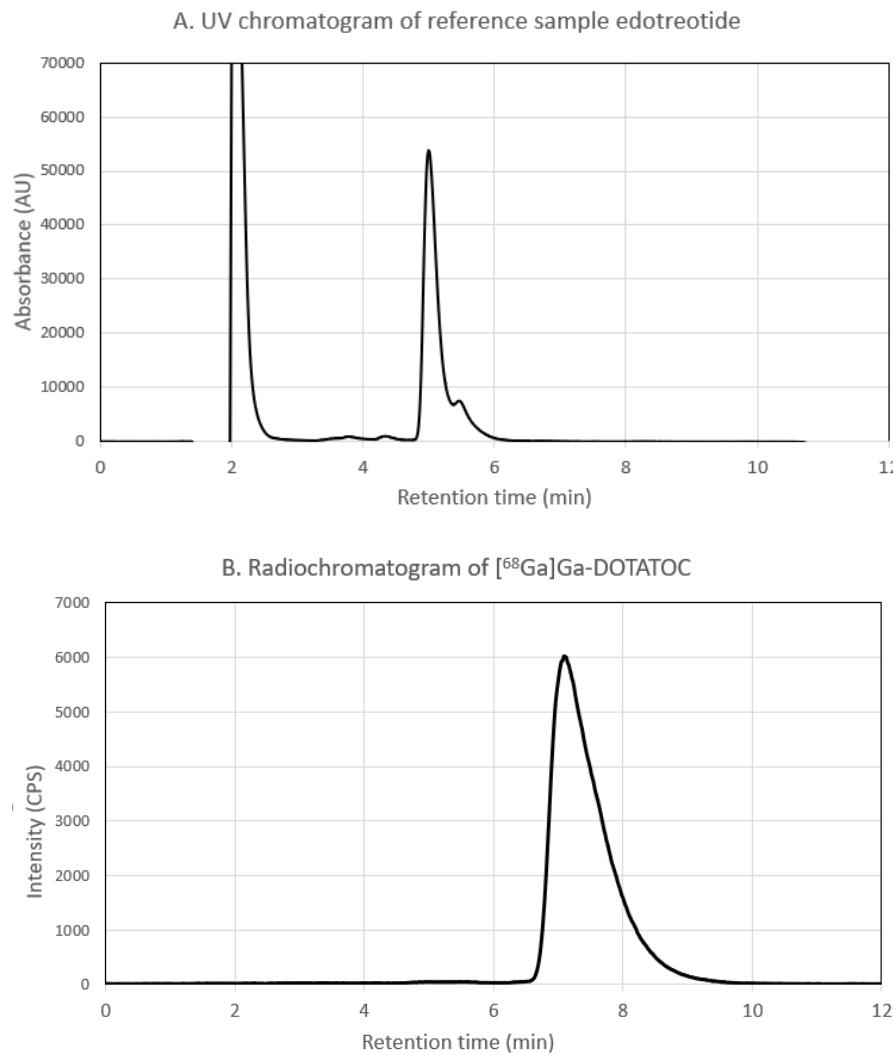


Figure S2: Representative HPLC chromatograms for the quality control of [⁶⁸Ga]Ga-DOTATOC, where A. UV detection at 220 nm of the reference sample of edotreotide and B. Radiochromatogram of [⁶⁸Ga]Ga-DOTATOC sample.

Table S2: Comparison of the log stability constants, log K_{ML} for the different chelators

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Chelator	Ga ³⁺	Fe ³⁺	Fe ²⁺	References
DOTA	21.3 ^a	29.4 ^a	20.22 ^b	^a [1] ^b [2]
NOTA	31.0 ^c	28.3 ^c	NF*	^c [3]
HBED	38.5 ^d	39.0 ^d	22.7 ^b	^b [2] ^d [4]

*NF = not found in the literature

Supplementary Materials

References

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