

# [<sup>68</sup>Ga]Ga-FAP-2286 – Synthesis, Quality Control and Comparison with [<sup>18</sup>F]FDG PET/CT in a Patient with Suspected Cholangiocellular Carcinoma

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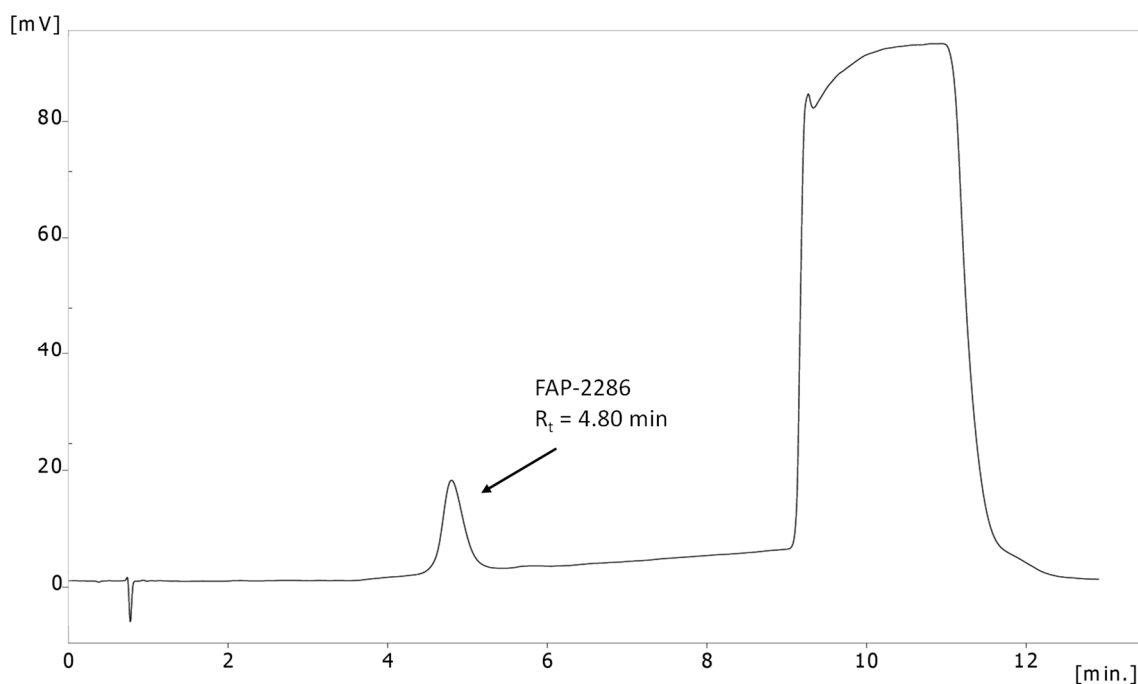
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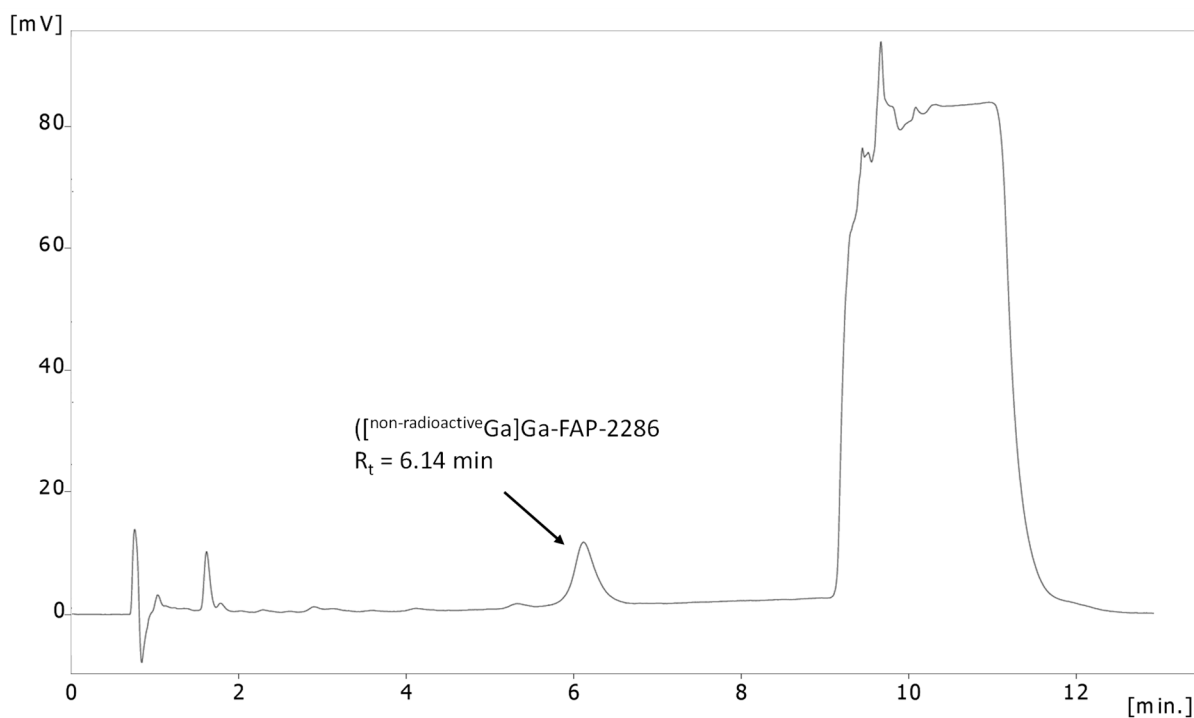
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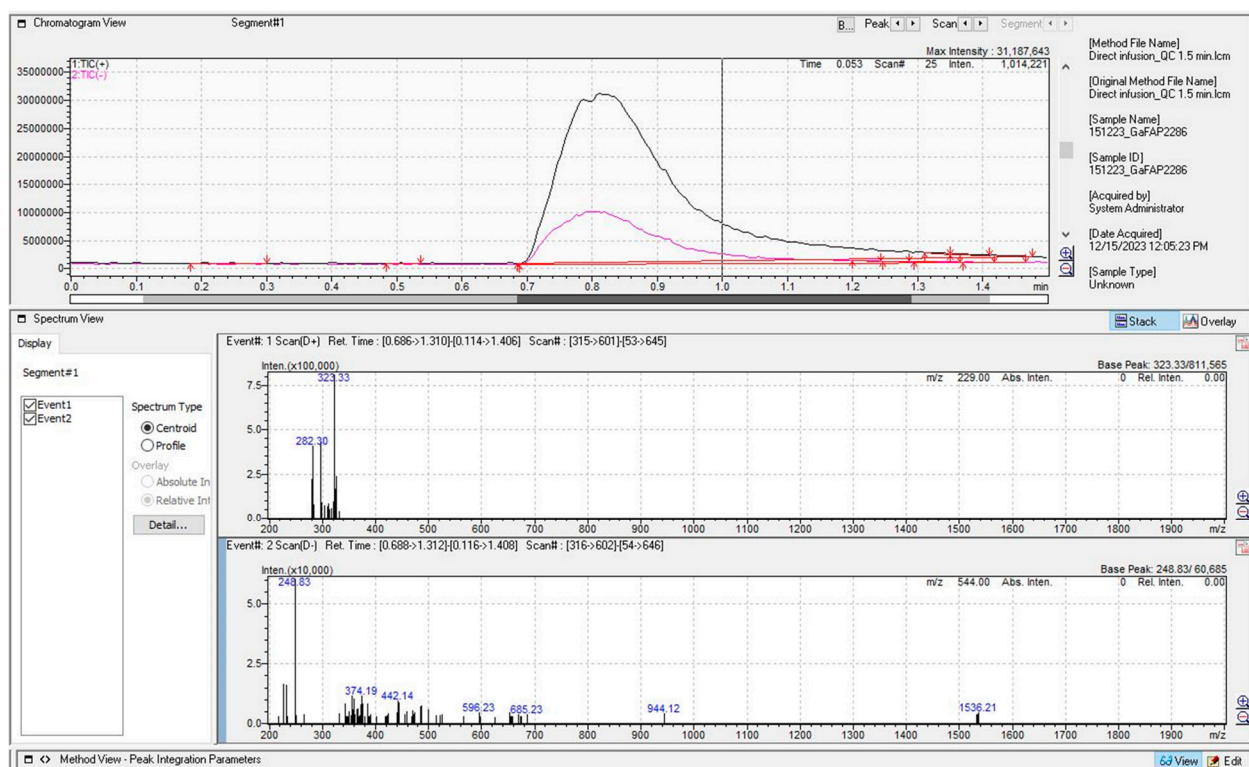
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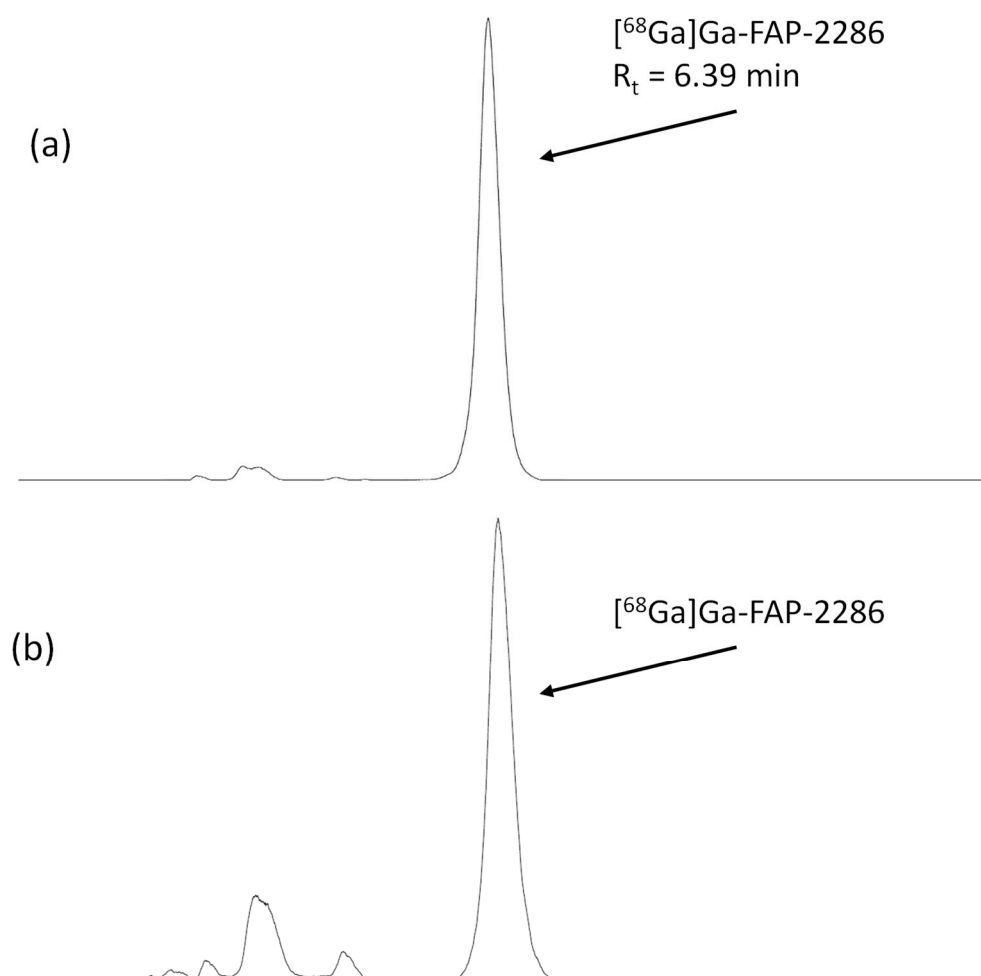
**Figure S1.** UV-Vis HPLC chromatogram of FAP-2286



**Figure S2.** UV-Vis HPLC chromatogram of ([non-radioactiveGa]Ga-FAP-2286



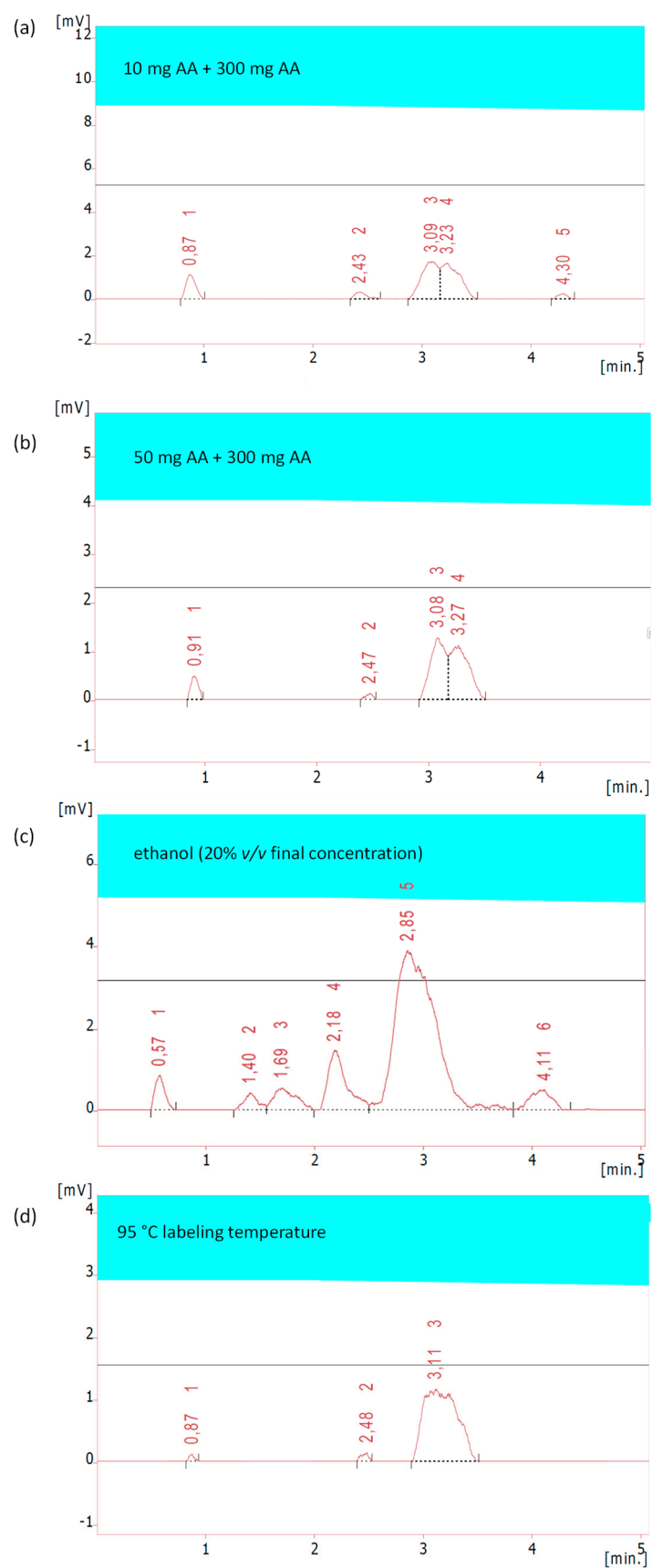
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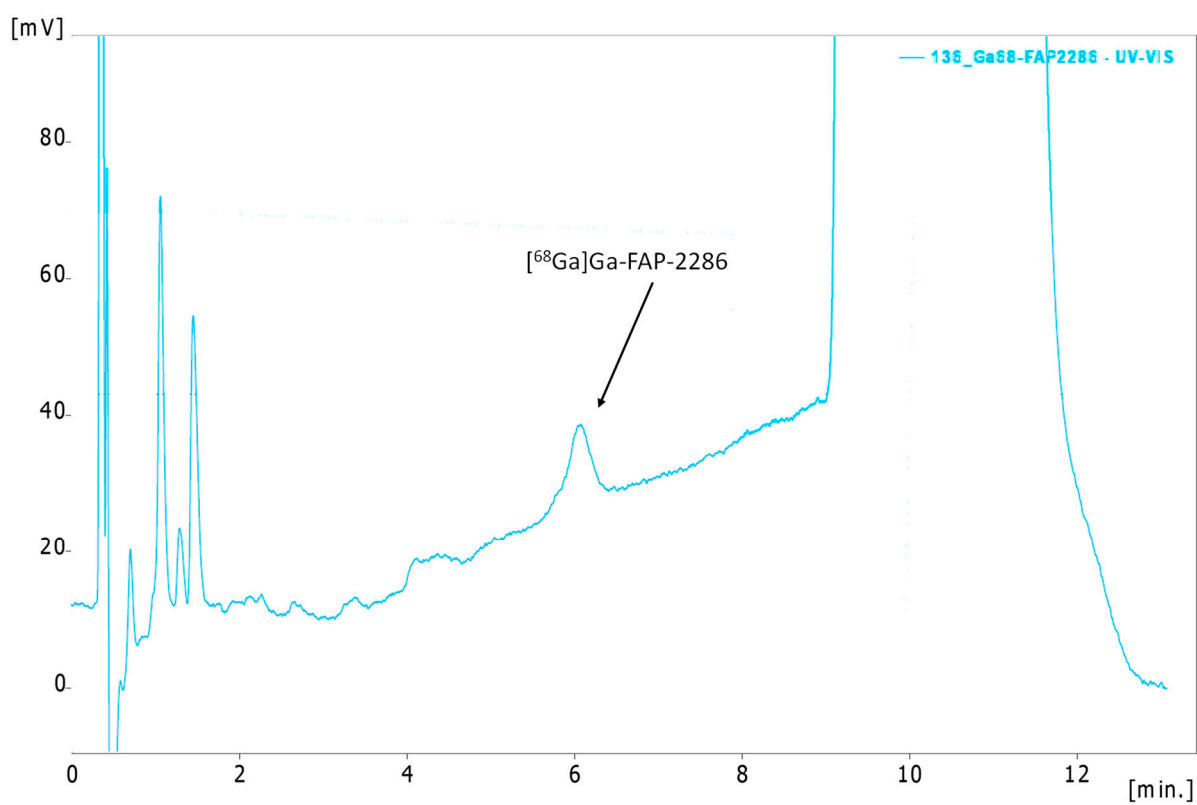
**Figure S4.** Radio-HPLC chromatogram of  $[^{68}\text{Ga}]\text{Ga-FAP-2286}$  (a) post production and (b) post production with addition of  $\text{H}_2\text{O}_2$

**Table S1.** Results from the single batch analysis

| Batch number                 | Acceptance criteria | 1     | 2     | 3     | 4     | 5     |
|------------------------------|---------------------|-------|-------|-------|-------|-------|
| Overall radiochemical purity | $\geq 92\%$         | 95.7% | 96.3% | 94.5% | 98.2% | 95.7% |
| Radiochemical yield d.c.     | $\geq 70\%$         | 69.7% | 73.0% | 70.1% | 74.7% | 71.6% |



**Figure S5.** Magnified radio-HPLC chromatograms of  $[^{68}\text{Ga}]\text{Ga-FAP-2286}$ , showing hydrophilic impurities with different modifications during radiolabeling: (a) 10 mg ascorbic acid + 300 mg ascorbic acid, (b) 50 mg ascorbic acid + 300 mg ascorbic acid, (c) addition of ethanol (20% v/v final concentration) and (d) reducing the labeling temperature to 95 °C



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