

**SUPPORTING INFORMATION**

**DOI:** 10.1002/ejoc.201101063

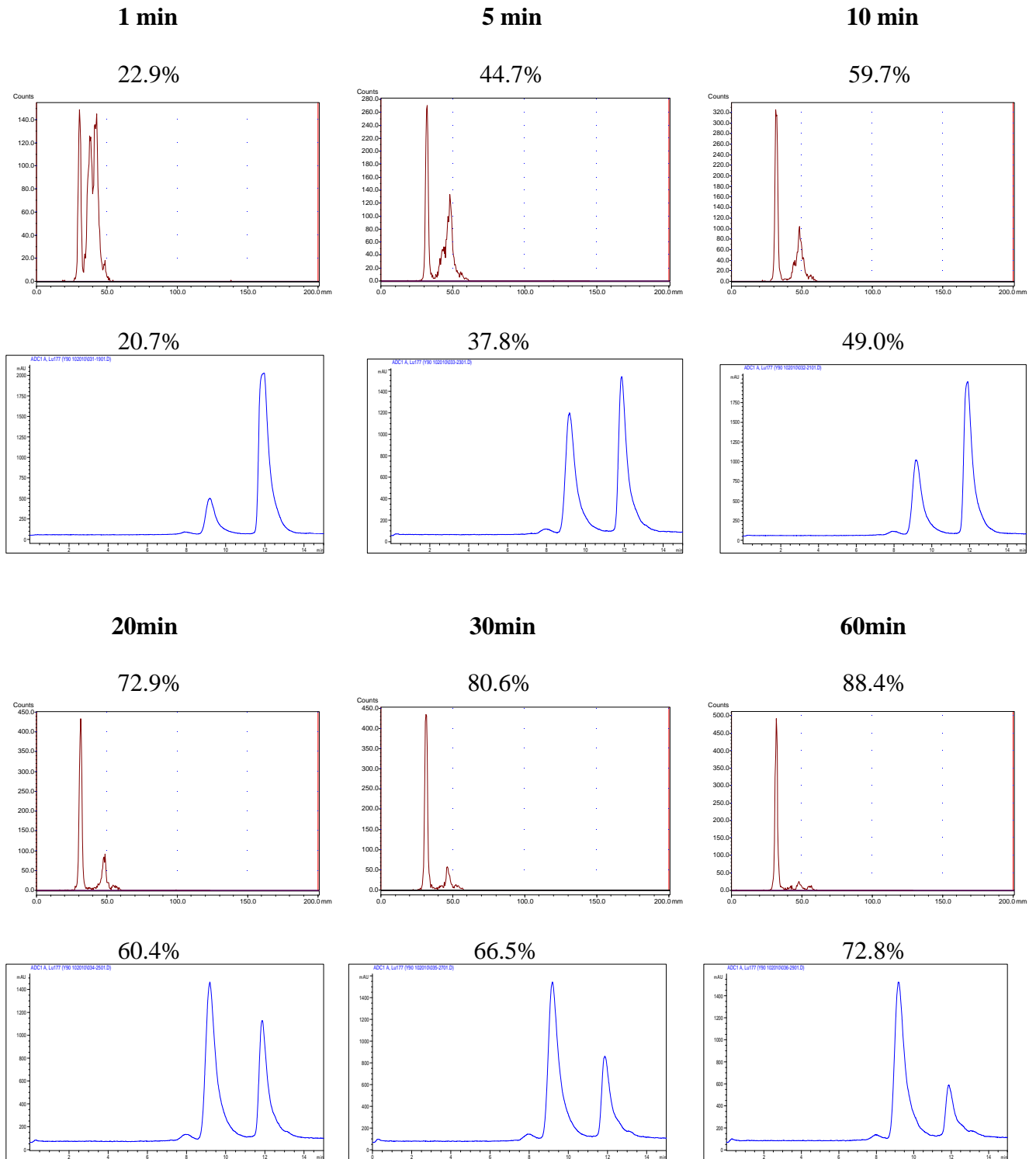
**Title:** Convenient Synthesis and Evaluation of a Heptadentate Bifunctional Ligand for Radioimmunotherapy Applications

**Author(s):** Hyun-Soon Chong,\* Xiang Sun, Pengfei Dong, Chi Soo Kang

# 1. ITLC and HPLC spectra for radiolabeling kinetics studies

## A. Radiolabeling of C-NE3TA-Trastuzumab with $^{90}\text{Y}$

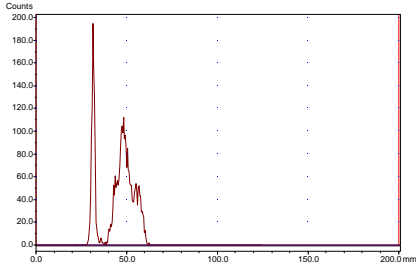
### Sample 1



# Sample 2

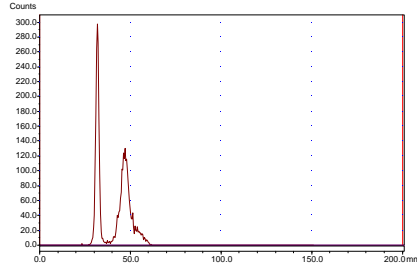
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26.2%



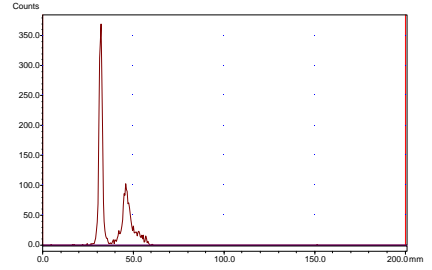
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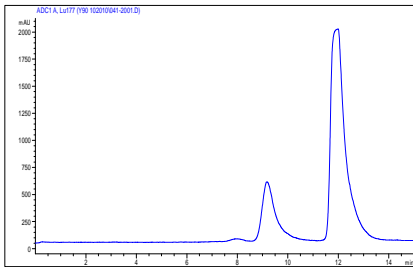


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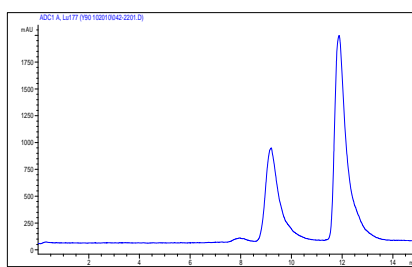
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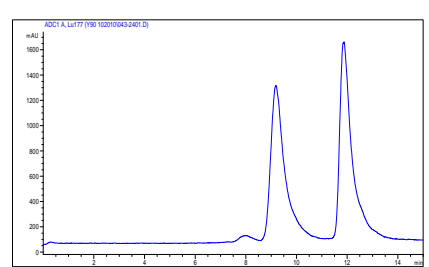
23.7%



36.9%

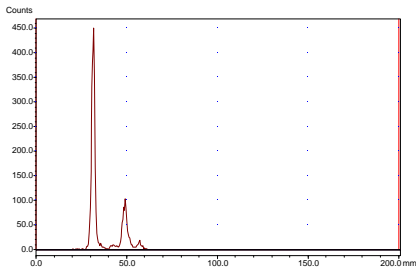


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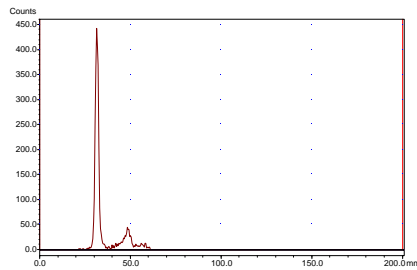
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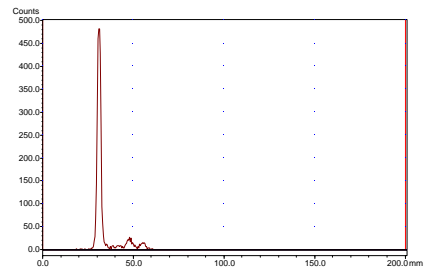
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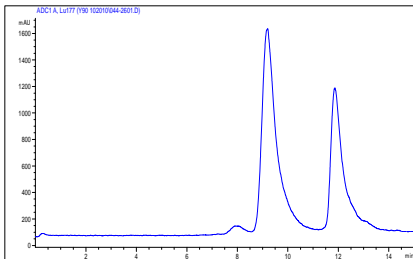


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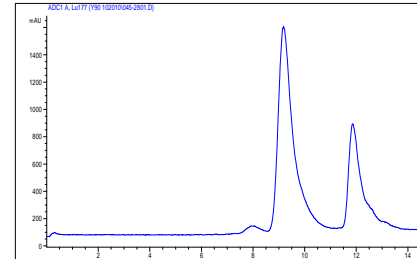
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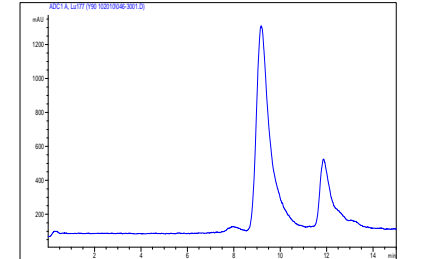
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66.9%



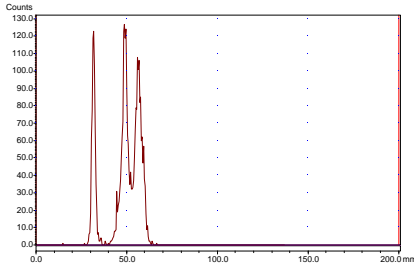
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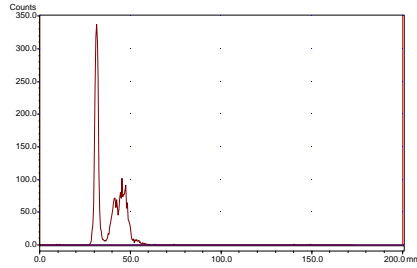
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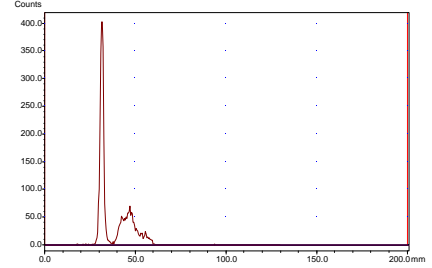
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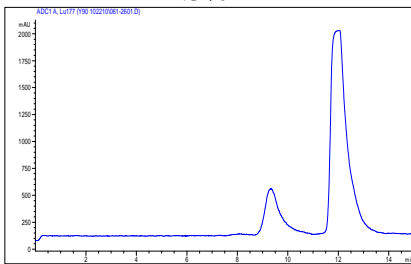


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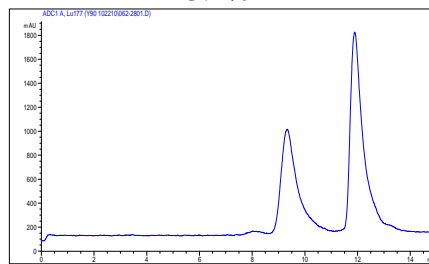
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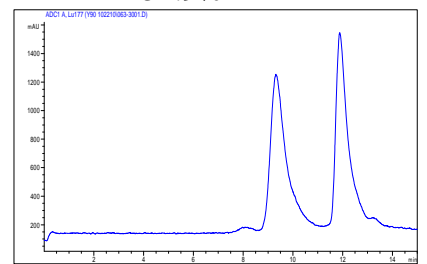
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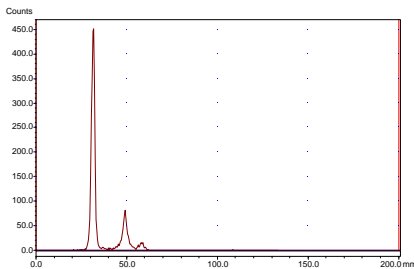


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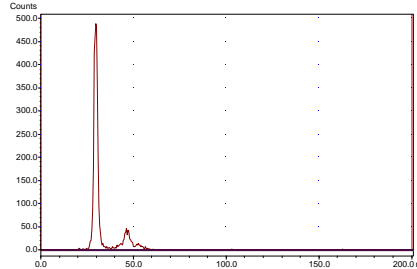
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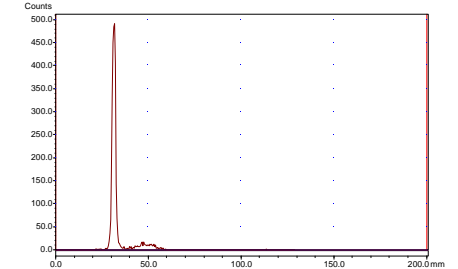
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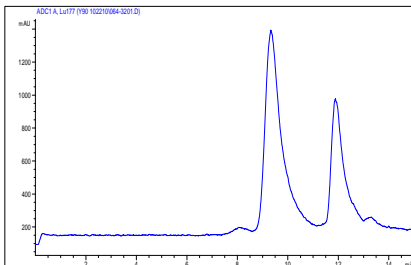


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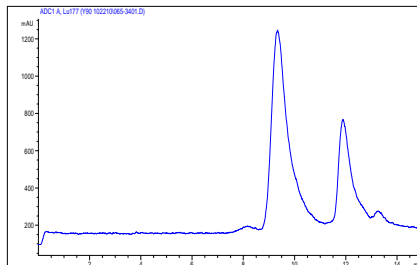
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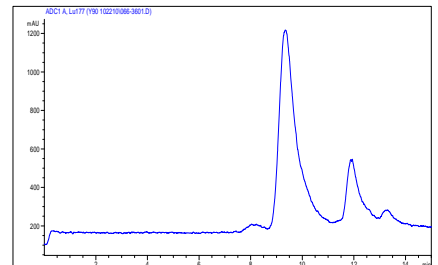
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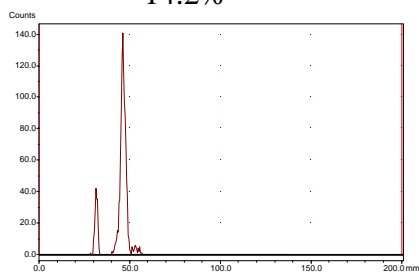


## B. Radiolabeling of C-NE3TA-Trastuzumab with $^{177}\text{Lu}$

### Sample 1

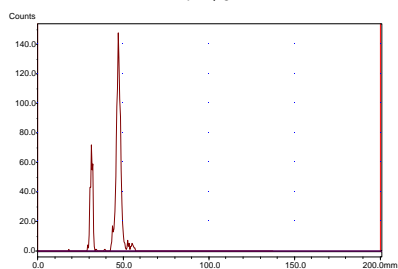
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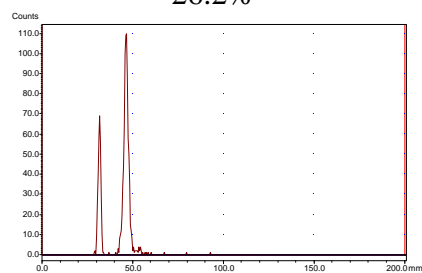
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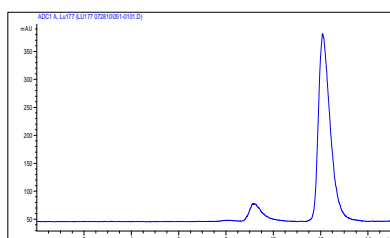


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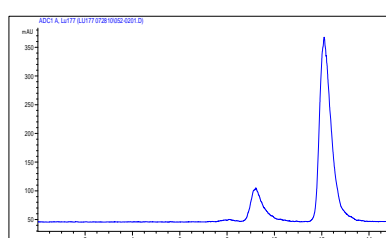
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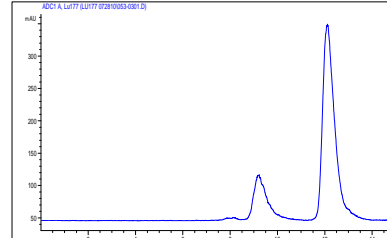
10.5%



18.1%

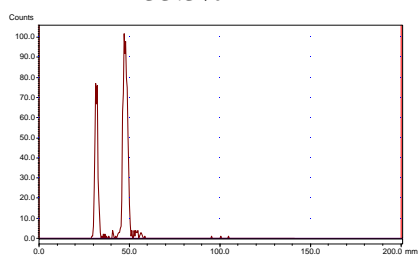


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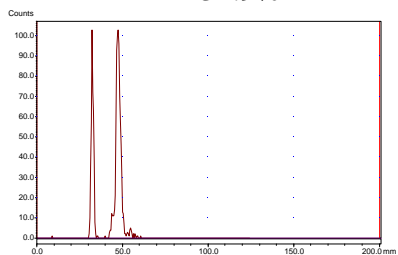
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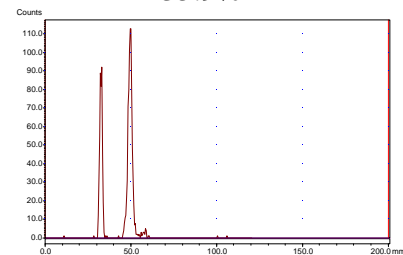
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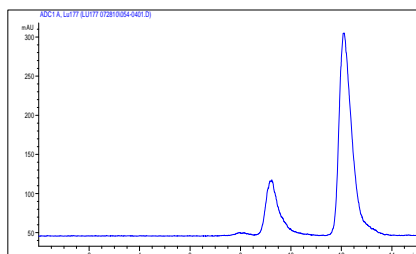


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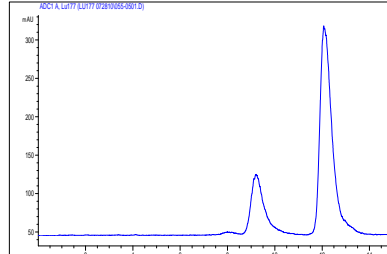
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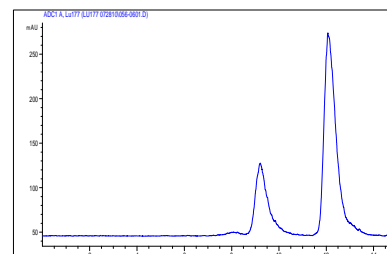
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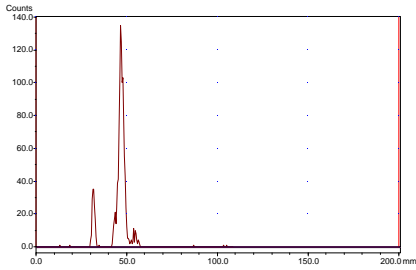
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# Sample 2

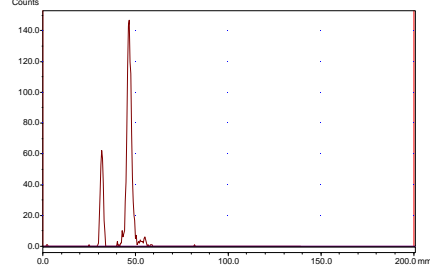
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**13.5%**



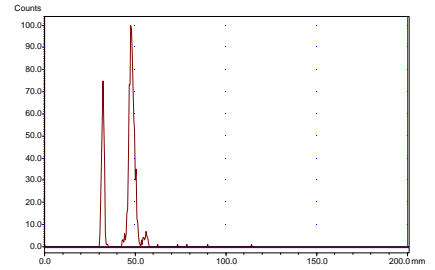
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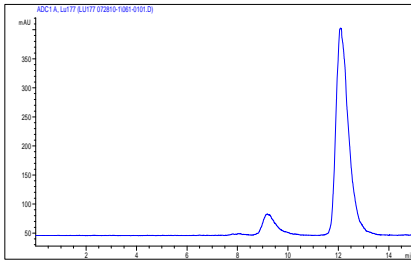


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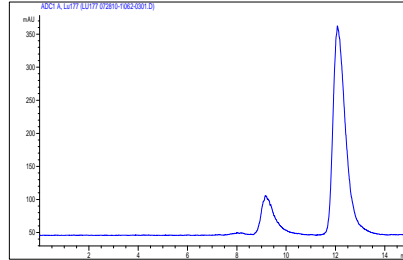
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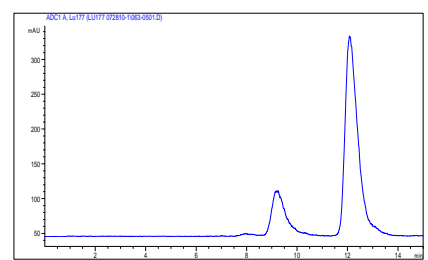
**11.3%**



**18.2%**

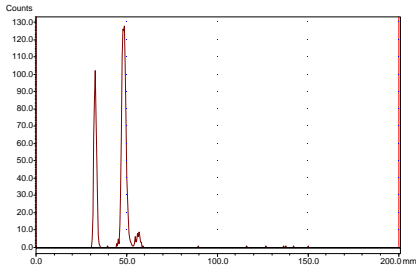


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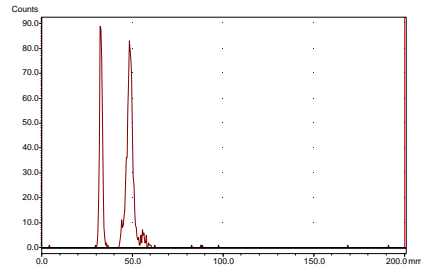
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**32.2%**



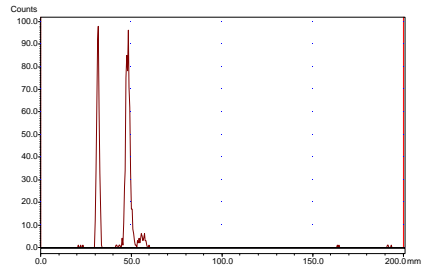
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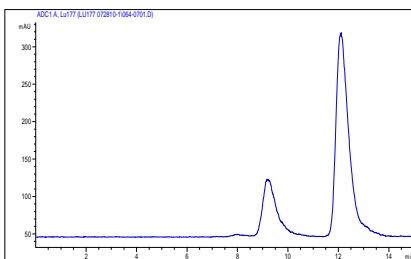


**60 min**

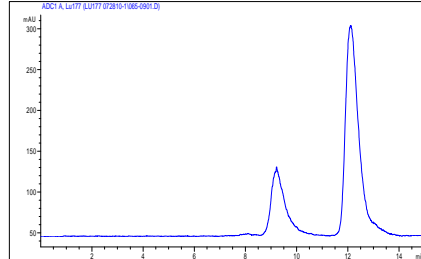
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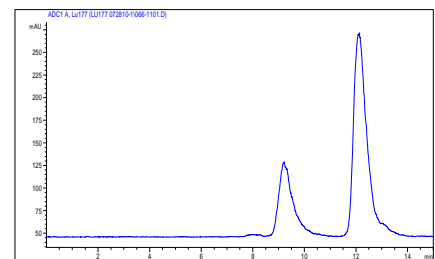
**25.1%**



**26.3%**



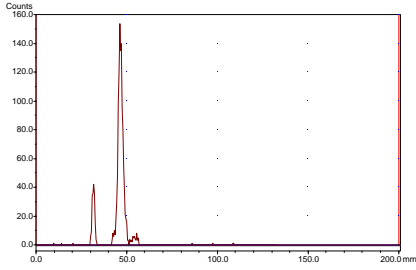
**29.1%**



# Sample 3

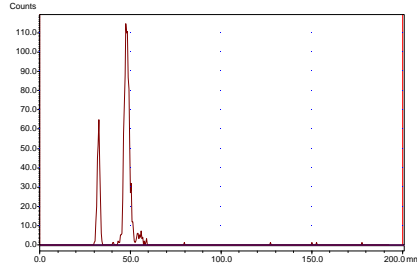
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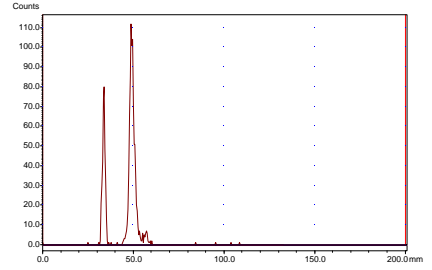
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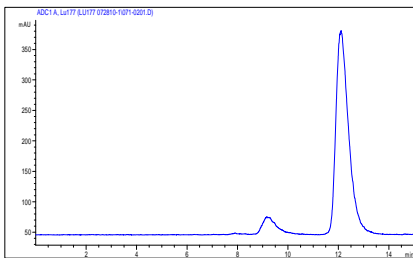


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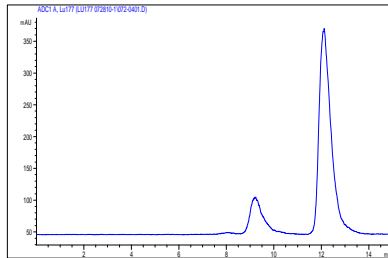
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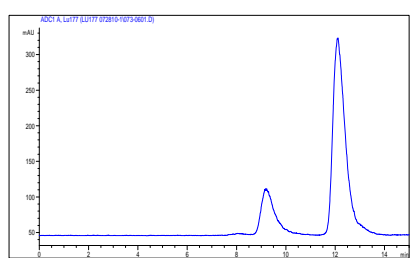
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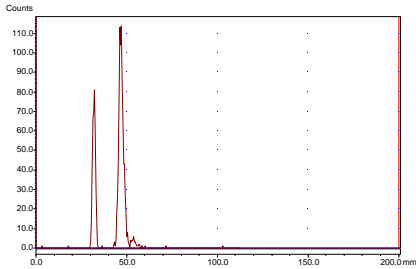


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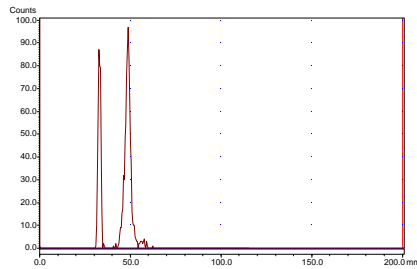
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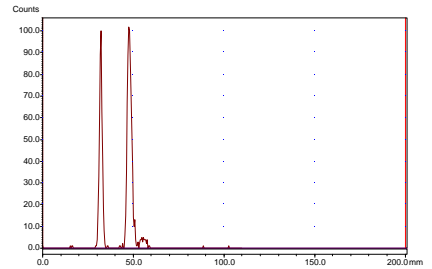
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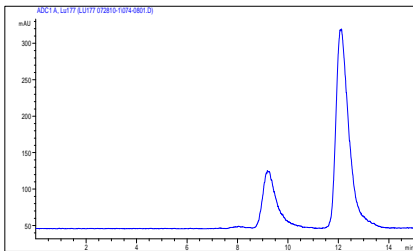


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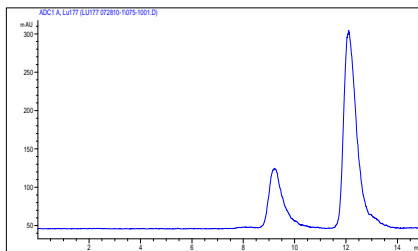
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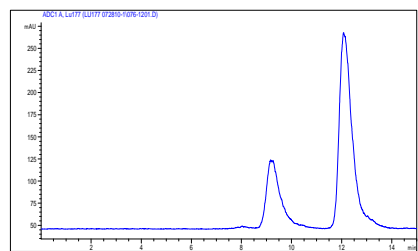
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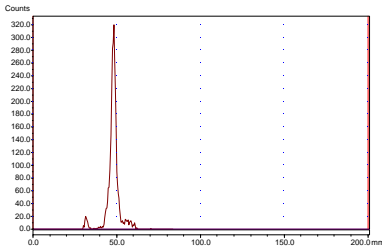
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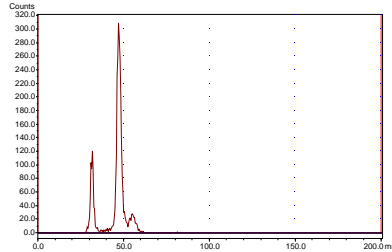
## C. Radiolabeling of C-NOTA-Trastuzumab with $^{90}\text{Y}$ .

### Sample 1

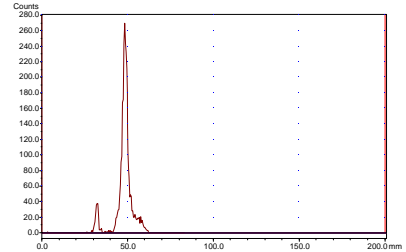
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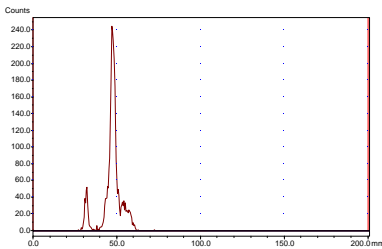
**5 min**  
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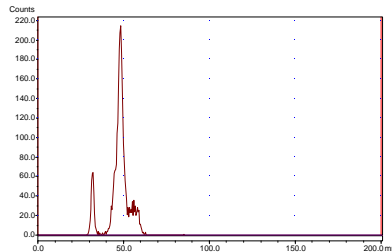
**10 min**  
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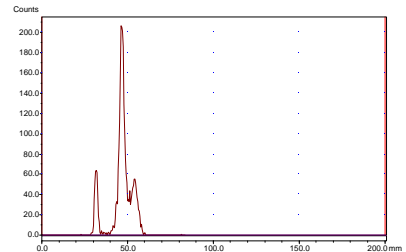
**20 min**  
8.6%



**30 min**  
10.7%

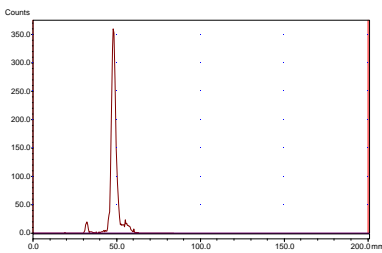


**60 min**  
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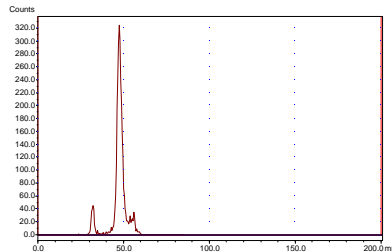


### Sample 2

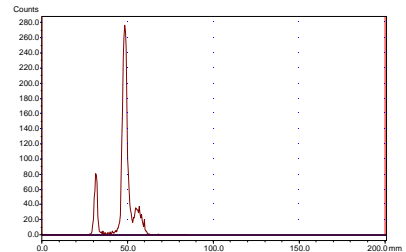
**1 min**  
2.7%



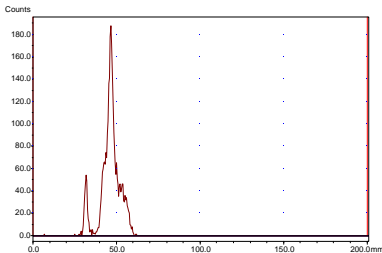
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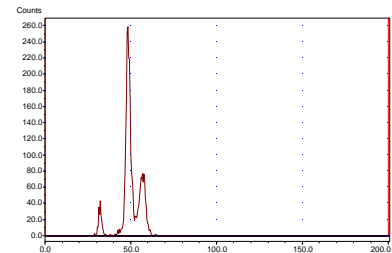
**10 min**  
13.5%



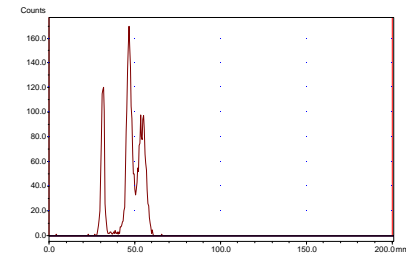
**20 min**  
8.6%



**30 min**  
6.7%



**60 min**  
19.9%

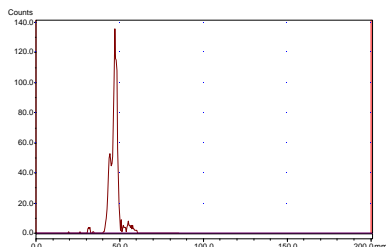




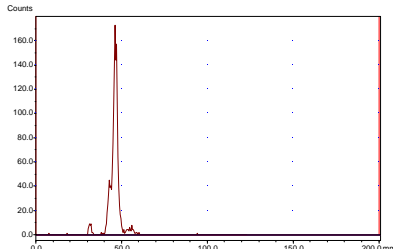
## D. Radiolabeling of C-NOTA-Trastuzumab with $^{177}\text{Lu}$

### Sample 1

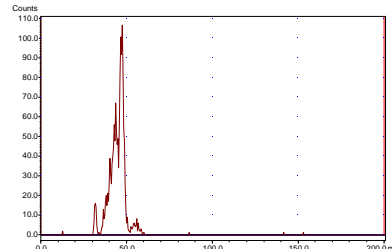
**1 min**  
0.93%



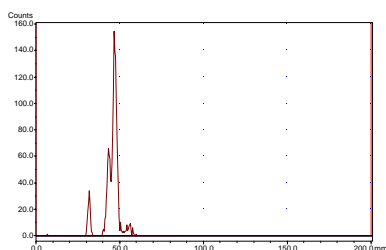
**5 min**  
2.5%



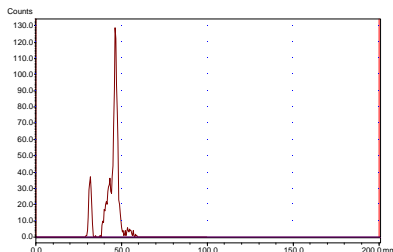
**10 min**  
3.7%



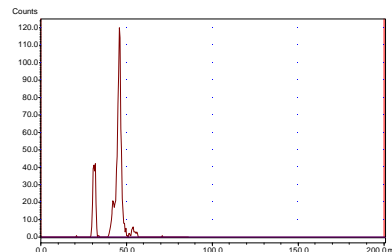
**20 min**  
8.3%



**30 min**  
12.5%

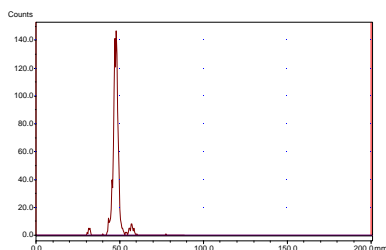


**60 min**  
19.7%

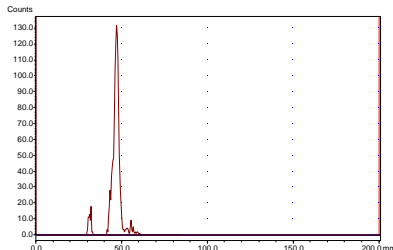


### Sample 2

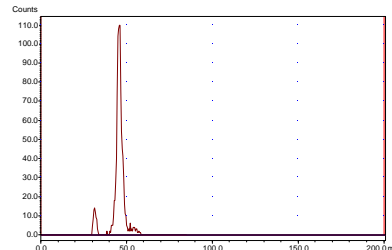
**1 min**  
1.2%



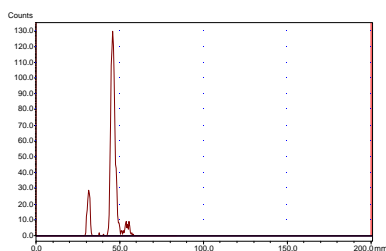
**5 min**  
4.8%



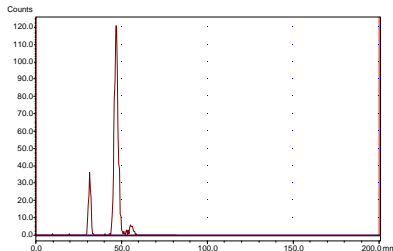
**10 min**  
6.3%



**20 min**  
11.3%



**30 min**  
14.1%



**60 min**  
26.0%

