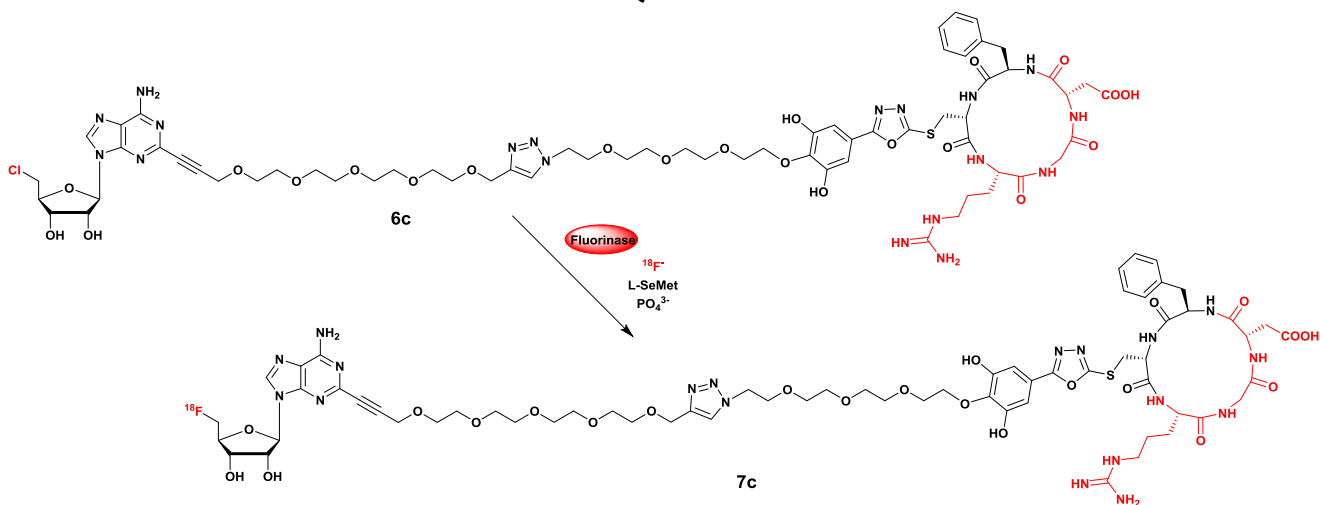


## ZSJQZ011



Compound	Amount	Final conc.
Fluorinase enzyme	5 mg in 125 $\mu\text{L}$ $\text{PO}_4^{3-}$ buffer (50 mM), 154 nmol	20 mg/mL 0.62 mM
L-SeMet (2mM in water)	40 $\mu\text{L}$ , 80 nmol	0.32 mM
<b>6c</b>	0.3 mg, 160 nmol	0.64 mM
$^{18}\text{F}$ in $\text{PO}_4^{3-}$ buffer (50 mM)	50 $\mu\text{L}$	380 MBq, 6.0 pmol, 24 pM @13:40
$\text{PO}_4^{3-}$ buffer (50 mM)	30 $\mu\text{L}$	41 mM
DMSO	5 $\mu\text{L}$ , 70 $\mu\text{mol}$	2%, 282 mM

13:40 start incubation 37°C

11:40 start incubation 37°C

12:10 5  $\mu\text{L}$  diluted to 500  $\mu\text{L}$  with water, boiled at 95°C for 5 min and spinned at 13500 rpm for 5 min. 20  $\mu\text{L}$  of the supernatant (0.4 MBq)

12:41 reaction mixture was boiled at 95°C for 5 min. After that, the eppendorf was spinned at 13500 rpm for 5 min.  
Final activity 243 MBq @12:48

Approx. 400  $\mu\text{L}$  of supernatant (157.5 MBq) was injected in the semiprep HPLC and 24 MBq of the desired product were collected.

Purification yield = 15.2 %

Collected activity was concentrated using Oasis HLB cartridge:

13:40 23.50 MBq collection vial

Solution in the collection vial was diluted with 40 mL of water and content loaded on the cartridge  
19 MBq trapped in the cartridge

1 MBq residue in the collection vial  
1 MBq in the filtered solution

Cartridge was washed with 20 mL of water

18.8 Mbq trapped in the cartridge

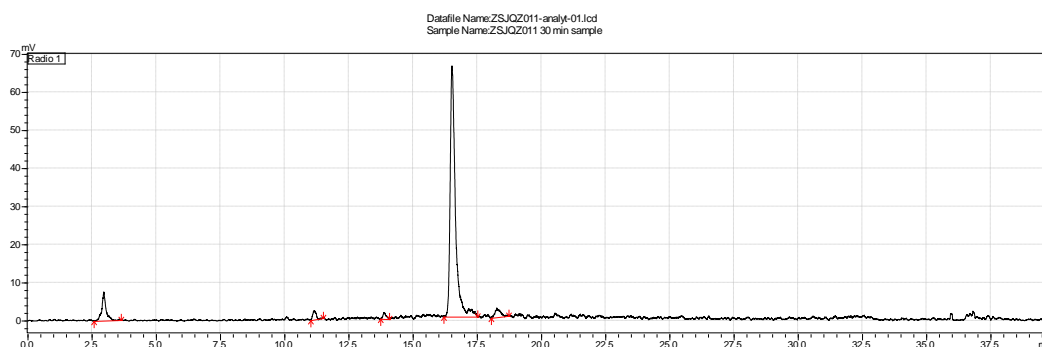
0.1 MBq in the wash solution

Activity was eluted from the cartridge with 1 mL of Ethanol

14 MBq eluted

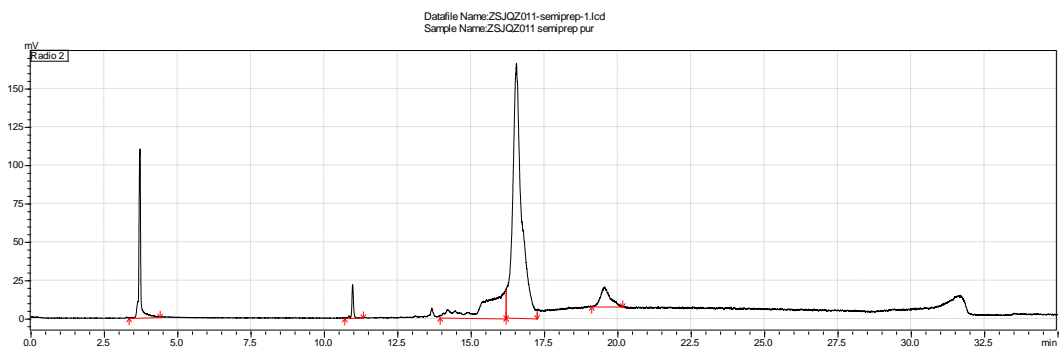
4 MBq left in the cartridge

analytical HPLC 30 min



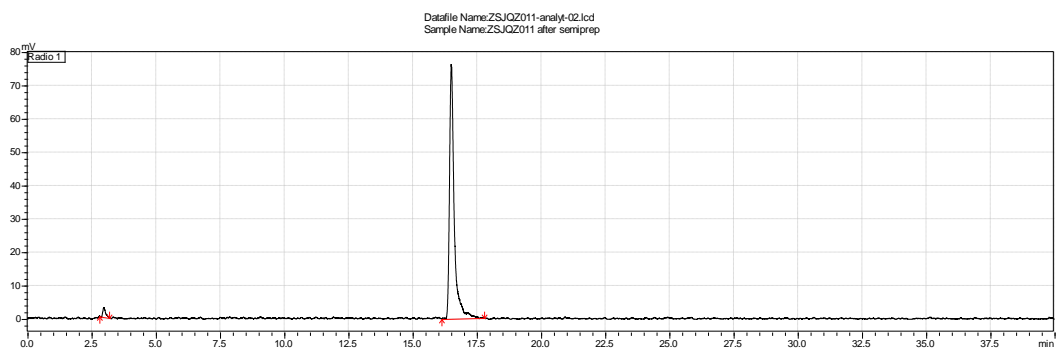
Peak#	Ret. Time	Area	Height	Mark	Conc.	Unit	ID#	Name	Area%
1	2.978	79750	7389	M	7.449			7.449	
2	11.189	17699	2130	M	1.653			1.653	
3	13.892	13516	1593	M	1.262			1.262	
4	16.539	927649	65615	M	86.640				86.640
5	18.286	32074	2287	M	2.996			2.996	
Total		1070688	79013		100.000				100.000

Semiprep HPLC



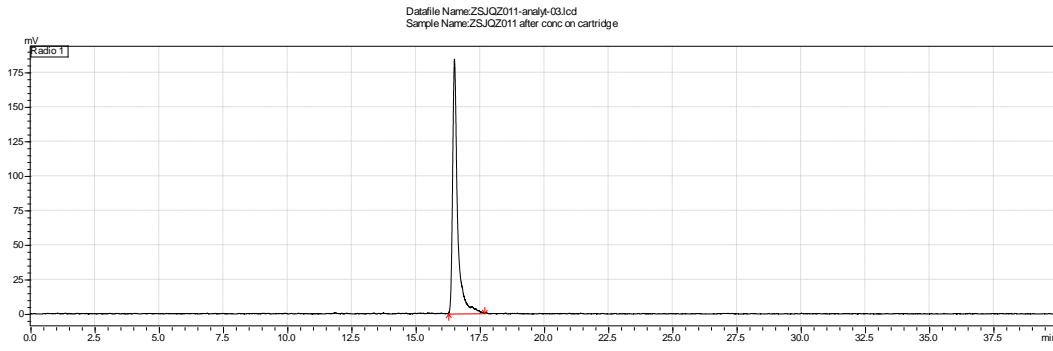
Peak#	Ret. Time	Area	Height	Mark	Conc.	Unit	ID#	Name	Area%
1	3.736	481530	109333		M	9.258			9.258
2	10.982	77597	21344	M	1.492				1.492
3	16.184	897190	17423	M	17.249				17.249
4	16.565	3467079	165366		M	66.656			66.656
5	19.574	278046	12686	M	5.346				5.346
Total		5201441	326152			100.000			100.000

### After semiprep



Peak#	Ret. Time	Area	Height	Mark	Conc.	Unit	ID#	Name	Area%
1	2.981	20665	2838	M	2.095				2.095
2	16.511	965928	76027	M	97.905				97.905
Total		986592	78865			100.000			100.000

After HLB cartridge



Peak#	Ret. Time	Area	Height	Mark	Conc.	Unit	ID#	Name	Area%
1	16.517	2457578	183496	M	100.000				100.000
Total		2457578	183496		100.000				100.000