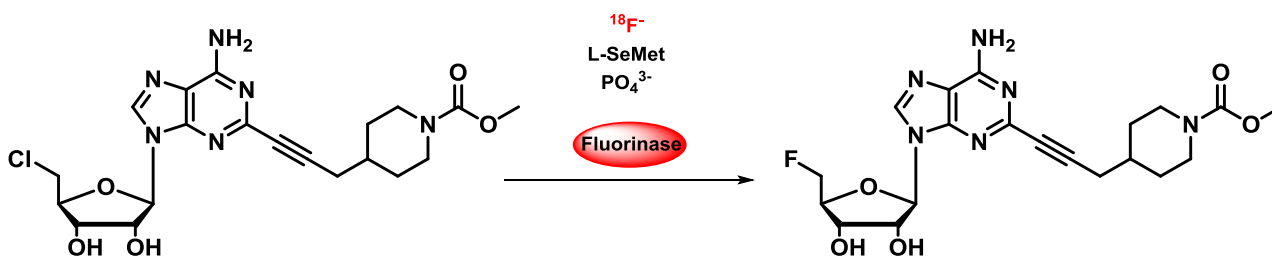


28-02-2017

ZSJPL004



Compound	Amount	Final conc.
Fluorinase enzyme	5 mg in 110 μL water (PO_4^{3-} buffer, 50 mM), 174 nmol	
L-SeMet (2mM in water)	40 μL , 80 nmol	
PL040	0.6 mg in 50 μL , 1.29 μmol	
^{18}F in O18 Water	50 μL	210 MBq @ 12:59

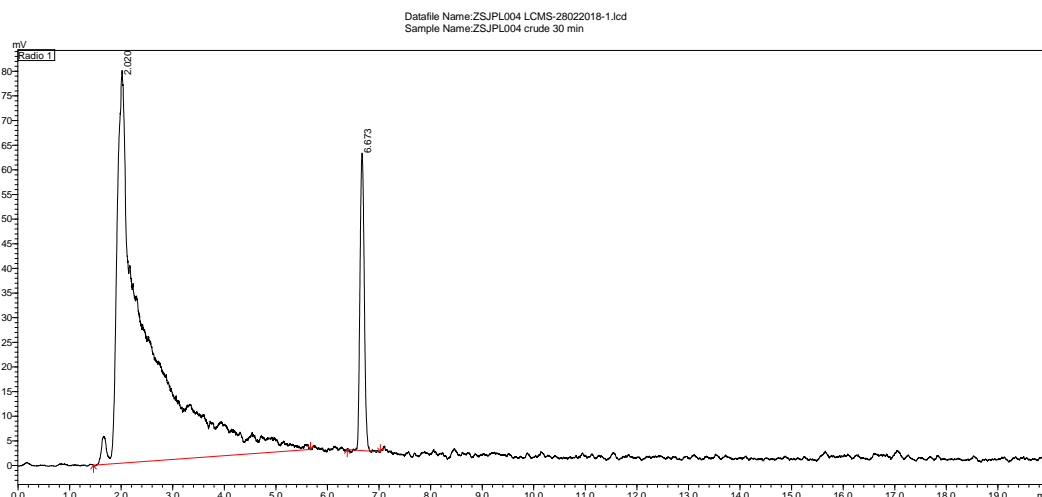
7 min bombardment on T4, no rinse, final activity 130 approx. 5.7 GBq

13 :02 start incubation 37 °C (205 MBq)

13:32 reaction mixture was boiled at 95°C for 5 min (165 Mbq @ 13:33). After that 250 μL of water were added and the eppendorf was spinned at 13500 rpm for 5 min. 10 μL of the supernatant were diluted to 200 μL and 40 μL of this solution were injected in the analytical HPLC @13:59. Approx. 450 μL of the supernatant (111.7 MBq @ 14:13 were injected in the HPLC (4.3 MBq @ 14:14 residual in the syringe @). Approx. 17.9 MBq left in the Eppendorf @ 14:14.

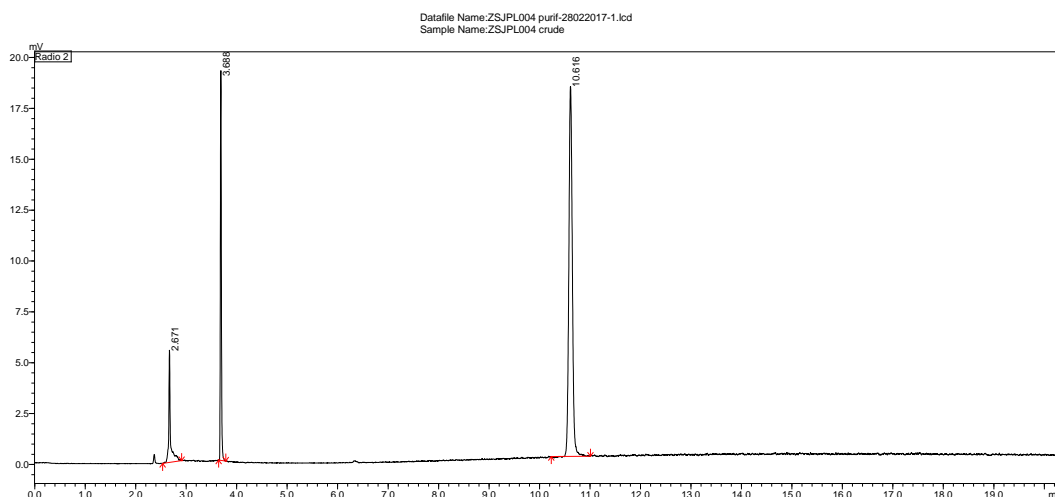
Collected 9.2 MBq @ 14:28, approx. 8.5% of injected activity

crude LCMS



Peak#	Ret. Time	Area	Height	Mark	Conc.	Area%
1	2.020	3014156	79268	M	89.717	89.717
2	6.673	345470	59617	M	10.283	10.283
Total		3359626	138885		100.000	100.000

semiprep crude radio signal



Peak#	Ret. Time	Area	Height	Mark	Conc.	Area%
1	2.671	12485	5289	M	9.885	9.885
2	3.688	27204	18648	M	21.539	21.539
3	10.616	86614	18092	M	68.577	68.577
Total		126302	42029		100.000	100.000

Solution in the collection vial (9.2 MBq @ 14:28) was diluted with 50 mL of water and content loaded on the OASIS HLB light cartridge

8.0 MBq trapped in the cartridge @ 14:43

0.4 MBq residue in the collection vial @ 14:43

1.2 MBq in the filtered solution @ 14:44

Cartridge was washed with 20 mL of water

7.6 Mbq trapped in the cartridge @14:46

0.5 MBq in the wash solution @14:47

Activity was eluted from the cartridge with 0.5 mL of Ethanol

7.0 MBq eluted @14:52

0.4 MBq left in the cartridge @14:52

1.10 MBq injected in HPLC analytical, 0.1 MBq left in the syringe.

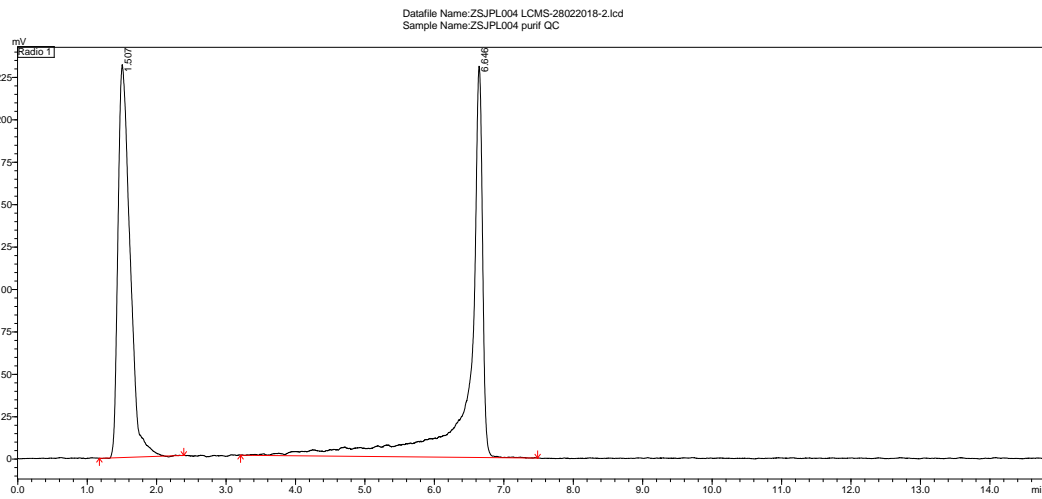
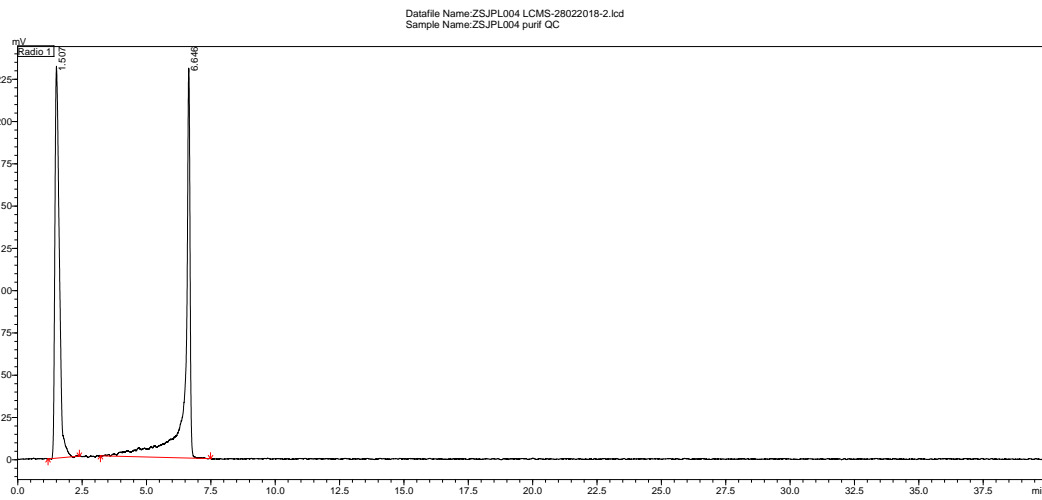
Analytical peak collected 0.40 MBq

Problem with the HPLC trace, big radioactive peak at beginning of the run,

5 µL of this solution were spotted on a TLC plate and Eluted with 95: ACN/Water, single peak.

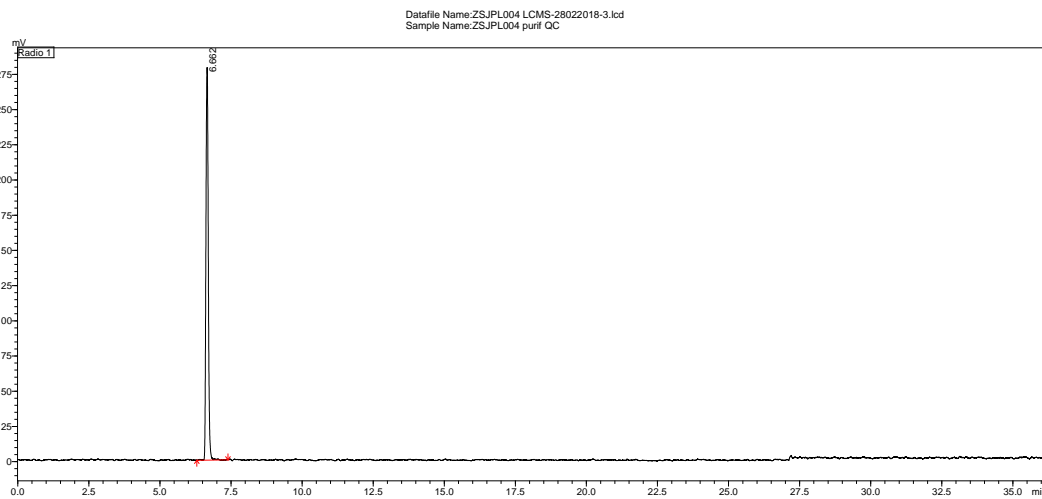
Solution diluted with water an injected and single peak observed.

purified LCMS pure ethanol

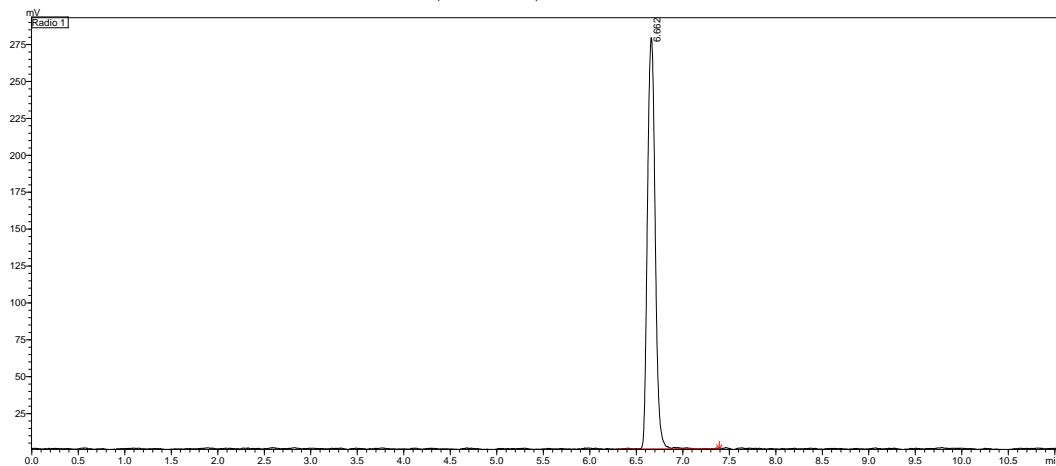


Peak#	Ret. Time	Area	Height	Mark	Conc.	Area%
1	1.507	2778145	230851	M	47.894	47.894
2	6.646	3022492	230237	M	52.106	52.106
Total		5800637	461088		100.000	100.000

purified LCMS diluted 1:5



Datafile Name: ZS.JPL004 LCMS-28022018-3.lcd
Sample Name: ZS.JPL004 purif QC



Peak#	Ret. Time	Area	Height	Mark	Conc.	Area%
1	6.662	1606657	278048	M	100.000	100.000
Total		1606657	278048		100.000	100.000

reference comparison

Blue reference, pink hot radiotracer signal

