ZSJQZ012

Compound	Amount	Final conc.	
Fluorinase enzyme	5 mg in 125 μL PO ₄ 3- buffer	20 mg/mL	
	(50 mM), 154 nmol	0.62 mM	
L-SeMet (2mM in water)	40 μL, 80 nmol	0.32 mM 0.64 mM	
6c	0.3 mg, 160 nmol		
¹⁸ F in PO ₄ ³⁻ buffer (50 mM)	90 μL	422 MBq, @11:45	
DMSO	5 μL, 70 μmol	2%, 282 Mm	

5 min Cyclotron bombardment, activity trapped in a Chromafix cartridge (equilibrated with 1 mL EtOH and 1 mL Water). Activity eluted with 600 μL of PO4 buffer 50 mM (2.83 GBq @11.33)

11:45 start incubation 37°C (422 MBq)

12:25 reaction mixture was boiled at 95°C for 5 min (320 Mbq @ 12.25). After that 250 μ L of water were added and the eppendorf was spinned at 13500 rpm for 5 min.

Approx. 400 μ L of supernatant (186 MBq @12.42, residue in the syringe 6 MBq @12.43) were injected in the semiprep HPLC and 32.6 MBq of the desired product were collected.

Purification yield = 18 %

Collected activity was concentrated using Oasis HLB cartridge:

12:42 32.6 MBq collection vial

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

27.8 MBq trapped in the cartridge @ 13.05

1.78 MBq residue in the collection vial @ 13.06

4.87 MBq in the filtered solution @ 13.05

Cartridge was washed with 20 mL of water

26.3 Mbq trapped in the cartridge0.5 MBq in the wash solution

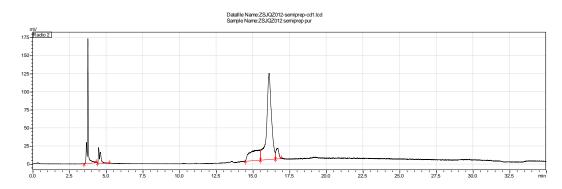
Activity was eluted from the cartridge with 1 mL of Ethanol

22.5 MBq eluted @13.13

3.9 MBq left in the cartridge @13.12

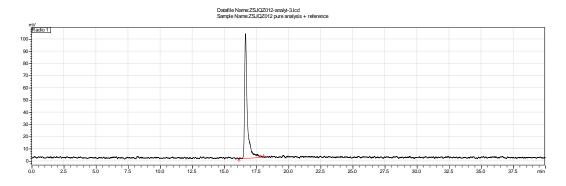
10.0 MBq in 0.5 mL @ 13.52 were delivered to Ian Fleming for cell experiments

Semiprep HPLC

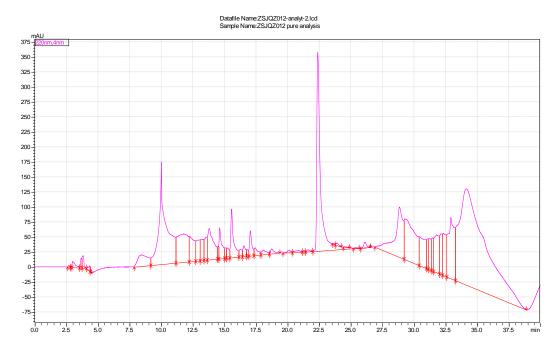


Peak#	Ret. Time	Area	Height	Area%
1	3.764	622957	170885	14.305
2	4.490	182787	20991	4.197
3	15.354	665328	13740	15.278
4	16.107	2684418	118435	61.642
5	16.678	199360	14319	4.578
Total		4354849	338369	100.000

ZSJQZ012 analytical Radio



ZSJQZ012 analytical UV



ZSJQZ012 + reference analytical UV

