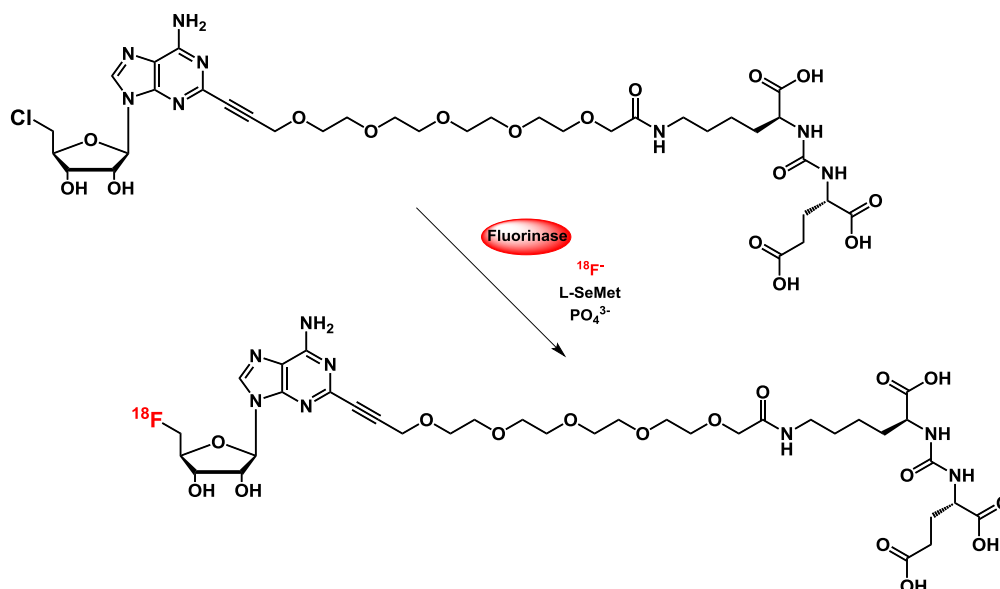


26-08-2016

ZSJPL001



Compound	Amount	Final conc.
Fluorinase enzyme	5 mg in 110 μL water (PO_4^{3-} buffer, 50 mM), 174 nmol	20 mg/mL 0.62 mM
L-SeMet (2mM in water)	40 μL , 80 nmol	0.32 mM
PSMA-CIDA	0.2 mg, 228 nmol	0.99 mM
^{18}F in O18 Water	80 μL	265 MBq, @10:15

6 min Cyclotron bombardment (T4), activity delivered to hotcell A (approx. 3.6-3.8 GBq @09.52 in approx. 2.2 mL)

10:16 start incubation 37°C (233 MBq)

10.46 10 μL sample diluted to 500 μL with water, boiled at 95°C for 5 min and spinned at 13500 rpm for 5 min. 20 μL of the supernatant (0.27 MBq) injected in the HPLC

11:26 reaction mixture was boiled at 95°C for 5 min (145 MBq @ 12.25). After that 250 μL of water were added and the eppendorf was spinned at 13500 rpm for 5 min.

Approx. 450 μL of supernatant (108.9 MBq @11.36, residue in the syringe 2.30 MBq @11.43) were injected in the semiprep HPLC and 13.8 MBq of the desired product were collected.

Purification yield = 12.9 %

Collected activity was concentrated using Oasis HLB cartridge:

11:51 13.8 MBq collection vial

Solution in the collection vial was diluted with 50 mL of water and content loaded on the cartridge
11.55 MBq trapped in the cartridge @ 12.04
0.05 MBq residue in the collection vial @ 12.01
1.57 MBq in the filtered solution @ 12.03

Cartridge was washed with 20 mL of water

10.85 MBq trapped in the cartridge @12.06
0.07 MBq in the wash solution @12.07

Activity was eluted from the cartridge with 1 mL of Ethanol
7.7 MBq eluted @12.15
2.3 MBq left in the cartridge @12.15

5.42 MBq in 1 mL EtOH @ 13.02 were delivered to Ian Fleming for cell experiments