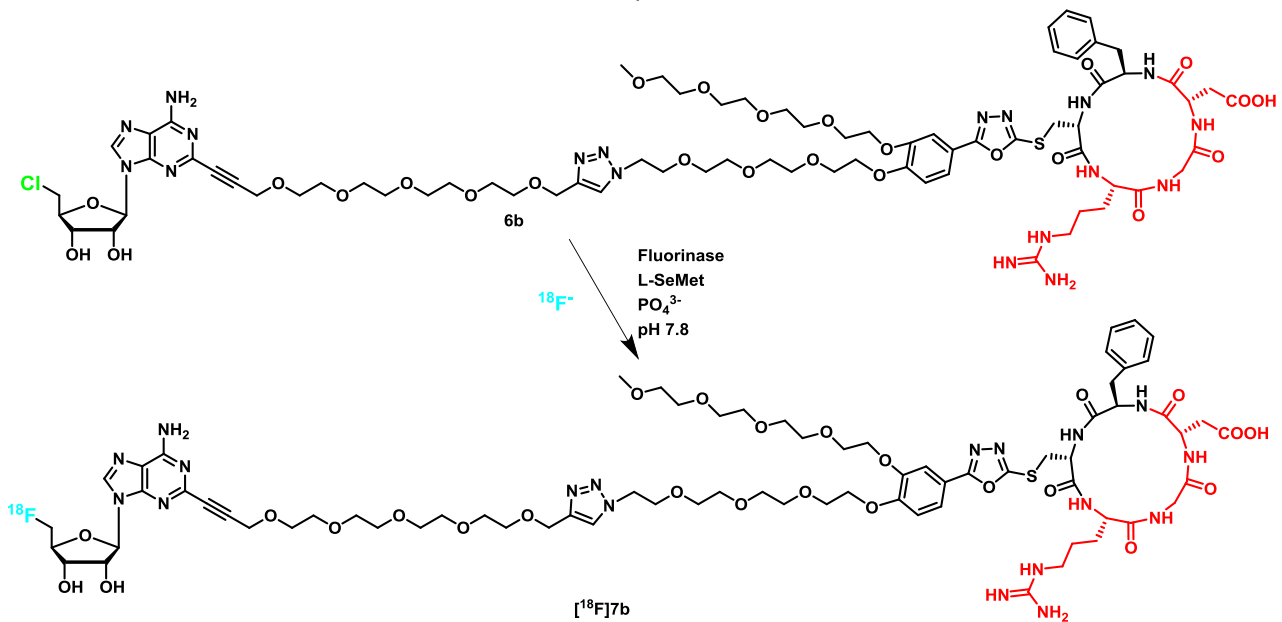


ZSJQZ005



Compound	Amount	
Fluorinase Freeze dried enzyme	5 mg	20 mg/mL final conc
L-Selenomethionine 2mM water	50 μL	
Precursor 6b 10 mM in DMSO	12 μL	
¹⁸ F in ¹⁸ O water solution	70 μL	617 MBq @10:55
Water	118 μL	

¹⁸F solution approx. 4 GBq in 0.4 mL

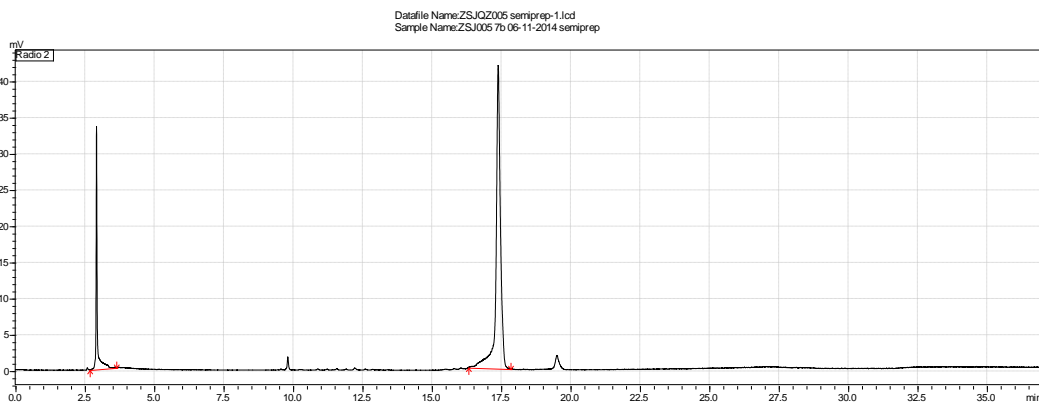
10:56 start incubation 37°C

11:41 reaction mixture (455 MBq) was diluted with 250μL of 5% DMSO in water solution and boiled at 95°C for 5 min. After that other 250μL of 5% DMSO in water solution were added to the eppendorf and this solution was spinned at 13500 rpm for 10 min.

Final activity 332 MBq @12:07

No clear precipitation of protein (gel like)

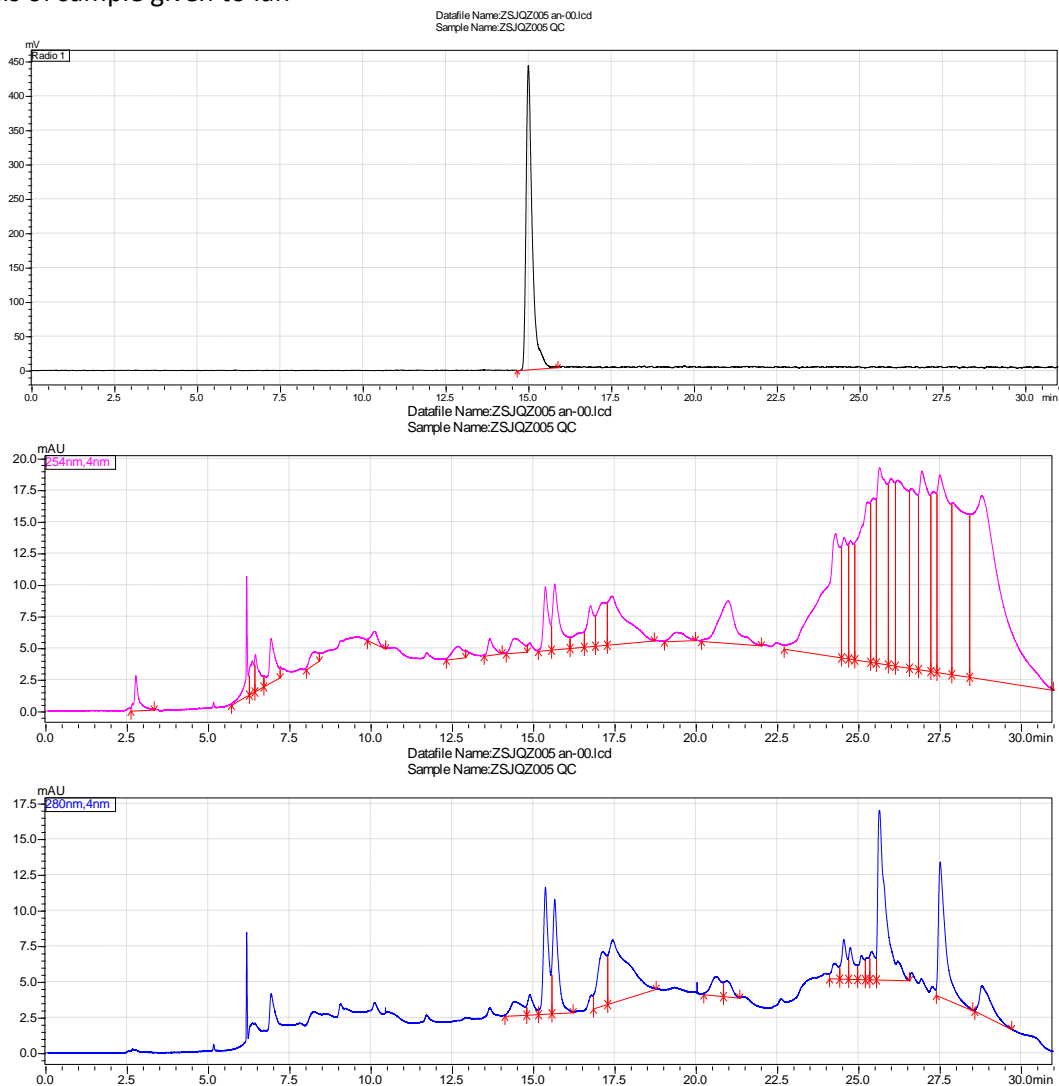
600 μL (238 MBq @ 12:08) were loaded in the HPLC syringe and injected in semiprep HPLC, 3.3 MBq @12:10 residue in the syringe



From semiprep HPLC 40.8 MBq @ 12:30 were collected (peak at 17.5 min), diluted with 20 mL of water, loaded on an Oasis HLB plus cartridge (Waters, conditioned with 2 mL EtOH and 2 mL Water). 39.6 MBq @ 12:35 were trapped in the cartridge after 10 mL water wash. 28.3 MBq @12:37 were eluted with 1 mL of EtOH. 10.6 Mbq @12:38 were left in the cartridge.

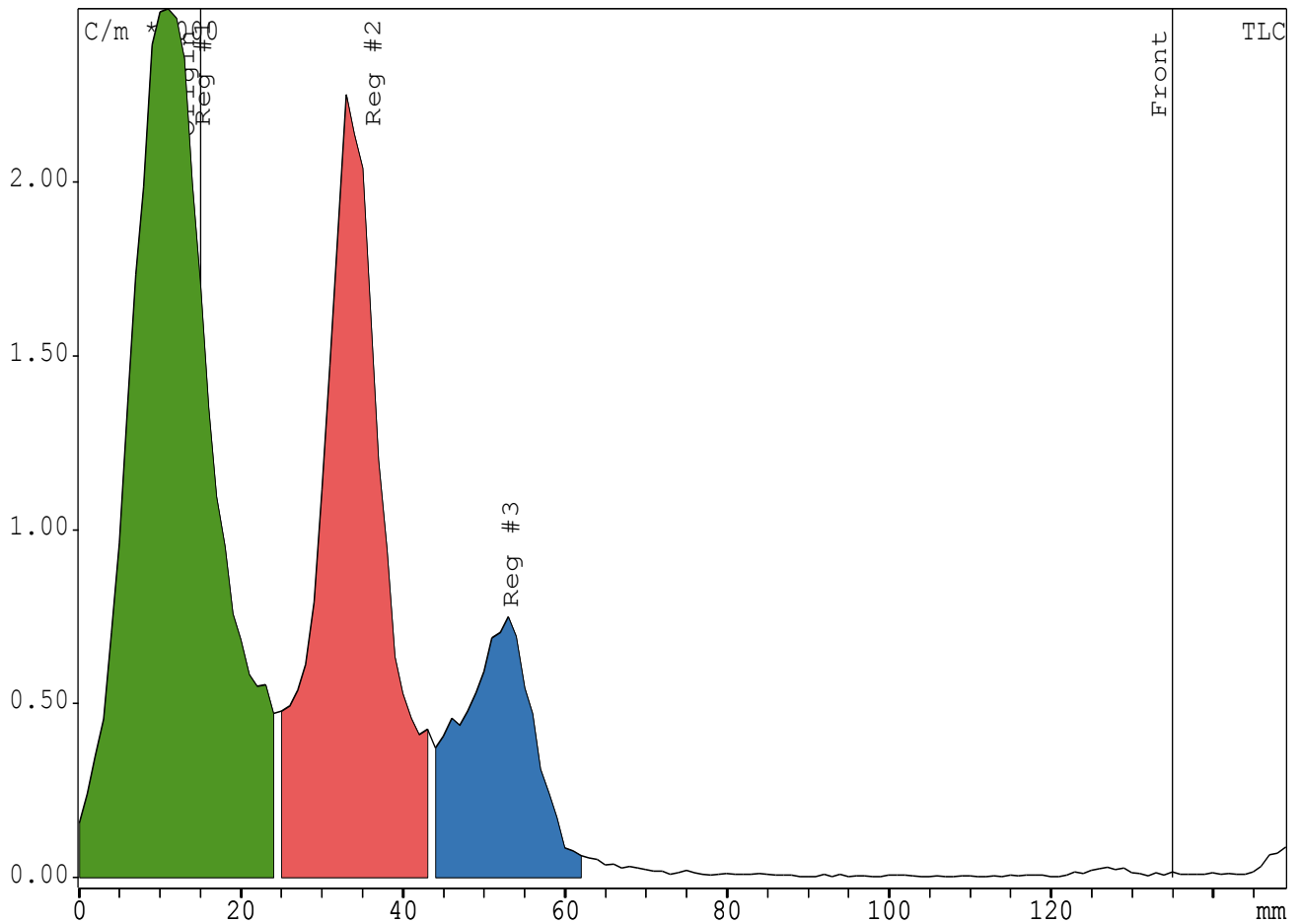
0.3 mL (10 MBq@12:58) of the ethanol solution were delivered to Ian Fleming for in vitro tests.

QC analysis of sample given to Ian



TLC of residual mixture

Integration C:\MiniGita Control\2014\Fluorinase\ZSJQZ005 crude residue RP6-11-14

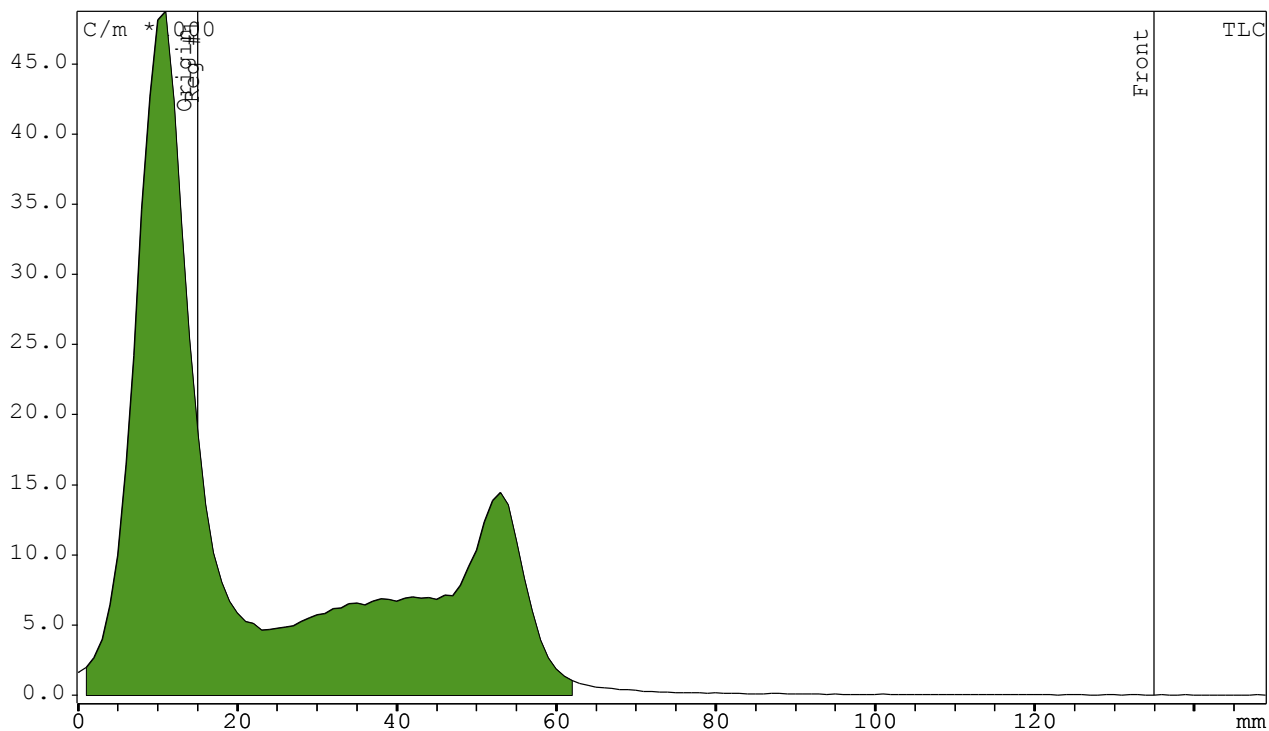


Integration TLC

"Substance"	R/F	%Total	"Type"	Area	%Area
""	%	""	C/m*mm	%	""
"Reg #1"	-0.033	50.57	"DD"	30394.00	52.38
"Reg #2"	0.158	32.63	"DD"	19611.00	33.80
"Reg #3"	0.308	13.35	"DD"	8022.00	13.82
""	""	""	""	""	""
"Sum in ROI"	""	""	""	58027.00	""
"Total area"	""	""	""	60107.00	""
"Area RF"	""	""	""	37654.00	""

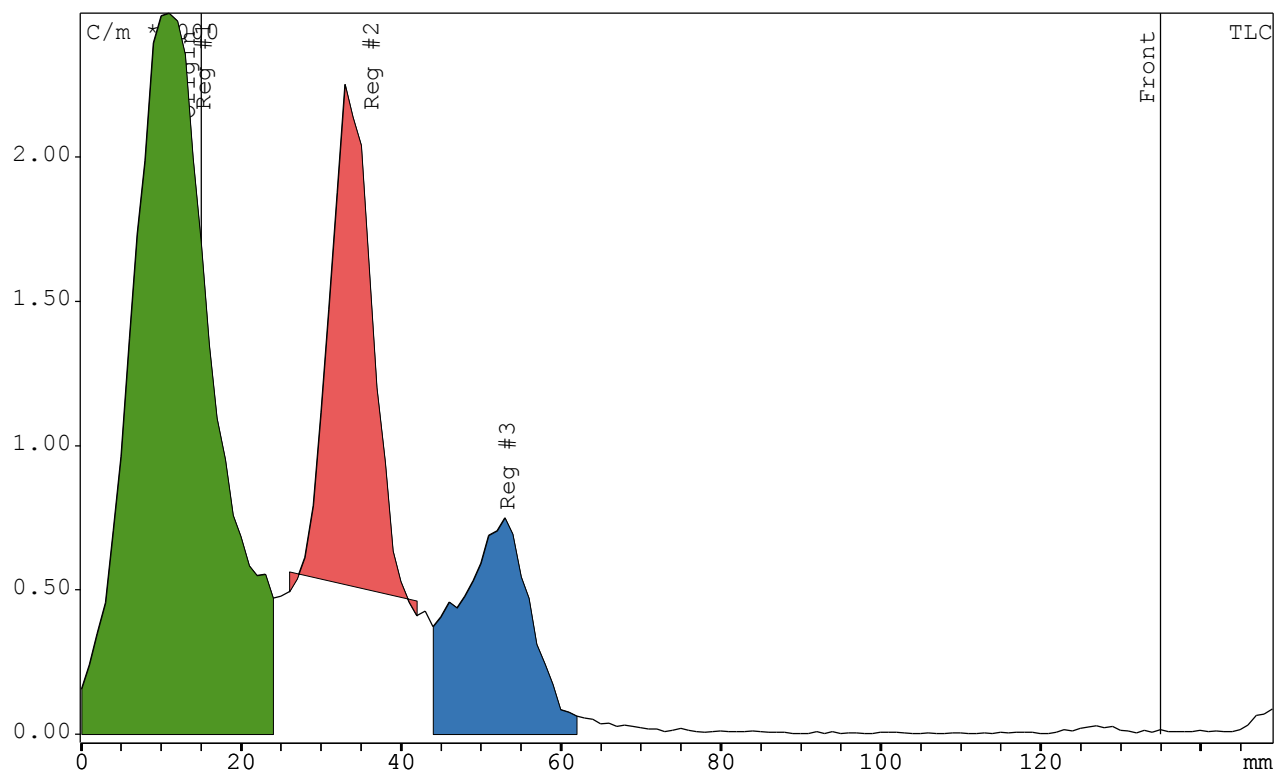
18F RP TLC

Integration C:\MiniGita Control\2014\Fluorinase\ZSJQZ005 18F ref RP 6-11-14.rta,



Integration TLC

"Substance"	R/F	%Total	"Type"	Area	%Area
""	%	""	C/m*mm	""	%
"Reg #1"	-0.042	98.28	"DD"	685746.0	100.00
""	""	""	""	""	""
"Sum in ROI"	""	""	""	685746.0	""
"Total area"	""	""	""	697774.0	""
"Area RF"	""	""	""	354638.0	""



Integration TLC

"Substance"	R/F	%Total	"Type"	Area	%Area
"	%	"	C/m*mm	"	%
"Reg #1"	-0.033	50.57	"DD"	30394.00	63.45
"Reg #2"	0.158	15.79	"BB"	9488.00	19.81
"Reg #3"	0.308	13.35	"DD"	8022.00	16.75
"	"	"	"	"	"
"Sum in ROI"				47904.00	
"Total area"				60107.00	
"Area RF"				37654.00	