

Weekly report

09/10/15 – 15/10/15

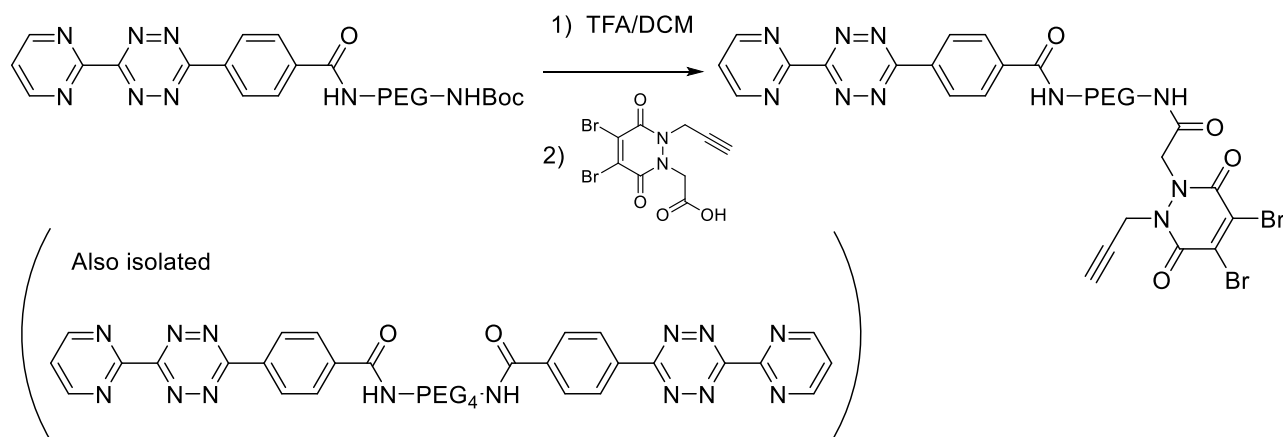
Antoine Maruani

Synthesis

Tetrazine

- Characterisation of tetrazine-alkyne PD to confirm it was the correct product: it is!
Yield: 45%.

I was also able to isolate bis-tetrazine PEG that I couldn't separate from the previous reaction mixture (it was due to the fact that the $\text{NH}_2\text{-PEG-NHBoc}$ I used was partially degraded to $\text{NH}_2\text{-PEG-NH}_2$).



Conjugation

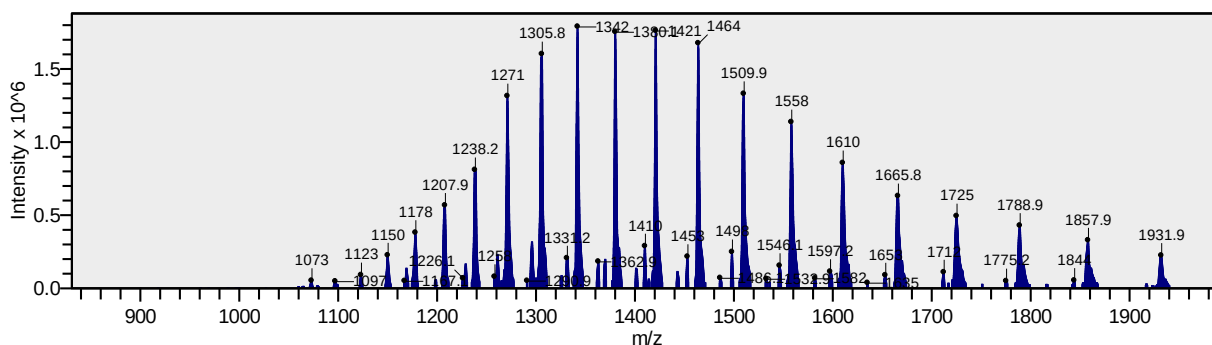
Astra

- To understand if the Astra PD I used was degraded/contaminated or if it degraded in the buffer, I preclicked it with AlexaFluor then conjugated it on Fab. I observed again a +30 peak (along with the Fab-PD-Alexa peak) which means that the buffer is not responsible for the degradation but my stock solution is impure.
- I'll scale up Astra and try to purify it with a slower gradient on the column to hopefully get it cleaner.

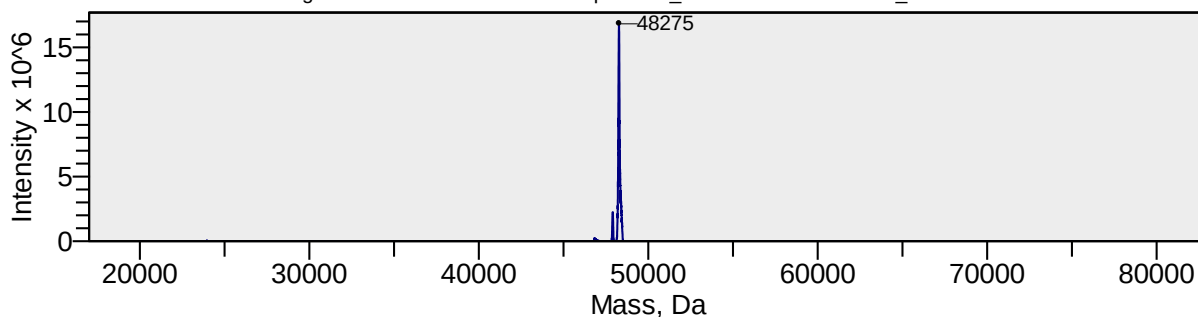
Tetrazine-Alkyne PD = Teta PD

- Bridged Fab with Teta PD → clean conversion
- Added Astra PD to Fab-Teta at rt for 5 h (5 eq of my impure Astra) → partial conversion → added 10 eq overnight at rt → results tomorrow

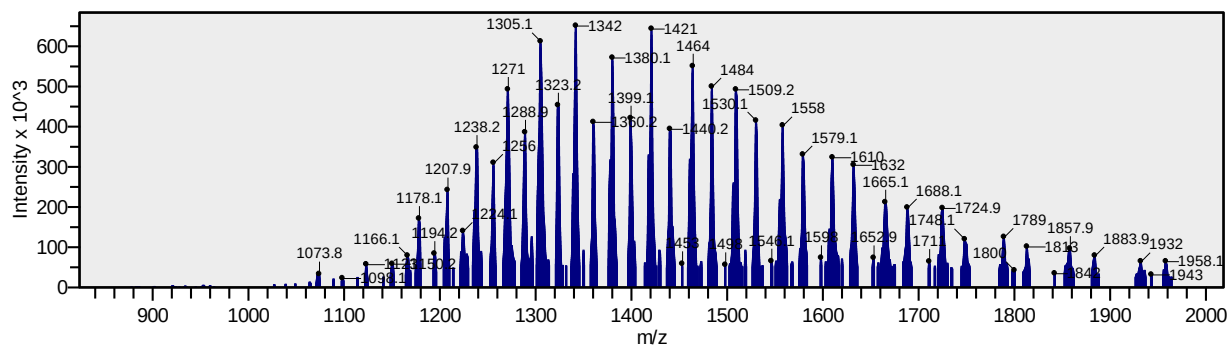
Fab-Teta



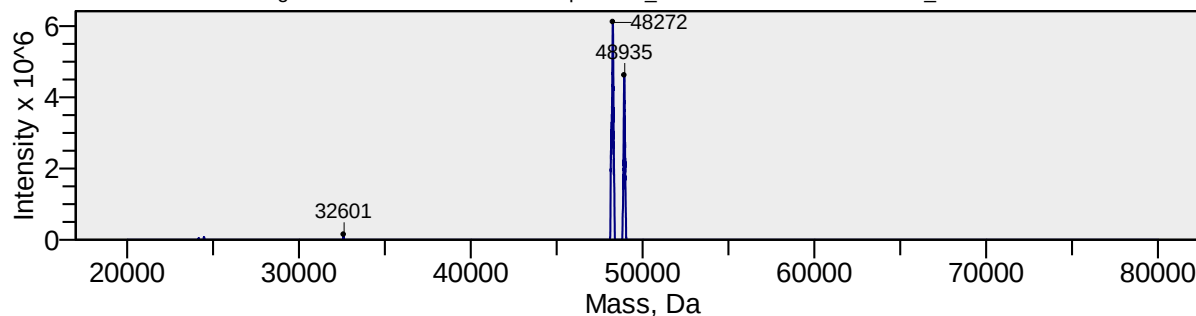
C:\Program Files\ProMassXcali\results\promass_results\AM409-Fab-Teta_132-170.dec



Fab-Teta-Astra



C:\Program Files\ProMassXcali\results\promass_results\AM409-Fab-Teta-Astra_134-183.dec



MS

Her-Astra failed to ionize on the MS... I don't know why and neither does Kersti. I'll try with a simpler PD next time.