

## Supporting information for

### **Growing single crystals of small molecules by thermal recrystallization, a viable option even for minute amounts of material?**

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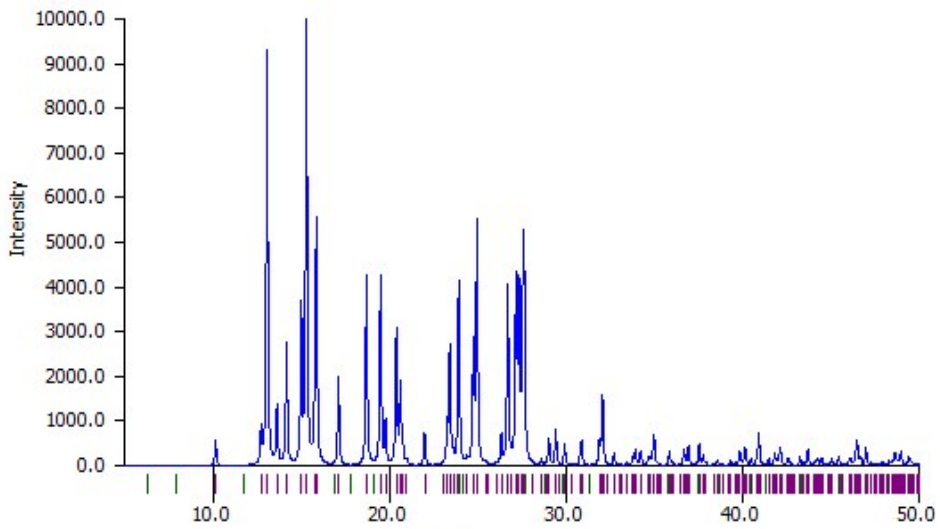
## Content

1. Powder diffraction of commercial carbamazepine
2. Powder diffraction of commercial *para*-amino benzoic acid

**Figure S1:** 4s exposure with Cu radiation of a vitamin B<sub>12</sub> crystal

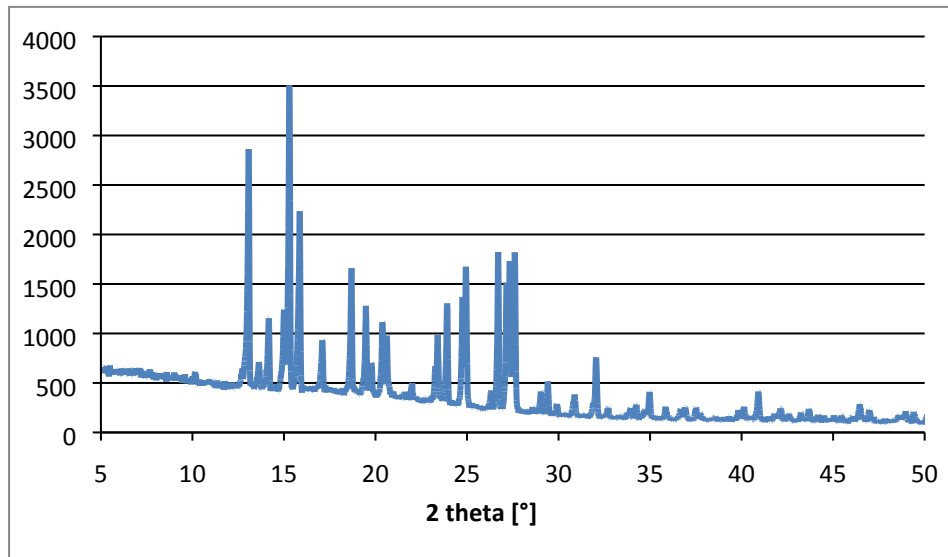
**Figure S2:** UPLC-ESI-MS of a) a reference of vitamin B<sub>12</sub>, b) vitamin B<sub>12</sub> that had been heated up in water from 25°C to 95°C at a rate of 1°C/min. and subsequently cooled down to -5°C at a rate of 0.1°C/min. c) vitamin B<sub>12</sub> that had been heated up in water from 25°C to 95°C at a rate of 1°C/min. and subsequently cooled down to -5°C at a rate of 0.05°C/min.

# 1. Powder diffraction of commercial carbamazepine

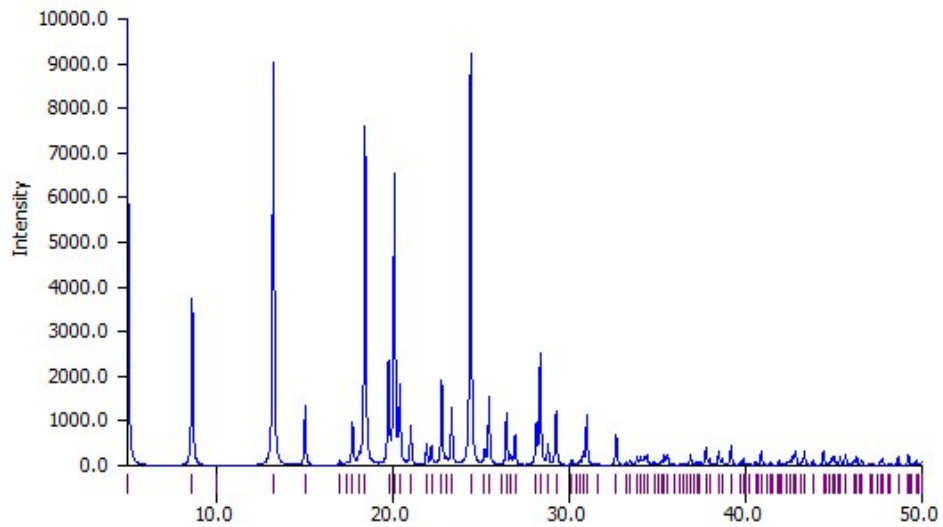


mP form (III) <sup>1</sup>:

Wavelength: 1.54056  
2 theta  
4.496, 10285  
h, k, l = 0, 0, 1



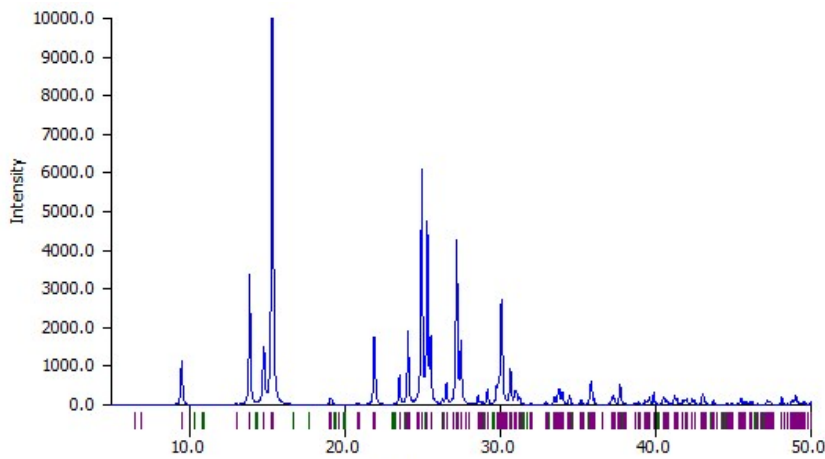
Exp.:



R-3 form: <sup>2</sup>

Wavelength: 1.54056  
2 theta  
22.758, 10285  
h, k, l = 6, -2, -1

## 2. Powder diffraction of commercial *para*-amino benzoic acid

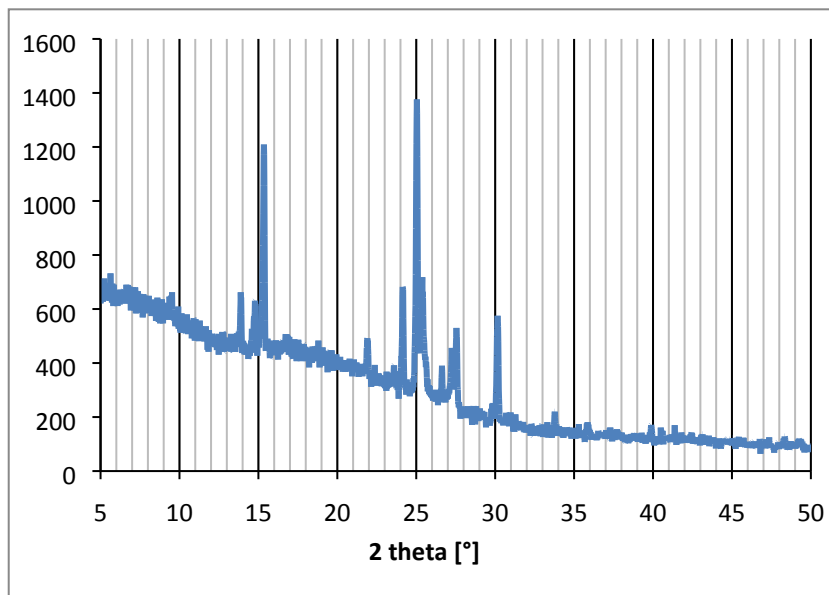


$\alpha$  form <sup>3</sup>:

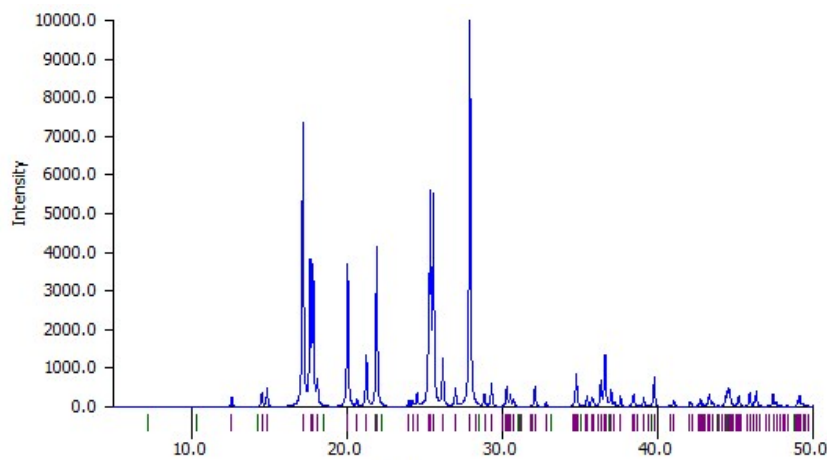
Wavelength: 1.54056

2 theta  
25.179, 10325

h, k, l = 2, 0, -5



Exp.:



$\beta$  form: <sup>4</sup>

Wavelength: 1.54056

2 theta  
24.978, 10407

h, k, l = 1, 2, 0

## References

1. V. L. Himes, A. D. Mighell and W. H. Decamp, *Acta Cryst.*, 1981, **B37**, 2242-2245.
2. R. Prohens, M. Font-Bardia and R. Barbas, *CrystEngComm*, 2013, **15**, 845-847.
3. T. F. Lai and R. E. Marsh, *Acta Cryst.*, 1967, **22**, 885-893.
4. S. Gracin and A. Fischer, *Acta Cryst.*, 2005, **E61**, o1242-o1244.

Figure S1: 4s exposure with Cu radiation of a vitamin B<sub>12</sub> crystal

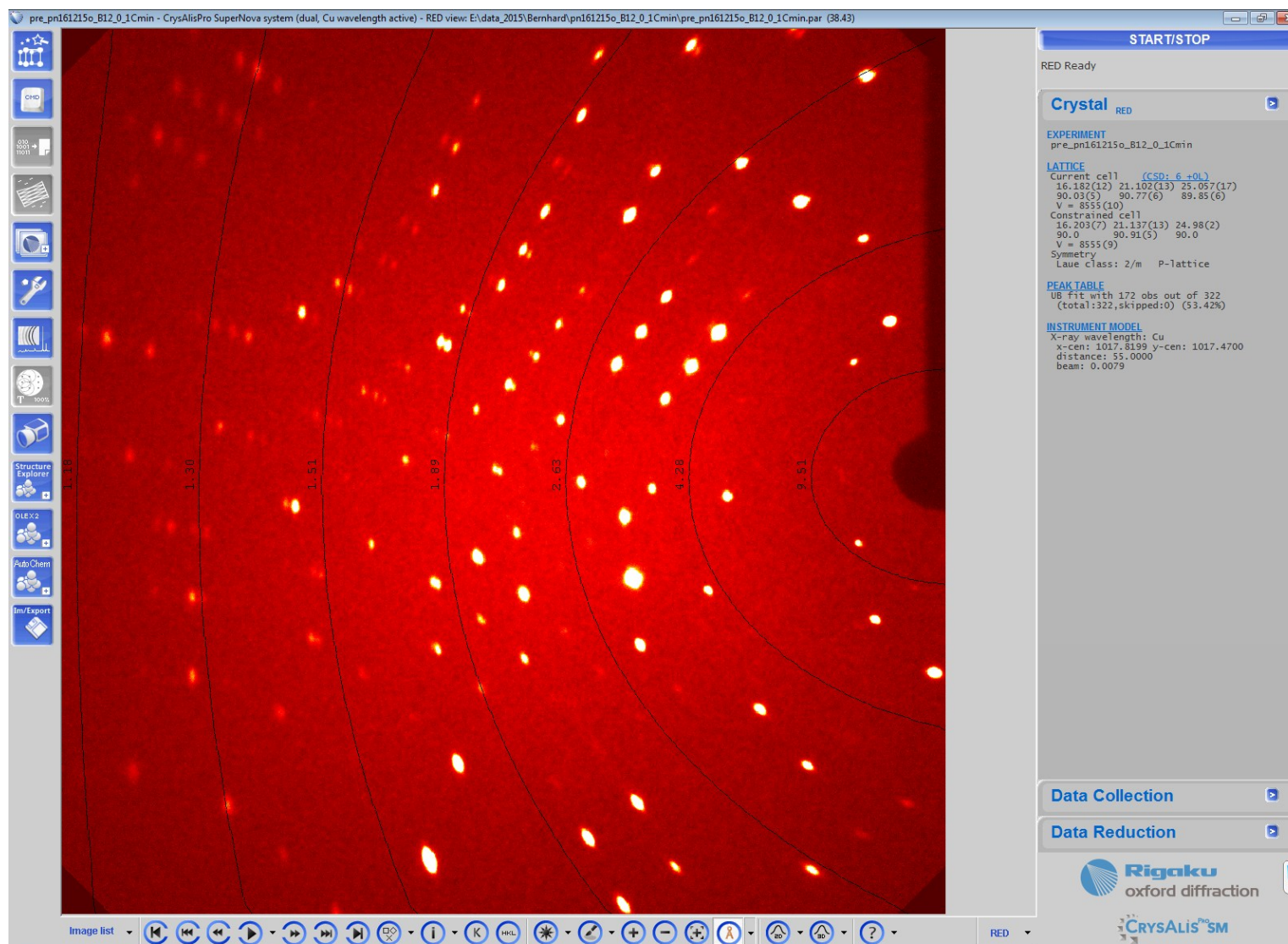


Figure S2a:

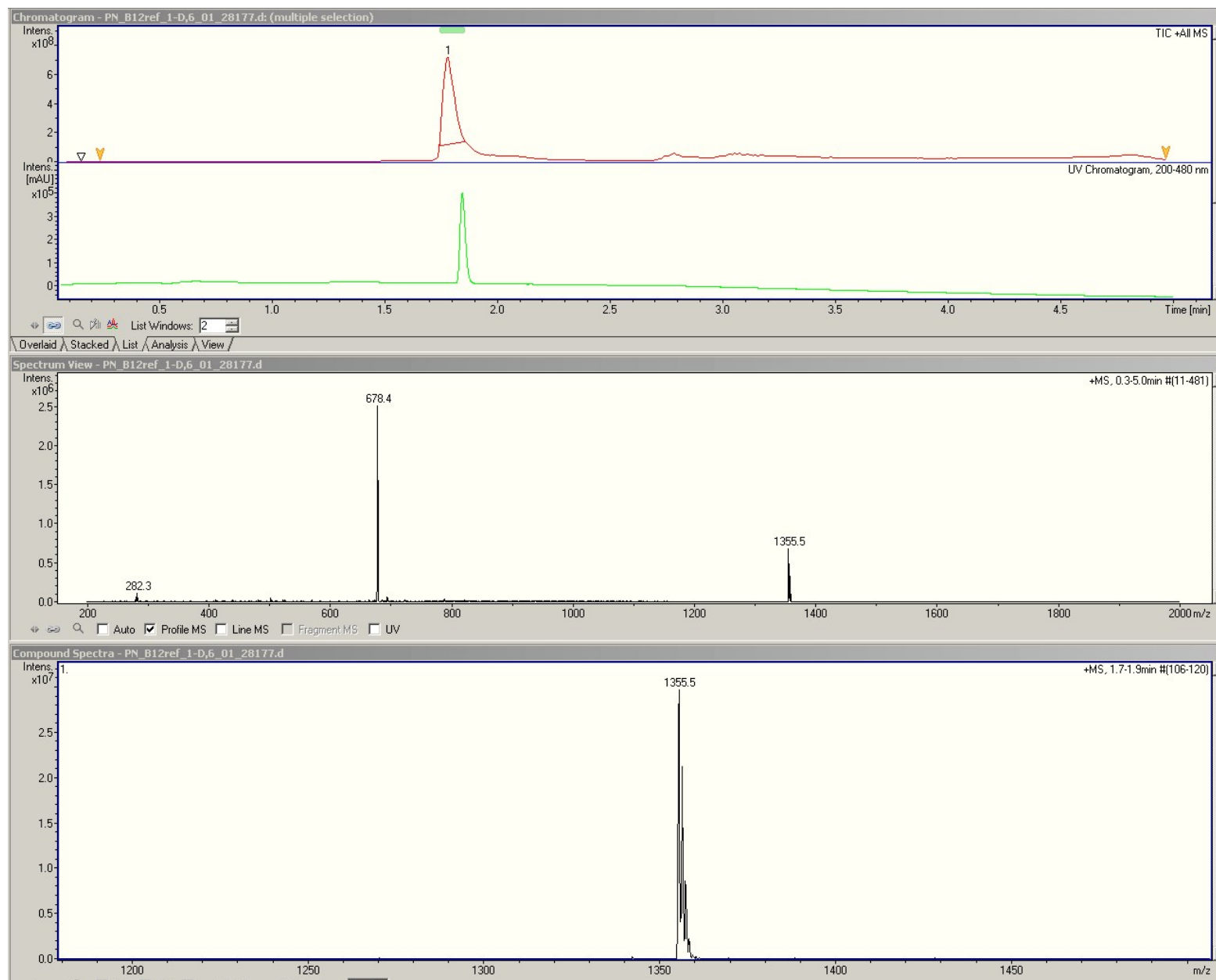


Figure S2b:

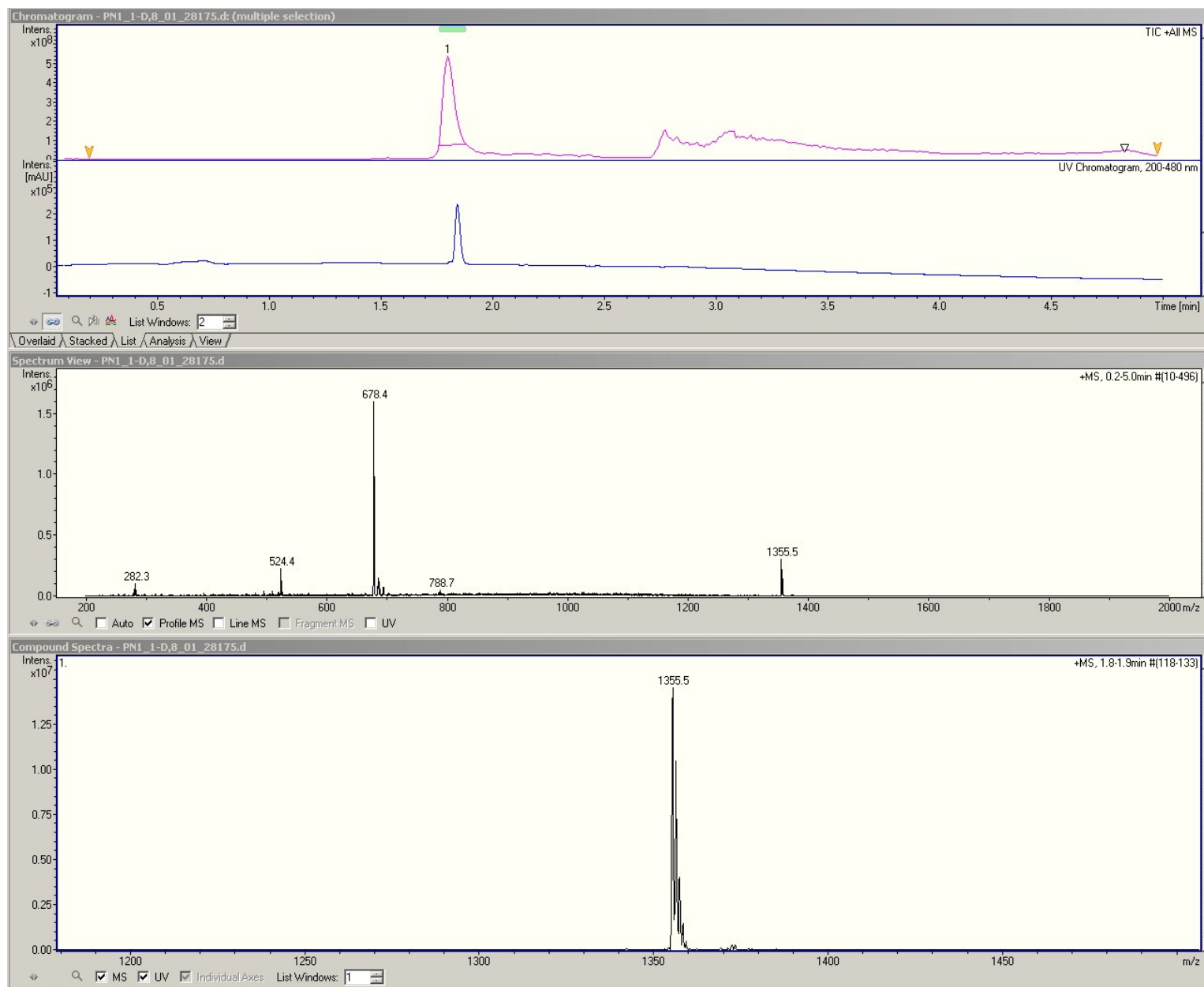




Figure S2c:

