

A novel series of amino acid prodrugs synthesized base on thienopyridines scaffolds and evaluation of their antiplatelet activity

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Supplementary Information

1. Platelet aggregation of target compounds

Supplementary Table 1. Platelet aggregation of first round screening target compounds at a dose of 3 mg/kg

Compounds	Platelet aggregation (%)
5a	33.4±19.3
5b	47.0±11.3
5c	1.2±2.0**
5d	23.1±6.1*
5e	42.2±16.5
5f	26.9±16.0*
5g	26.6±12.1*
5j	10.2±13.1**
5m	0±0**
clopidogrel	48.8±15.6
prasugrel	0.0±0.1**
vehicle	74.4±12.0

(*) P < 0.05 (**) P < 0.01 vs vehicle. Data are the mean ± SD, n = 5.

Supplementary Table 2. Platelet aggregation of second round screening target compounds at a dose of 3 mg/kg

Compounds	Platelet aggregation (%)
5h	27.9±7.3*
5i	3.8±1.8**
5k	6.2±7.8**
5l	2.1±3.7**
5n	0.4±0.6**
5o	3.7±7.4**

5p	17.6±9.1*
vehicle	57.7±5.7

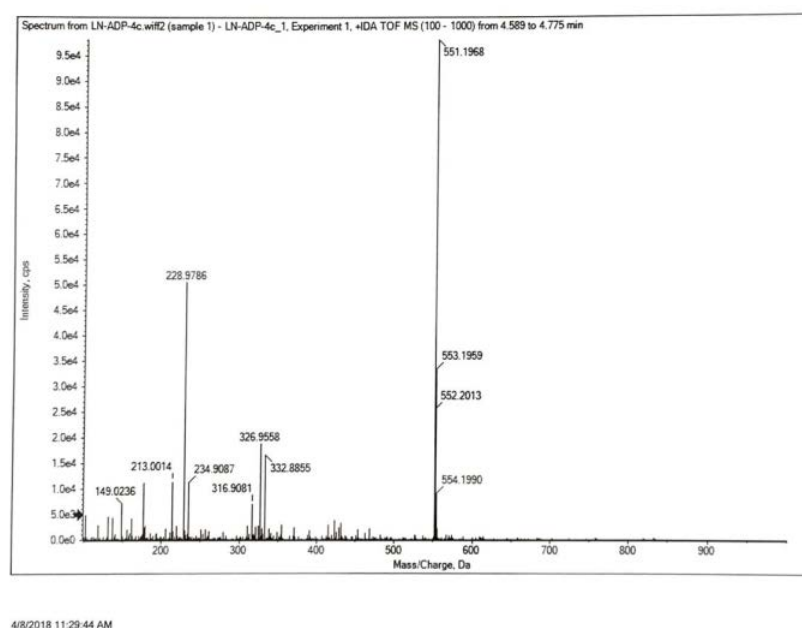
(*) P < 0.05 (**) P < 0.01 vs vehicle. Data are the mean ± SD, n = 5.

Supplementary Table 3. Platelet aggregation of second round screening target compounds at a dose of 1 mg/kg

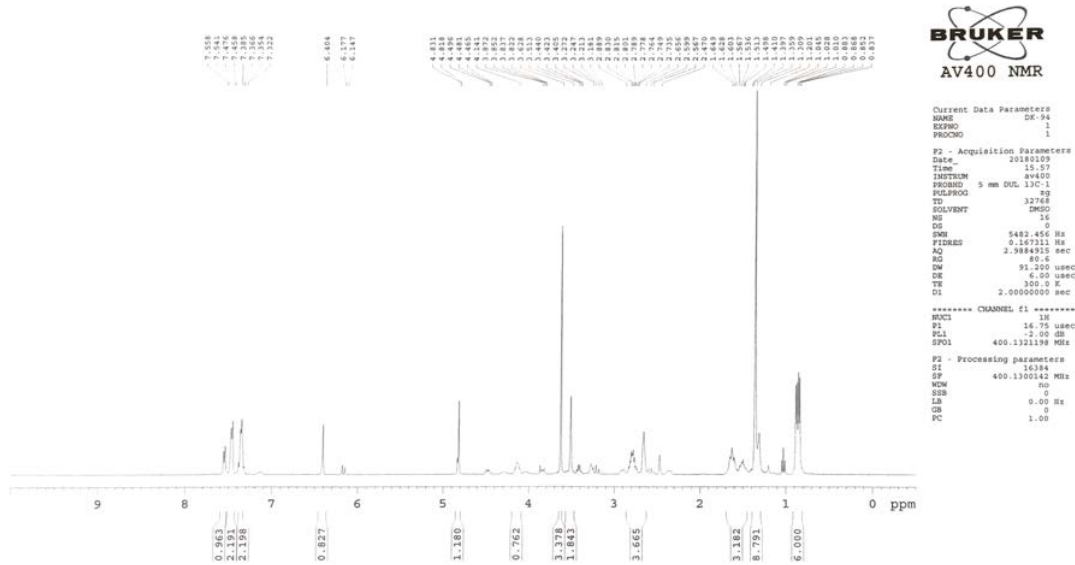
Compounds	platelet aggregation (%)
5a	49.1±20.7
5b	61.0±10.7
5c	45.7±11.0
5d	63.4±20.4
5e	63.7±17.2
5f	47.5±6.2
5g	48.8±18.0
5h	55.1±15.7
5i	62.5±20.0
5j	35.8±14.1*
5k	25.6±16.1*
5l	7.8±13.1*
5m	39.7±14.8*
5n	40.6±5.8
5o	52.5±11.9
5p	49.2±14.2
prasugrel	6.8±2.0**
vehicle	75.7±11.7

(*) P < 0.05 (**) P < 0.01 vs vehicle. Data are the mean ± SD, n = 5.

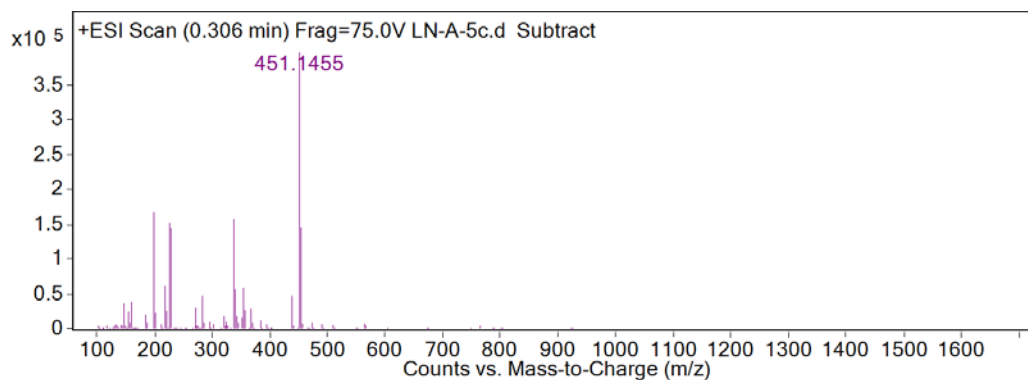
2. Characterization of Compound 5c and its intermediate 4c



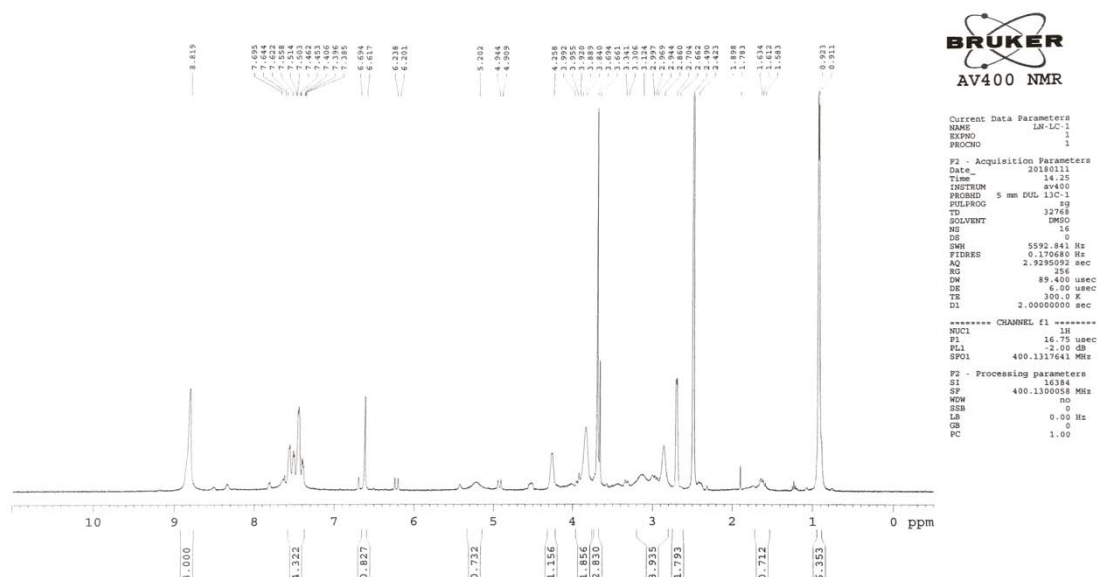
Supplementary Figure 1. HRMS of 4c.



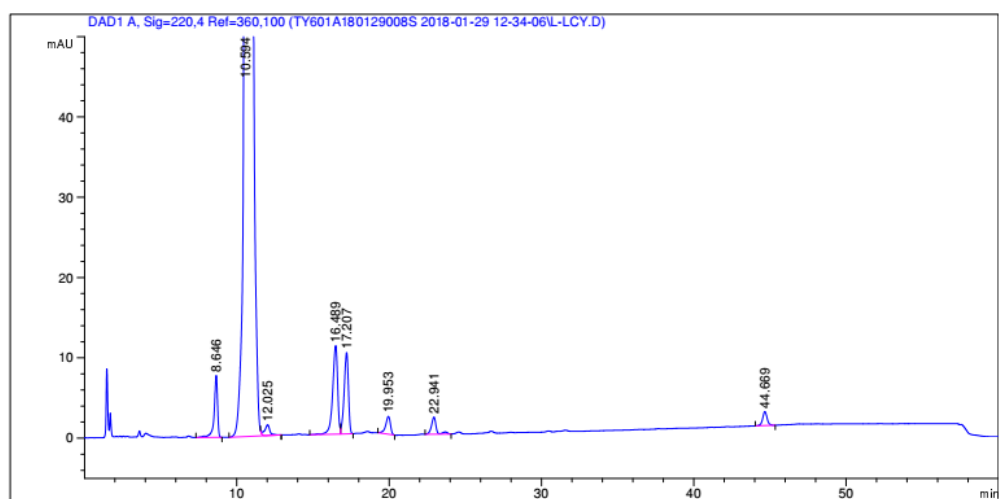
Supplementary Figure 2. ^1H -NMR of 4c.



Supplementary Figure 3. HRMS of 4c.



Supplementary Figure 4. ^1H -NMR of 5c.



Supplementary Figure 5. HPLC of 5c.