

Figure S1. CIP shows less toxicity in normal bone marrow cells. Acute myeloid leukemia cell lines (HL-60 and U937) or normal murine bone marrow cells from C57BL/6J mice were exposed to CIP for 24 h. The cell viability was measured using an MTS assay. \*P<0.05; CIP, *Corydalis incisa* (Thumb.) Pers.

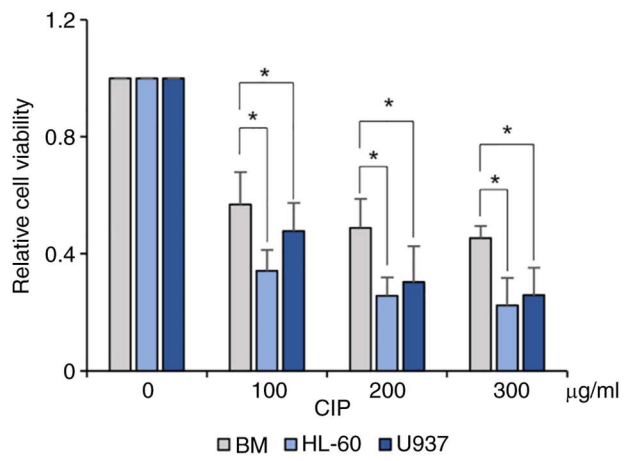


Figure S2. HL-60-CIP cells retain resistance to CIP for 3 weeks in the absence of CIP. HL-60-DMSO and HL-60-CIP cells were treated with 20  $\mu\text{g}/\text{ml}$  CIP for 96 h. Viable cell number was measured using trypan blue exclusion assay. \* $P < 0.05$ ; CIP, *Corydalis incisa* (thumb.) pers.

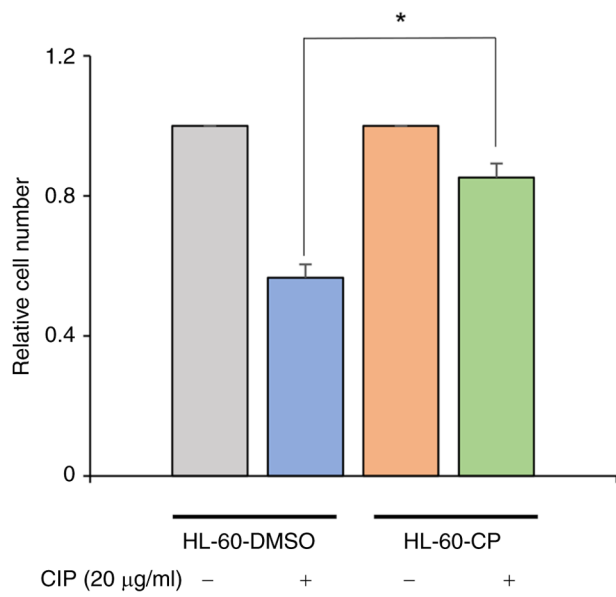


Figure S3. Peltatoside does not affect cell proliferation in acute myeloid leukemia. (A) U937 and THP-1 cells were treated with peltatoside. MTS assay was conducted to measure cell viability. (B) U937 and THP-1 cell proliferation was evaluated using trypan blue exclusion assays.

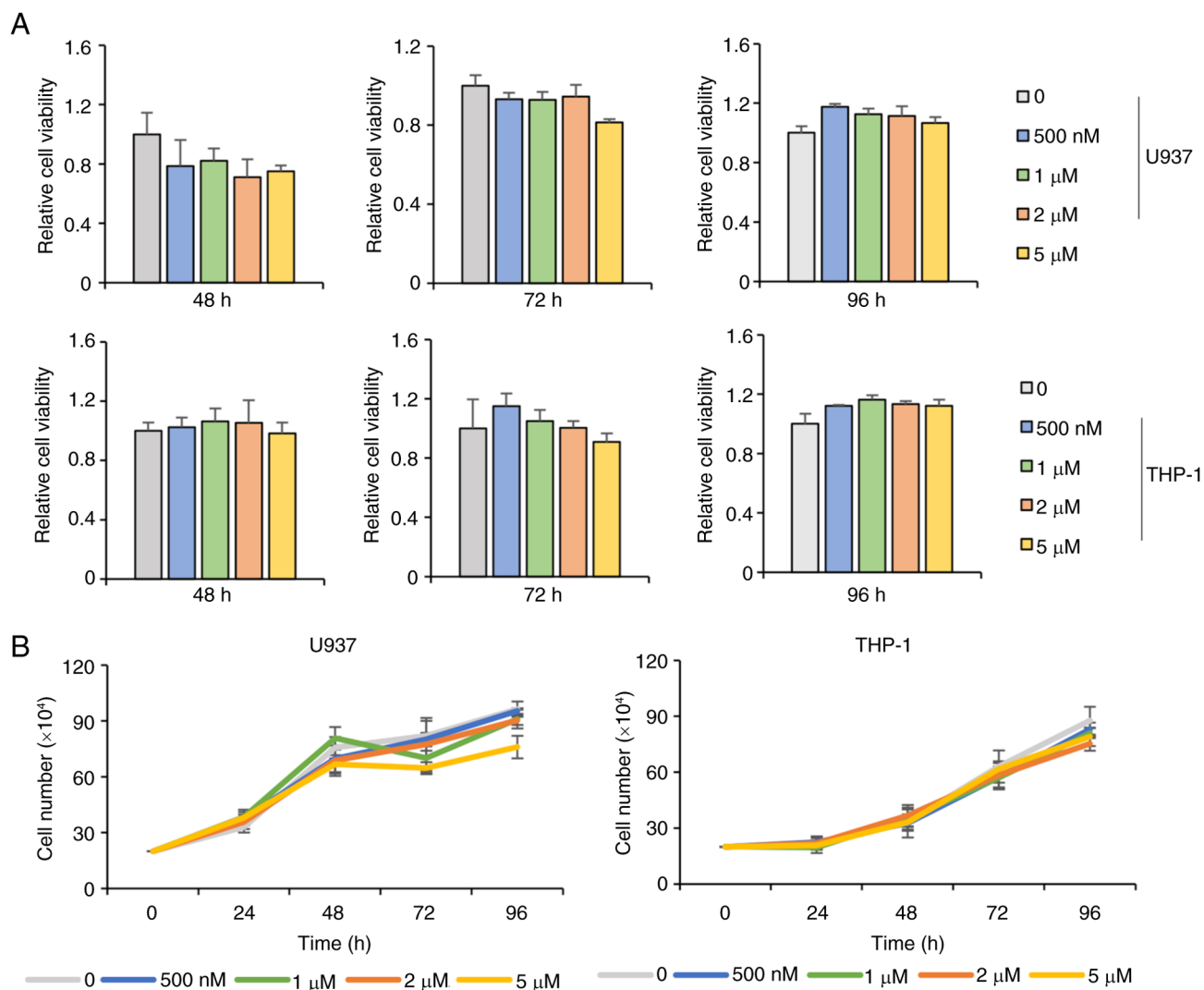


Figure S4. Norchelerythrine inhibits cell viability in samples from patients with acute myeloid leukemia. \*P<0.05; Con, Control; Nor, norchelerythrine.

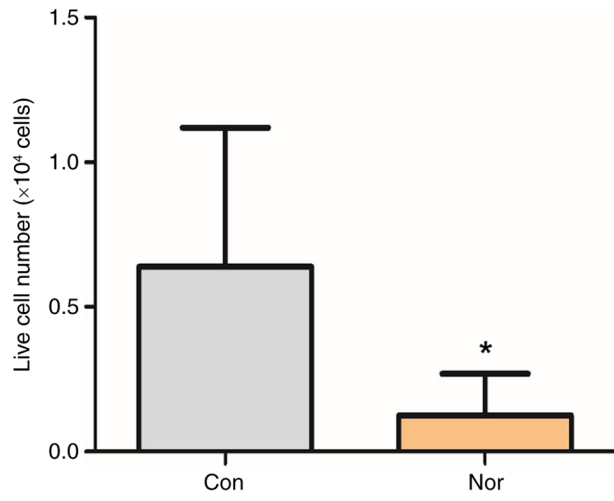


Figure S5. Norchelerythrine does not affect normal hematopoiesis in mice. Bone marrow cells were isolated from C57BL/6J mice and treated with 5  $\mu$ M norchelerythrine for 96 h. Flow cytometry was performed to evaluate the populations of myeloid lineage cells (CD45<sup>+</sup>CD11b<sup>+</sup>), granulocytes (CD11b<sup>+</sup>Ly-6G<sup>+</sup>) and monocytes (CD11b<sup>+</sup>CD14<sup>+</sup>). Con, Control; Nor, norchelerythrine; Ly-6G, lymphocyte antigen 6 complex locus G6D; N.S, not significant.

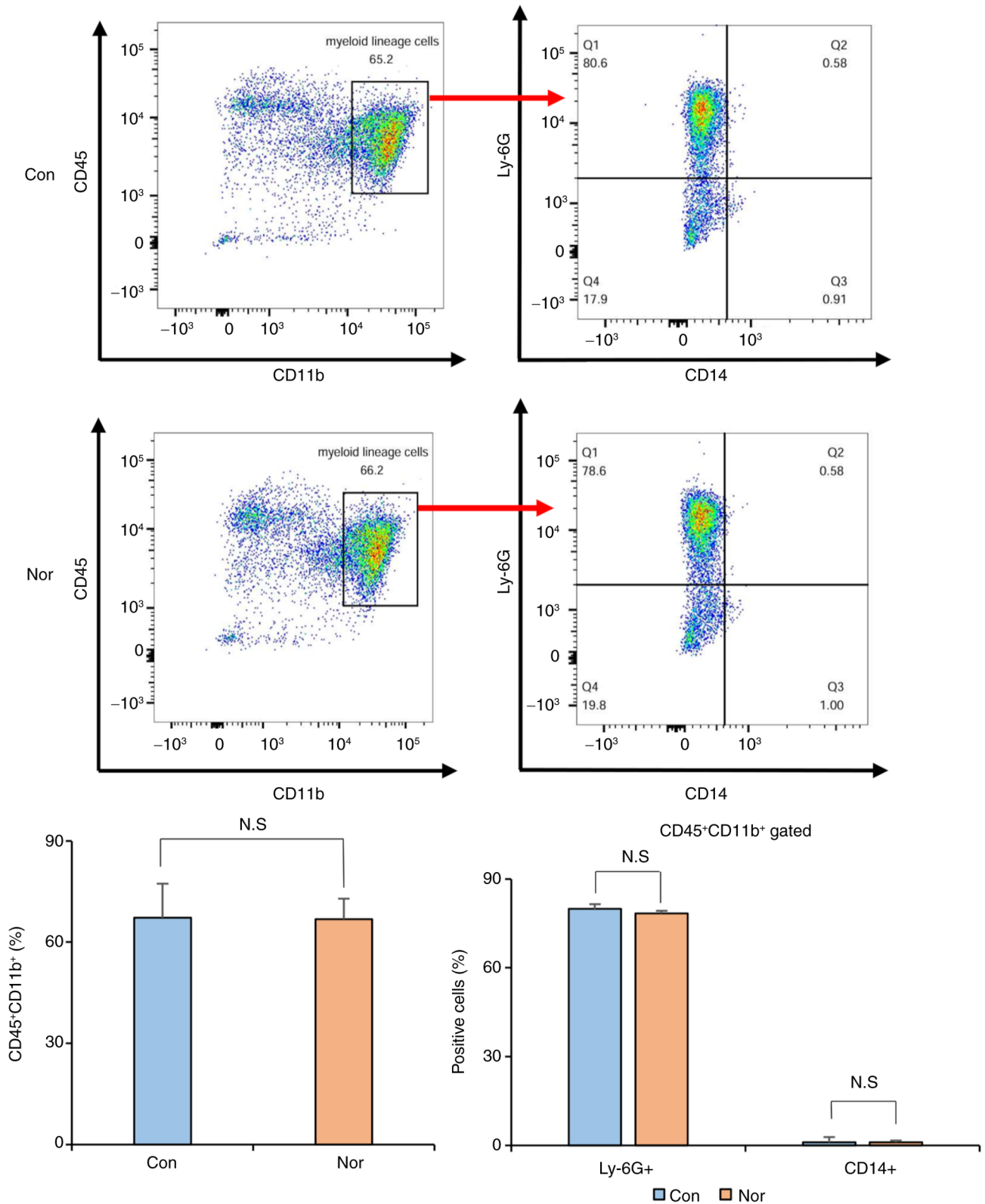


Figure S6. Effect of *Corydalis speciosa* Maxim. extract in acute myeloid leukemia cell lines. (A) HL-60 and U937 cells were exposed to *Corydalis speciosa* Maxim. extract (20  $\mu\text{g/ml}$ ) for 96 h. The CD11b expression was detected by flow cytometry. (B) HL-60 cells were treated with *Corydalis speciosa* Maxim. extract (20  $\mu\text{g/ml}$ ). MTS assay was conducted to measure cell viability. (C) Apoptosis rate was measured by trypan blue stain. \* $P < 0.05$ ; Con, control.

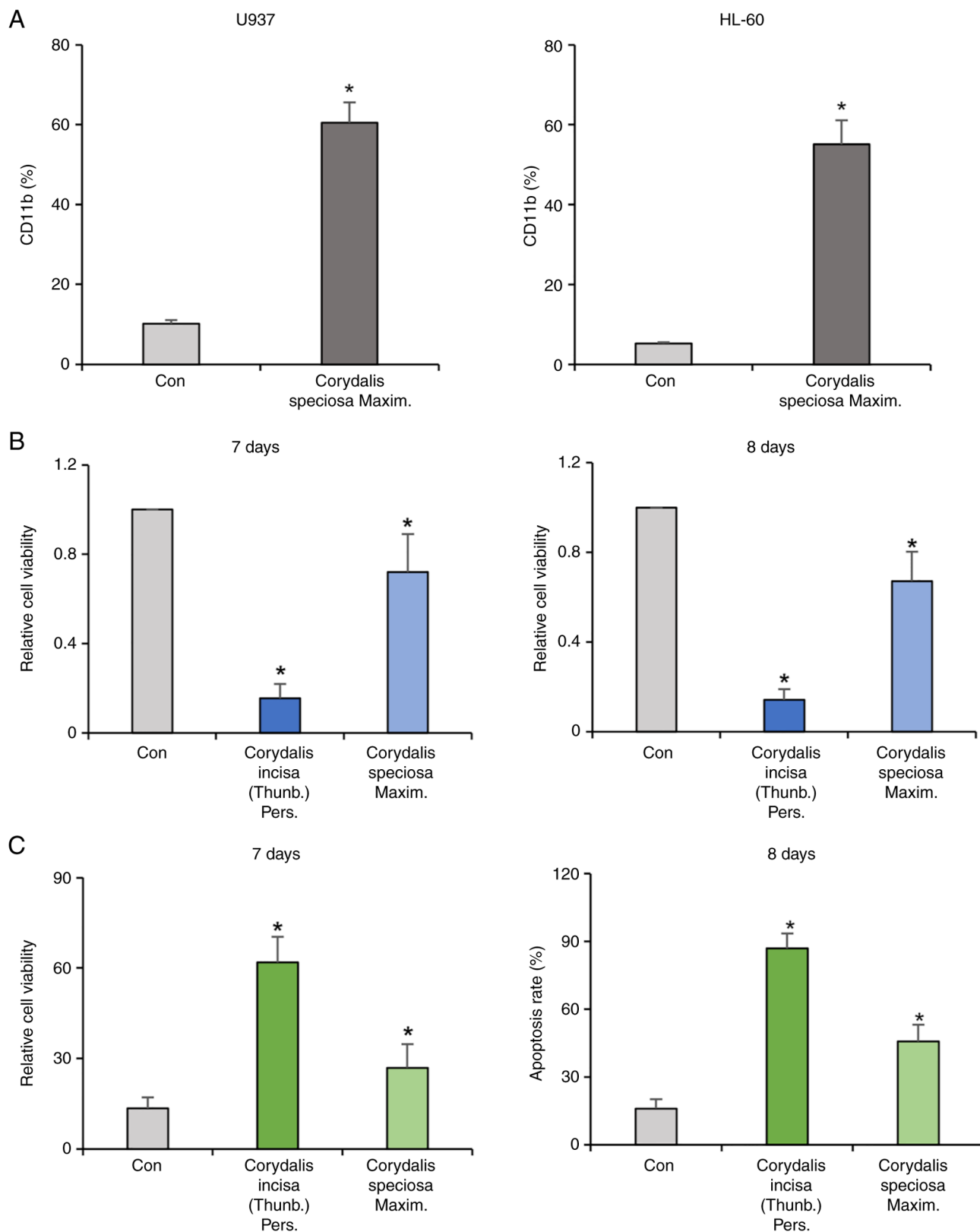
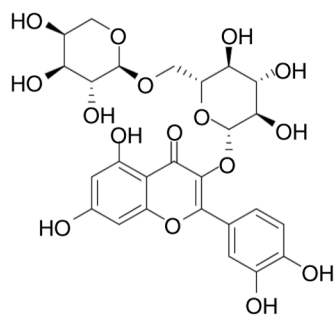
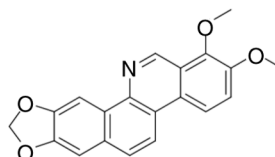


Figure S7. Ultra-performance liquid chromatography-quadrupole time-of-flight mass spectrometry of *Corydalis speciosa* Maxim. extract. AU, arbitrary unit.



Chemical formula:  $C_{26}H_{28}O_{16}$   
Molecular weight: 596.49 g/mol

Peltatoside



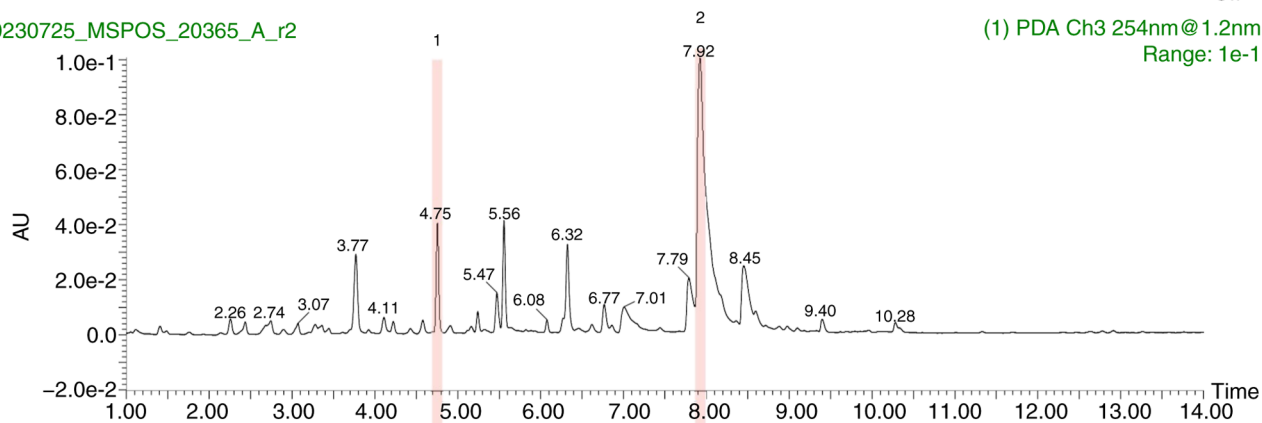
Chemical formula:  $C_{20}H_{15}NO_4$   
Molecular weight: 333.34 g/mol

Norchelerythrine

CIP

20230725\_MSPOS\_20365\_A\_r2

(1) PDA Ch3 254nm@1.2nm  
Range: 1e-1



20230724\_MSNEG\_20365\_A\_r2

20230831\_MSNEG\_20519\_840\_i1

Corydalis speciosa Maxim.

(1) PDA Ch3 254nm@1.2nm  
Range: 5e-2

