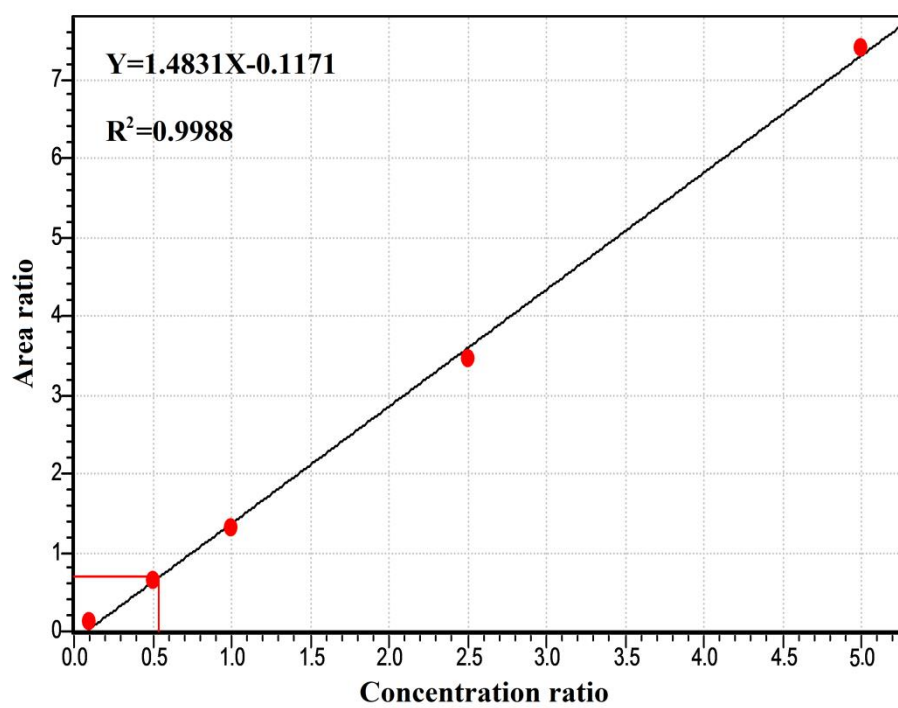


## Supplementary materials

**Figure S1.** Calibration curve of vitamin K<sub>1</sub>

**Figure S2.** MS/MS spectrum of vitamin K<sub>1</sub> and vitamin K<sub>1</sub>-D<sub>7</sub>: (a) vitamin K<sub>1</sub> full scan, (b) vitamin K<sub>1</sub> product ion scan, (c) vitamin K<sub>1</sub>-D<sub>7</sub> full scan, (d) vitamin K<sub>1</sub>-D<sub>7</sub> product ion scan

Figure S1. Calibration curve of vitamin K<sub>1</sub>



**Figure S2.** MS/MS spectrum of vitamin K<sub>1</sub> and vitamin K<sub>1</sub>-D<sub>7</sub>: (a) vitamin K<sub>1</sub> full scan, (b) vitamin K<sub>1</sub> product ion scan, (c) vitamin K<sub>1</sub>-D<sub>7</sub> full scan, (d) vitamin K<sub>1</sub>-D<sub>7</sub> product ion scan

