

## Supplementary material

### Determination of folic acid by capillary zone electrophoresis with indirect chemiluminescence detection

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#### Method performance comparison

Characteristics of the developed method were compared with other detection methods reported for the determination of FA. The comparison of samples, linear ranges and LODs were listed in Table S1. According to the results, although the proposed method had not enough advantages in LOD, the CE-CL method had its unique advantages. The presented work has advantages of low cost, easy to operate, environment-friendly and rapid detection. Compared with HPLC<sup>[7,8]</sup> or flow-injection method<sup>[12,13,15]</sup>, CE-CL method has advantages in separation efficiency, analysis speed, consumption cost and sample consumption. Flow-injection methods usually have some problems of interference. The CE separations are highly efficient and could be used to complicated sample matrices. The method is simple and does not require complex sample pretreatment procedures. This work was also promising in the future in terms of sensitivity and practicability.

**Table S1.** Performance comparison of the developed CE-CL method with that reported by different methods for the detection of FA.

Method	Sample	Linear ranges	LOD	Ref.
HPLC-FSFD	Vegetables	50-1000 ng mL <sup>-1</sup>	7.5 ng mL <sup>-1</sup>	7
HPLC-UV	Fortified rice and wheat flour	50-800 µg L <sup>-1</sup>	20 µg L <sup>-1</sup>	8
FI-spectrofluorimetric	Pharmaceutical preparations	0.008-2.5 µg mL <sup>-1</sup>	0.0001 µg mL <sup>-1</sup>	12
FI-CL	Pharmaceutical preparations	3.1×10 <sup>-7</sup> -2.5×10 <sup>-5</sup> mol L <sup>-1</sup>	2.3×10 <sup>-8</sup> mol L <sup>-1</sup>	13
SPE-FI-CL	Milk powder	8.0×10 <sup>-8</sup> -4.0×10 <sup>-5</sup> g L <sup>-1</sup>	2.0×10 <sup>-8</sup> g L <sup>-1</sup>	15
CE-CL	Pharmaceutical tablets, apple juices and human urine	5.0×10 <sup>-8</sup> -1.0×10 <sup>-5</sup> M	2.0×10 <sup>-8</sup> M	11
CE-CL	Pharmaceutical tablets and human urine	5.0-150.0 mg L <sup>-1</sup>	1.3 mg L <sup>-1</sup>	This work

HPLC-FSFD: High performance liquid chromatography coupled with a fast-scanning fluorimetric detector;

FI: Flow-injection.