

## **Electronic Supplementary Information (ESI)**

### **Green synthesis and evaluation of isoquercitrin imprinted polymers for class-selective separation and purification of flavonol glycosides**

Xiang-Jie Li<sup>a,b</sup> Xiu-Xiu Chen<sup>a,b</sup> Guan-Yin Sun<sup>a,b</sup> Yong Xin Zhao<sup>a,b</sup> Zhao-Sheng Liu<sup>a,b\*</sup> Haji Akber Aisa<sup>\*, a,b</sup>

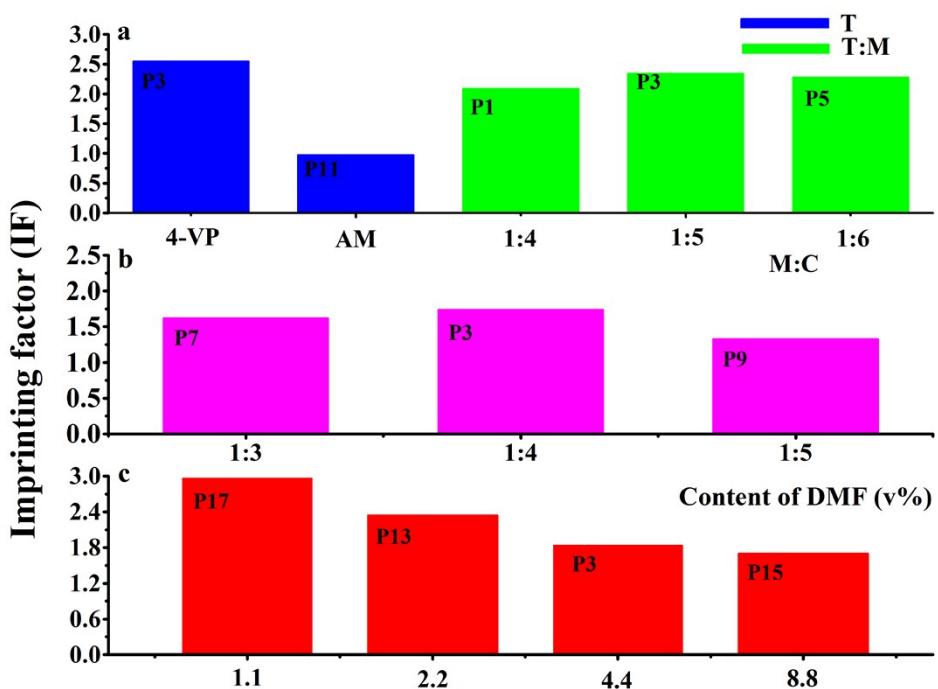
Correspondence: Dr. Zhao-Sheng Liu

Fax: (+086)-022-23536746

E-mail: [zhaoshengliu@sohu.com](mailto:zhaoshengliu@sohu.com)

Correspondence: Haji Akber Aisa

E-mail: [haji@ms.xjb.ac.cn](mailto:haji@ms.xjb.ac.cn)



**Fig. S1.** Imprinting factors of MIPs made with the different ratio of ISO to 4-VP (a), 4-VP to EDMA (b), and DMF (c). Mobile phase, methanol/water/acetate acid (90/9/1, v/v/v); velocity of flow, 0.5 ml/min; detection wavelength, 255 nm; injection volume, 20  $\mu$ l; temperature: 30°C.

**Table S1** MISPE Protocol applied to the extraction of ISO and its analogues in the crude extract of flowers of *Gossypium herbaceum* L

Step	Solvent	Volume (mL)
Conditioning	Methanol	10
Loading	Plant extract (20.18 mg/mL) in methanol:water, 70:30 (v/v)	0.5
Washing	(1) Methanol:water, 20:80 (v/v) (2) Methanol:water, 25:75	10 10
Elution	Acetonitrile:water, 30:70 (segmented collecting 2- 7.5 ml)	5.5

**Table S2** Recovery rate of different amount of ISO-MIP

Amount of MIPs (g)	1.9	0.9	0.45
recovery rate (%)	isoquercitrin	61.75	87.93
	hyperoside	73.81	93.00
	astragalin	55.73	83.25
	quercetin-7-O-glucoside	28.95	54.52
	quercetin-3'-O-glucoside	0	7.16