

Supplementary Information

Synthesis of Molecularly Imprinted Polymer with Methacrylate Derivative Monomer for Isolation of Ethyl *p*-Methoxycinnamate as an Active Compound from *Kaempferia galanga* L. Extracts

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† Footnotes relating to the title and/or authors should appear here.

Figure S1 Monomer Structure

Figure S2 EPMC UV spectrum at maximum wavelength

Figure S3 Calibration curve for EPMC content in extract

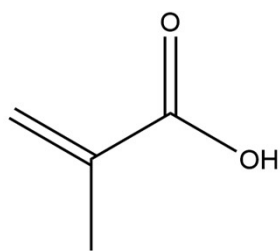
Figure S4 Benesi-Hildebrand regression linear curve

Figure S5 Job's Plot xH calculation

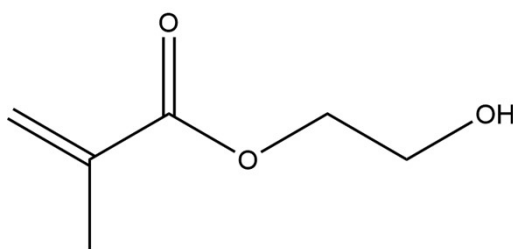
Figure S6 EDS analysis of MIP and NIP

Figure S7 Linear regression curve of Freundlich and Langmuir Isotherm

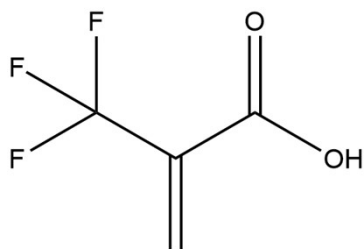
Table S1 EPMC contain in *Kaempferia galanga* L. rhizome extract



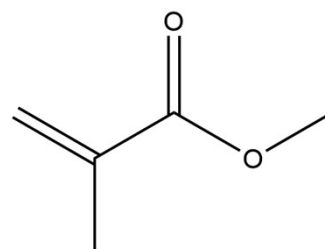
methacrylic acid



2-hydroxyethyl Methacrylate



2-(Trifluoromethyl)acrylic acid



Methyl Methacrylate

Fig. S1. Monomer Structure

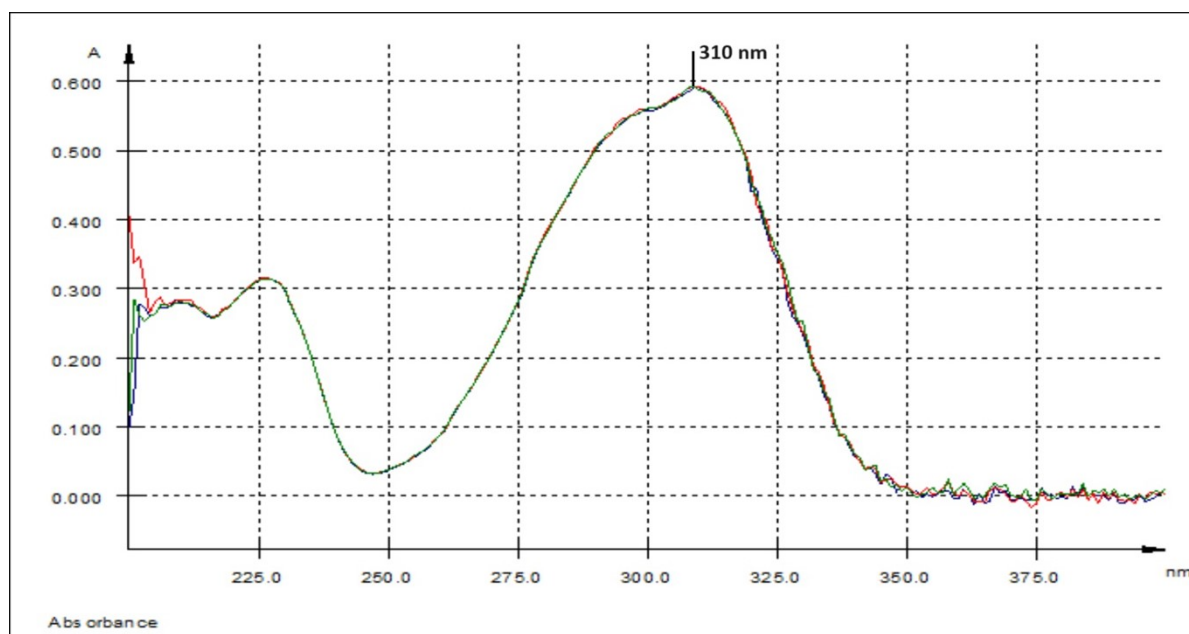


Fig. S2. EPMC UV spectrum at maximum wavelength

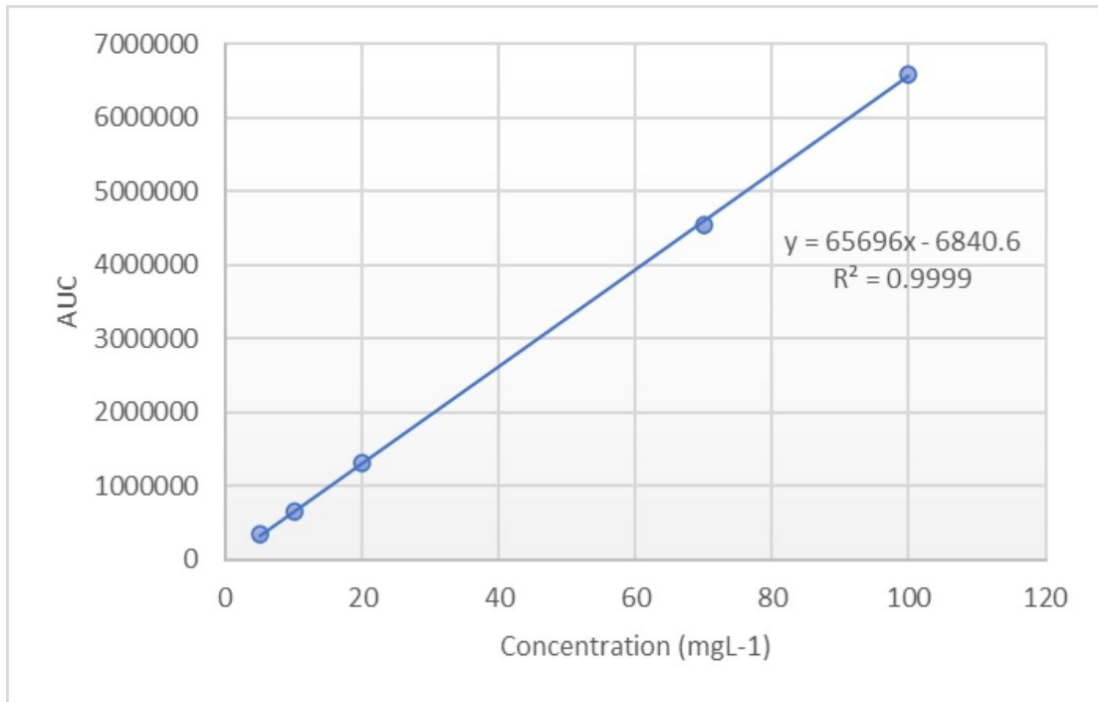


Fig. S3. Calibration curve for EPMC content in extract

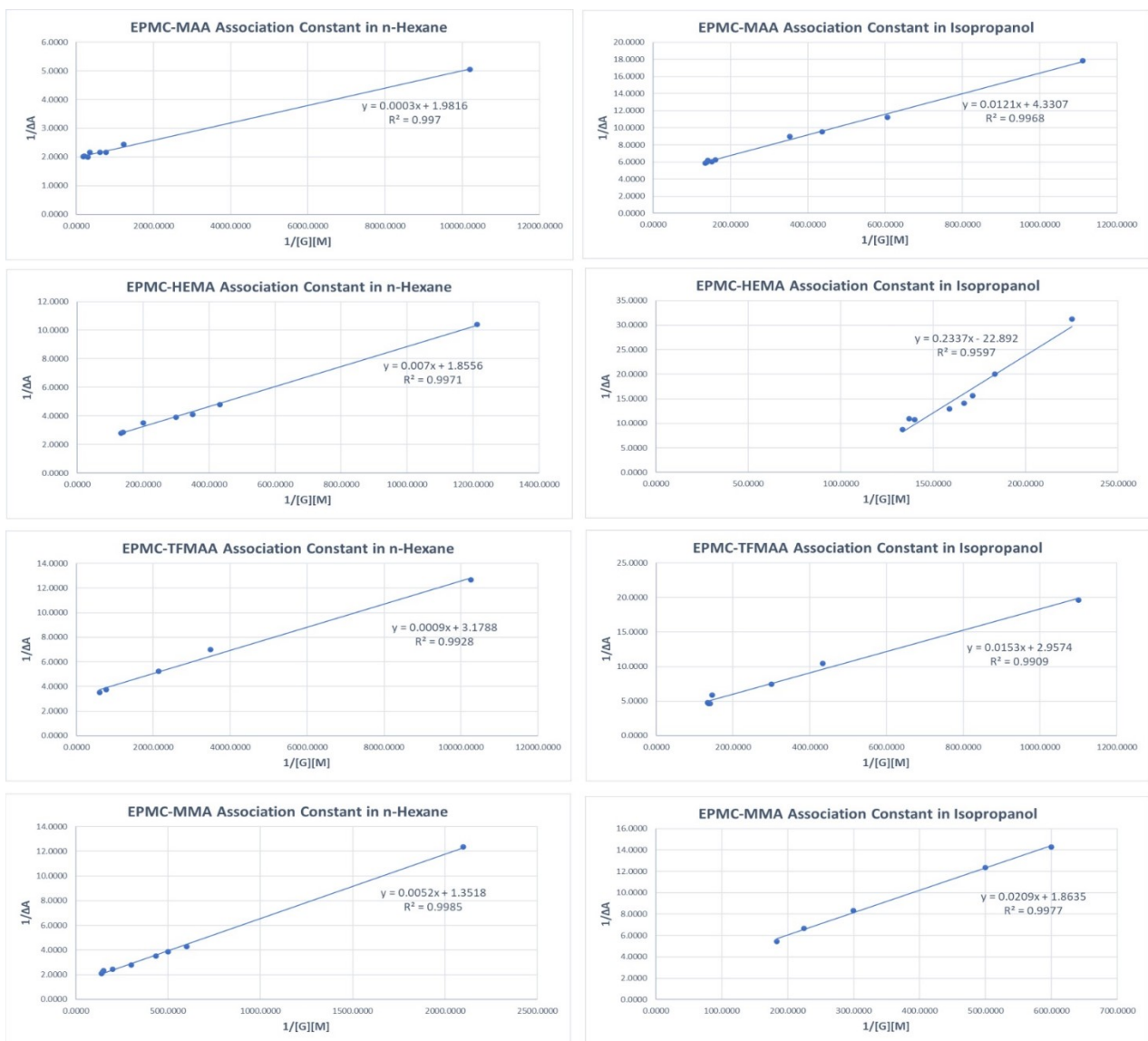


Fig. S4. Benesi-Hildebrand regression linear curve

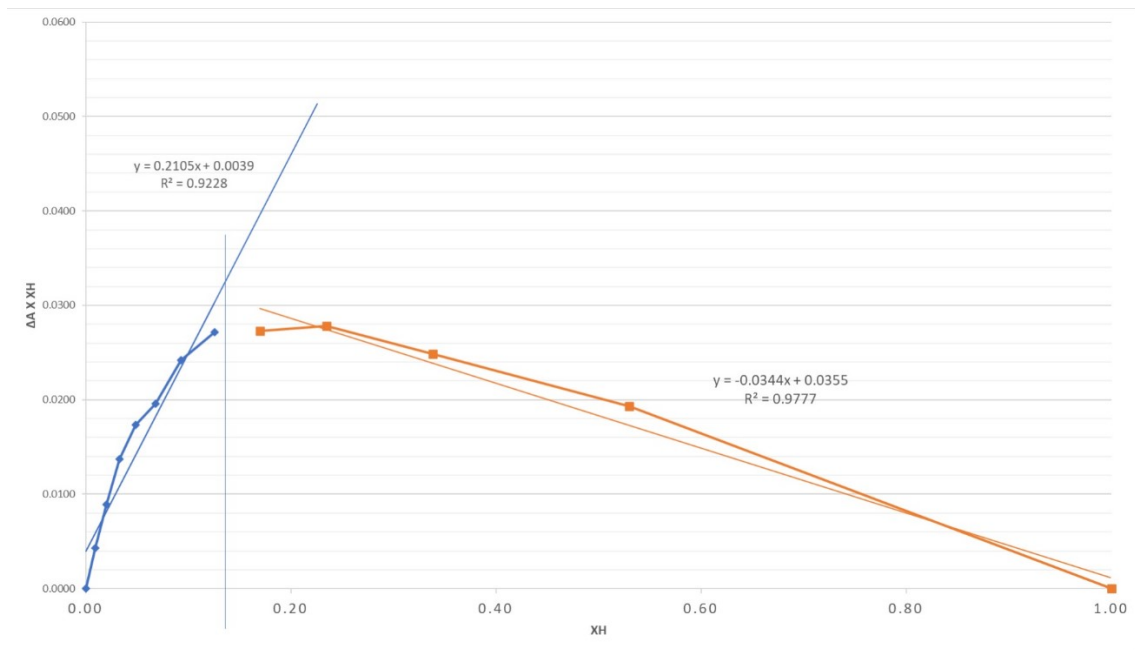


Fig. S5. Job's Plot xH calculation

Eq (1) [G] ... $y = 0.2105x + 0.0039$

Eq (2) [H]... $y = -0.0344x + 0.0355$

$$0 = 0.2449x - 0.0316$$

$$x = 0.129$$

$$x_H = 0.129$$

$$x_G = 1 - 0.129 = 0.871$$

$$H:G = 0.129:0.871$$

$$H:G = 1:6.8 \text{ rounded up to } 1:7$$

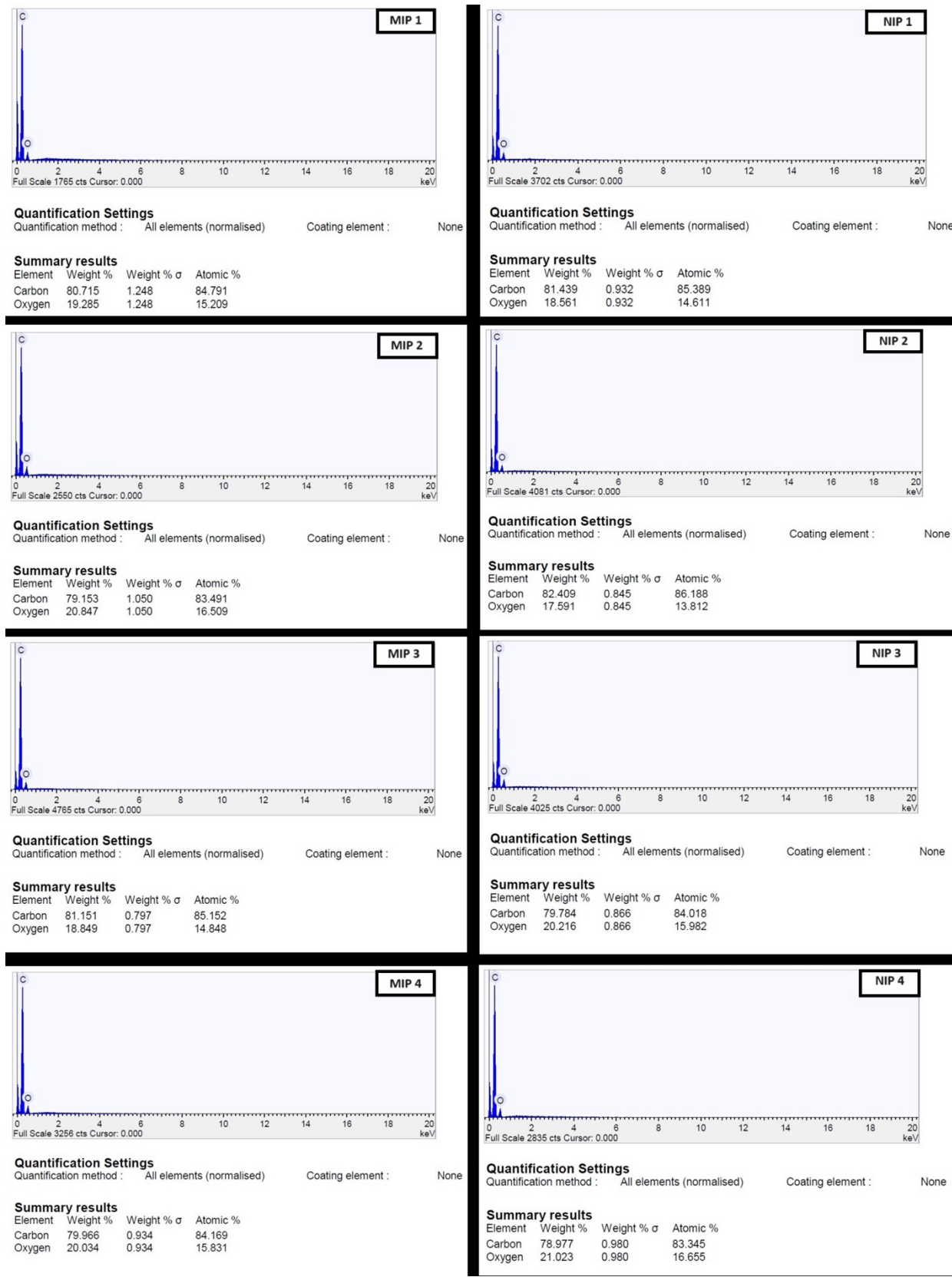


Fig. S6. EDS analysis of MIP and NIP

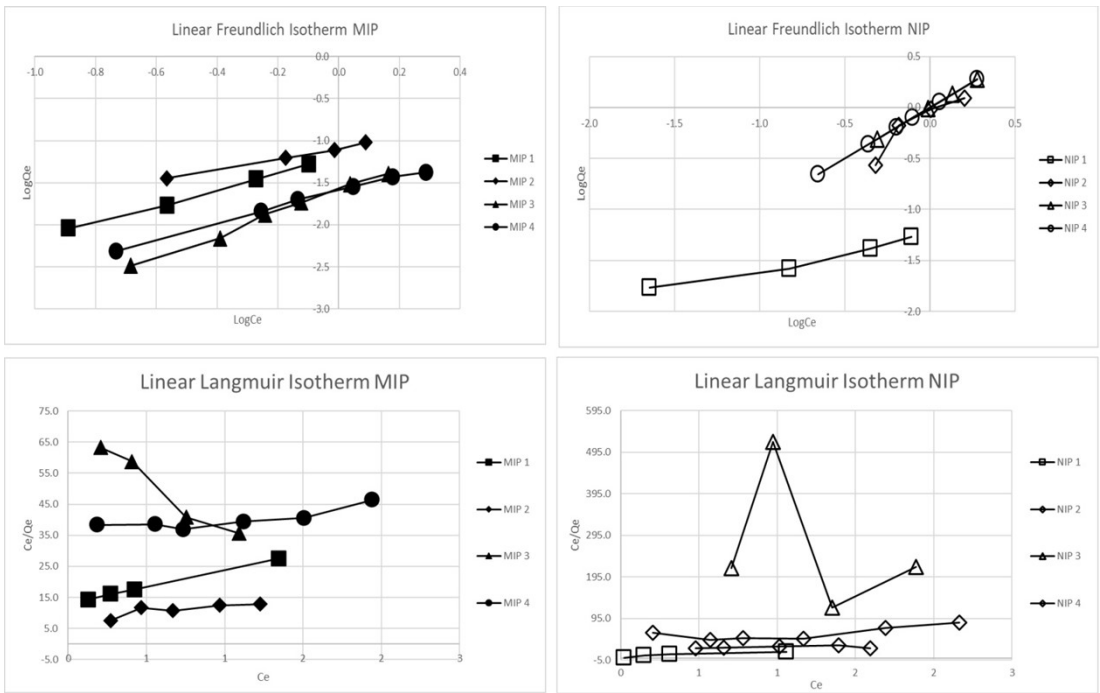


Fig. S7. Linear regression curve of Freundlich and Langmuir Isotherm

Table S1. EPMC contain in *Kaempferia galanga* L. rhizome extract (n=3)

Extraction (100 mgL ⁻¹)	Mass (mg)	AUC	Average of AUC	Assay (mgL ⁻¹)	%Assay (%)	Average of AUC (%)	RSD (%)
Ethyl Acetate	100.4	5728684	5667812	87.10	86.75	85.83	3.49
		5827755		88.60	88.25		
		5446998		82.81	82.48		
Ethanol	100.5	4781032	4694456	72.67	72.31	71.00	1.85
		4607880		70.03	69.69		
		4694456		71.35	71.00		
n-Hexane	102.4	6429813	6471957	97.77	95.48	96.10	1.11
		6554742		99.67	97.33		
		6431317		97.79	95.50		