Supplementary Information

Flavonoid epimers from custard apple leaves, a rapid screening and separation by HSCCC and their antioxidant and hypoglycaemic activities evaluation

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Supplementary Table The different concentrations impact of components on HepG2 cells glucose uptake

| Samples                        | △GC/MTT a |
|--------------------------------|-----------|
|                                | 30 µg/mL  | 60 µg/mL | 120 µg/mL |
| Crude ethanol extract          | 4.15±0.18# | 4.45±0.15# | 4.65±0.29** |
| Crude flavonoid extract        | 4.19±0.15# | 5.03±0.11#* | 5.67±0.14#* |
| Quercetin-3-O-robinobioside (1)| 4.28±0.20# | 5.08±0.10#* | 5.65±0.28#* |
| Rutin (2)                      | 4.26±0.16# | 5.07±0.48#* | 5.63±0.26#* |
| Quercetin-3-O-β-D-glucoside (3)| 4.21±0.15# | 4.60±0.11#* | 5.02±0.27#* |
| Kaempferol-3-O-robinobioside (4)| 4.19±0.64# | 4.47±0.28#* | 4.59±0.34#* |
| Kaempferol-3-O-rutinoside (5)  | 4.25±0.07# | 4.55±0.19#* | 4.75±0.26#* |
| Metformin                      | 4.56±0.22# | 5.31±0.23#* | 6.06±0.15#* |
| Blank control b                | 6.48±0.36  |
| Insulin group                  | 3.93±0.43# |

a Each value is presented as mean ± SD (n = 6); b Used as blank control
#p<0.05 vs. blank ; *p<0.05 vs. insulin.
Supplementary Figure HPLC chromatograms of the crude flavonoid extract (CFE) and crude ethanol extract (CEE). Experimental conditions: Waters Symmetry C\text{\textsubscript{18}} column (5 μm, 4.6 mm× 250 mm, i.d.); Mobile phase: acetonitrile/0.1% aqueous solution of acetic acid (16:84, v/v). Flow rate: 1.0 mL/min; Detection: 254 nm; Concentration: 20 mg/mL; Injection volume: 10 μL.