

Figure S1. HPLC-UV chromatograms of C-SDs I.

CUR concentration of C-SDs I-IV were measured by HPLC-UV.

BDMC, bisdemethoxycurcumin; CUR, curcumin; C-SDs, curcumin solid dispersions; DMC, demethoxycurcumin.

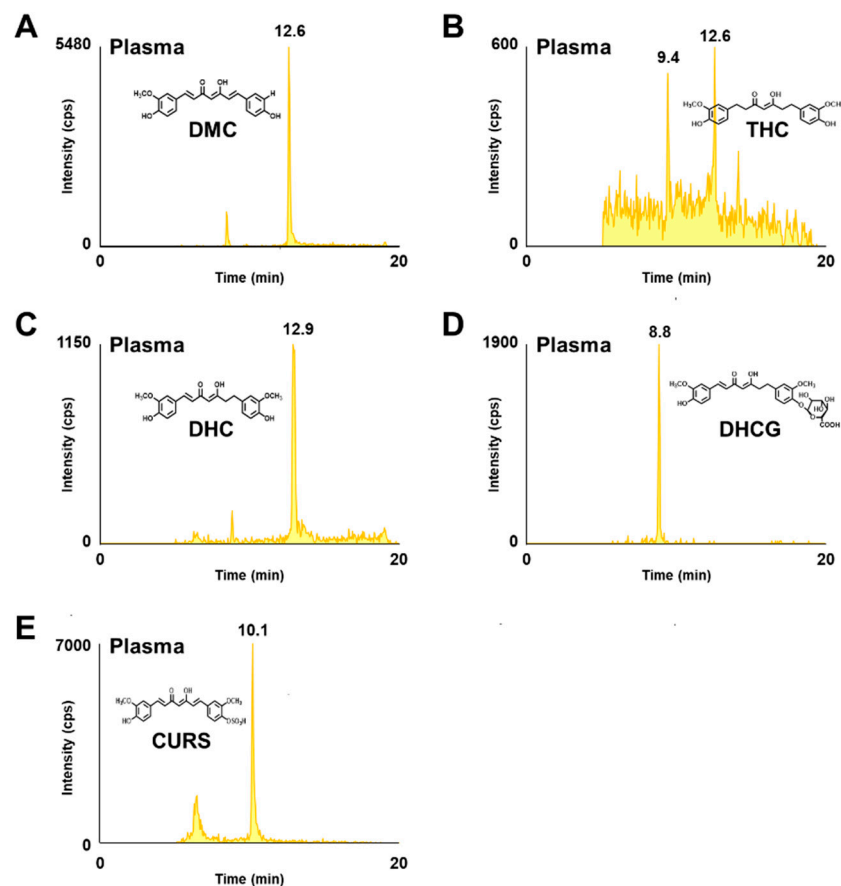


Figure S2. Representative HPLC-MS/MS chromatograms of other CUR metabolites in plasma.

Other CUR metabolites were analysed using MRM transitions from previous study [4], and DMC, DHC, DHCG, THC and CURS were detected in plasma. CURS, curcumin sulfate; DHC, dihydrocurcumin; DHCG, dihydrocurcumin glucuronide; DMC, demethoxycurcumin; THC, tetrahydrocurcumin.

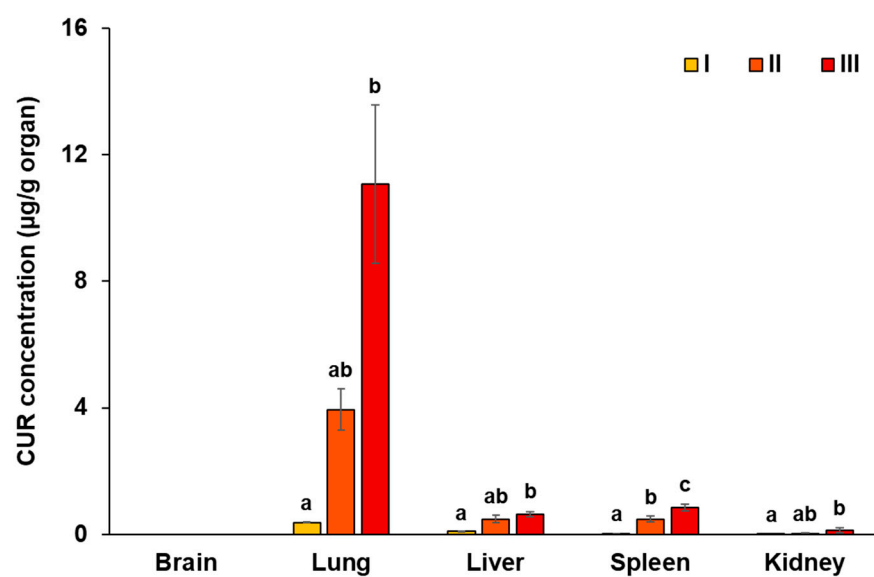


Figure S3. Organ distribution of CUR in the C-SDs I-IV intravenous administration groups.

Two hours after intravenous administration, organs (liver, spleen, lung, kidney, and brain) were immediately excised and rinsed with saline. Collected organs were stored at -80 °C until analysis. To prepare organ homogenates (25% w/v), each tissue was homogenized with a saline solution containing 1 mM ethylenediaminetetraacetic acid. 100 µL of tissue homogenates underwent extraction and quantification protocols as previously mentioned in section 2.4. (mean ± SE, n=4, a, b, c P <0.05 (Tukey)). I, C-SDs I; II, C-SDs II; III, C-SDs III.

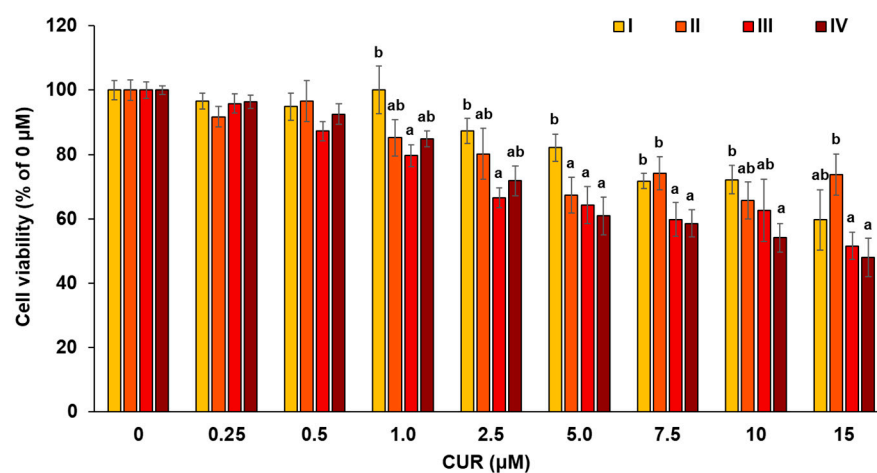


Figure S4. Cell viability

MTT assay was performed to determine cell viability based on the protocols described in the previous study [21]. Cell viability in LPS-stimulated RAW264 cells (positive control) is assumed to be 100%. (mean \pm SE, $n=6$, a, b $P < 0.05$ (Tukey)).

MTT, 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide; I, C-SDs I; II, C-SDs II; III, C-SDs III; IV, C-SDs IV.