

Development of Sildenafil Citrate Microemulsion-Loaded Hydrogel as Potential Systems for Drug Delivery to the Penis and Its Cellular Metabolic Mechanism

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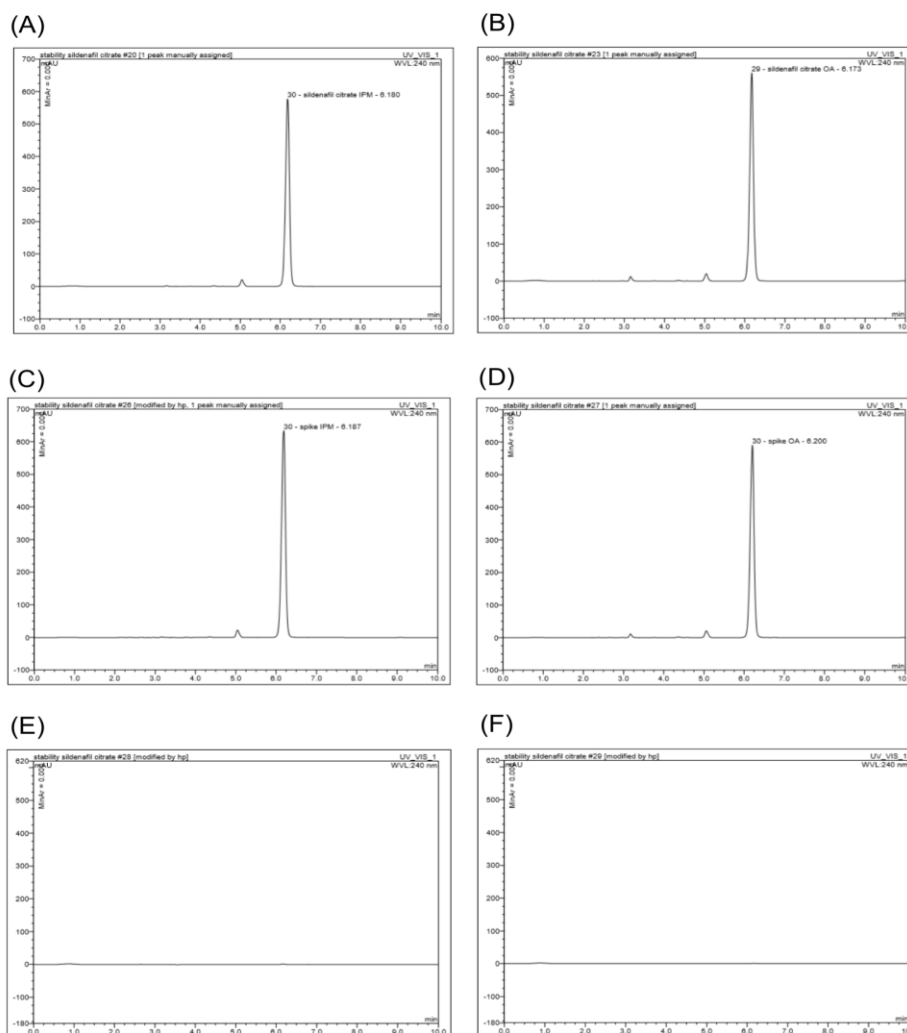


Figure S1. The specificity validation for HPLC analytical method for the quantitation of sildenafil citrate in the microemulsion-loaded hydrogel system. (A) Sildenafil citrate in isopropyl myristate microemulsion-loaded hydrogel system, (B) sildenafil citrate in oleic acid microemulsion-loaded hydrogel system, (C) standard sildenafil citrate spike in the isopropyl myristate microemulsion-loaded hydrogel system, (D) standard sildenafil citrate spike in the oleic acid microemulsion-loaded hydrogel system, (E) placebo in the isopropyl myristate microemulsion-loaded hydrogel system, (F) placebo in the oleic acid microemulsion-loaded hydrogel system.

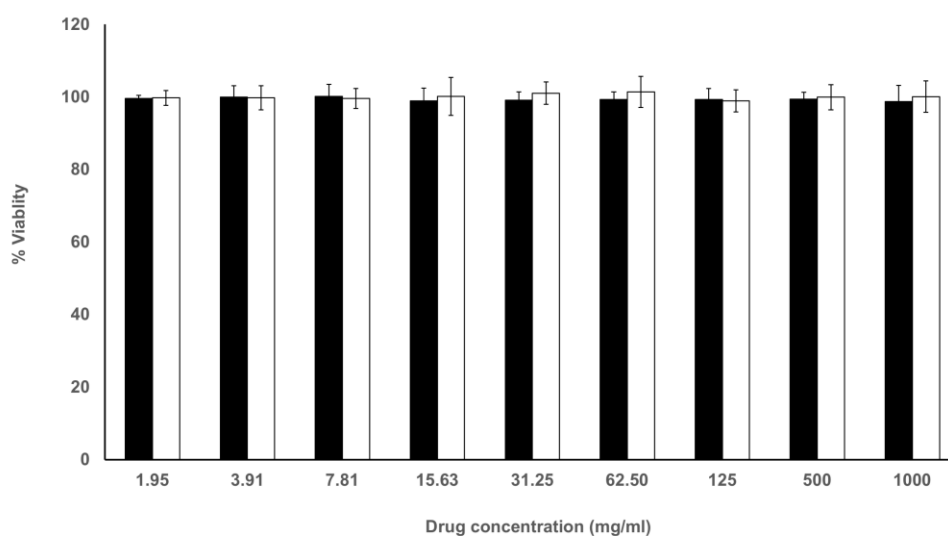


Figure S2. Cell viability in HepG2 cells using the MTT assay after being induced with sildenafil citrate microemulsion-loaded hydrogel for 24 h. Data are shown as mean \pm SD of triplicate assays.

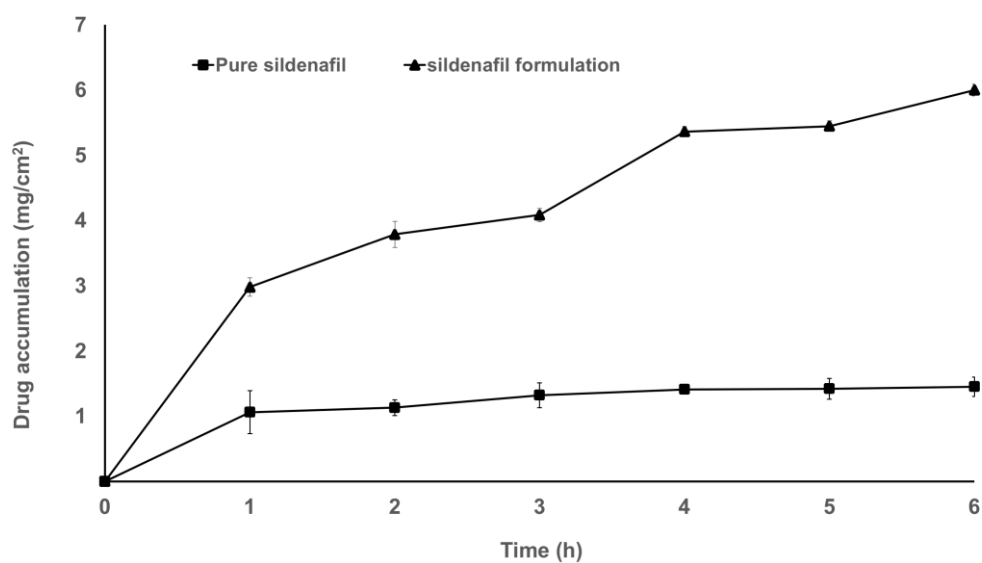


Figure S3. Amount of sildenafil citrate accumulation in the cell after incubation for 6 h.

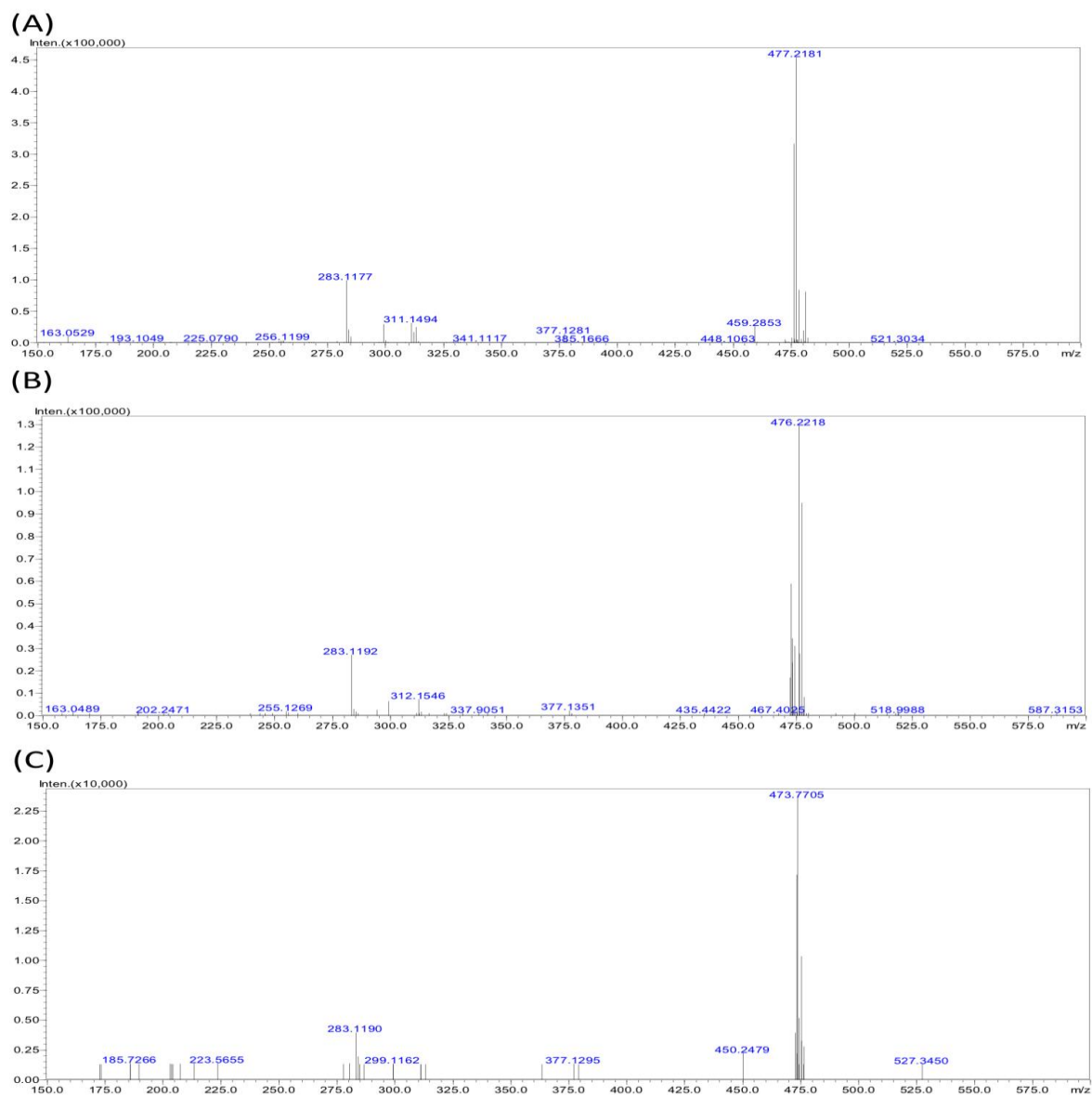


Figure S4. LC-MS/MS chromatogram of (A) sildenafil citrate, (B) drug extraction from cells incubated in sildenafil citrate aqueous solution for 6 h, (C) drug extraction from cells incubated in the sildenafil citrate microemulsion-loaded hydrogel (IPM system) for 6 h.