**Title:** Dual-responsive supramolecular colloidal microcapsules from cucurbit[8]uril molecular recognition in microfluidic droplets

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**Summary of available data**

Original or unprocessed data is provided in support of the article “Dual-responsive supramolecular colloidal microcapsules from cucurbit[8]uril molecular recognition in microfluidic droplets”. The data is structured into three folders and the description of each fold is as follows:

**Folder 1: Dynamic light scattering (DLS) spreadsheet**

The original DLS data for creating Fig. S1 of the template P(St-*co*-StMV) colloidal particles in neutral aqueous solution (Ø = 100 nm, PDI = 0.05) and the colloidal particles (MCP) after surface grating with NIPAM (Ø = 322 nm, PDI = 0.08).

**Folder 2: 150 kDa FD cargo release from microcapsules over 1h at temperatures of 25, 35 and 45 °C**

The original 150 kDa FD cargo release data for creating Fig. 7a , The release profiles of 150 kDa FD cargo from microcapsules over 1h, at temperatures: 25, 35 and 45 °C.

**Folder 3: 150 kDa FD cargo release from microcapsules after 30 s of UV irradiation at 377 nm** The original fluorescence micrographs of the 150 kDa FITC-dextran release from microcapsules after 30 s of UV irradiation at 377 nm were provided. Those images were obtained using an Olympus IX81 inverted optical microscope under a 20×objective coupled with a camera of Andor Technology EMCCD iXonEM+ DU 897. For the analysis of the release of FITC-dextran, the fluorescence intensities were analysed by *Image J* software, compiled into the spreadsheet, release profile.xlsx.