## Supplementary Information

## Facile synthesis of superparamagnetic magnetite nanoflowers and their

## applications in cellular imaging

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Figure S1. TEM images of the MNFs at different reaction times: a) 0.5 h; b) 2 h and c) 8 h.



**Figure S2**. UV–vis absorption spectra of Rh123 mixed with MNFs before washing (blue curve), and Rh123 mixed with MNFs after purified by spin filtering and dialysis (black curve). It indicates that all the free Rh123 dye has been removed by this washing procedure.



**Figure S3**. Fluorescence spectra of Rh123 mixed with MNFs before washing (blue curve), and Rh123 mixed with MNFs after purified by spin filtering and dialysis (black curve). It indicates that all the free Rh123 dye has been removed by this washing procedure.