

### Electronic Supplementary Information

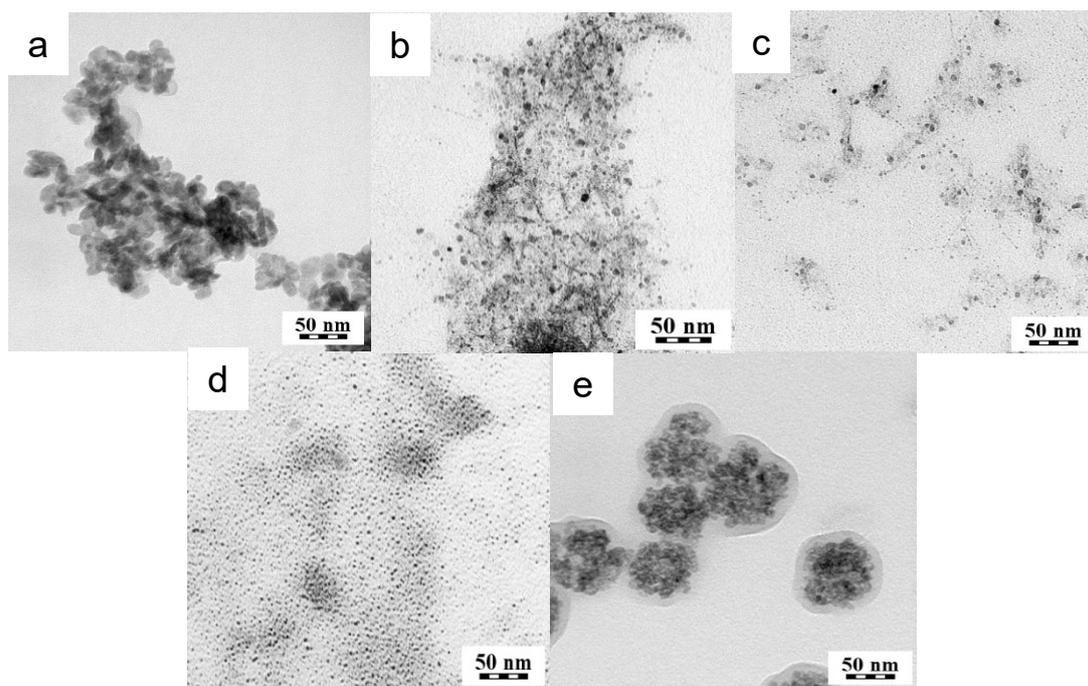


Figure S1. TEM micrographs of (a)  $\text{GdF}_3@EG$  and (b-d)  $\text{GdF}_3@PSSMA$  particles prepared with (b) 1, (c) 5, (d) 15 mg of PSSMA/ml in the feed, and (e)  $\text{GdF}_3@PSSMA-PSDA-A488$  nanoparticles.

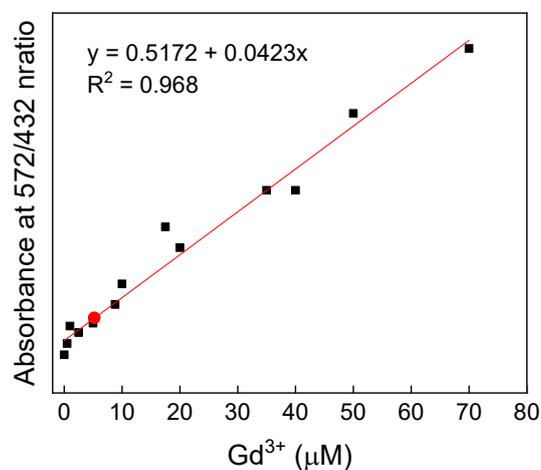


Figure S2. Calibration curve of  $\text{GdCl}_3$  (0-70  $\mu\text{M}$  of  $\text{Gd}^{3+}$ ) determined by xylenol orange (18  $\mu\text{M}$ ) and the amount of free  $\text{Gd}^{3+}$  (5.5  $\mu\text{M}$ ; red circle) released from aqueous  $\text{GdF}_3@PSSMA-PSDA-A488$  (3.7 mM of  $\text{Gd}^{3+}$ ) dispersion stored at RT for 40 days.

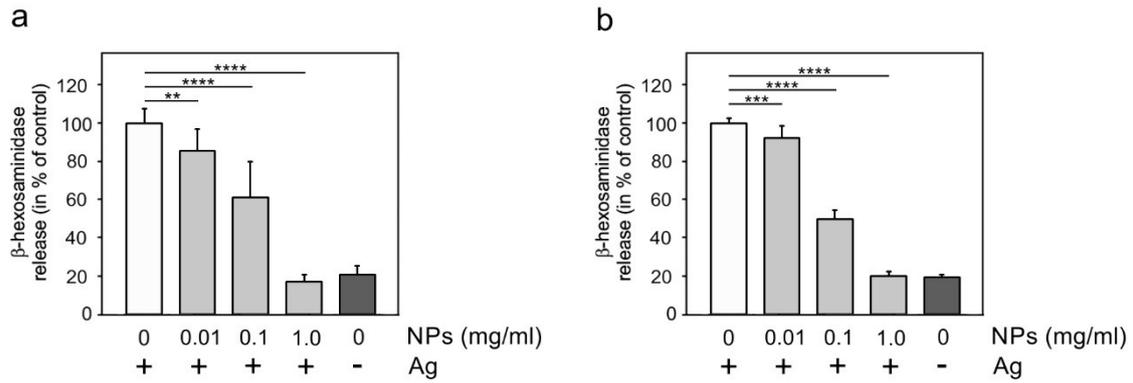


Figure S3. Effect of GdF<sub>3</sub>@PSSMA-PSDA-A488 nanoparticles (NPs) on degranulation in (a) RBL and (b) BMMC cells. Degranulation in IgE-sensitized cells incubated with particles and antigen for 30 min. Degranulation was measured by  $\beta$ -hexosaminidase release and performed in RPMI 1640 medium without phenol red. The data represent the mean  $\pm$  S.D. (n = 3 for RBL; n = 4 for BMMC) from the independent experiments performed in triplicates. Two-tailed unpaired Student's t test was performed to determine statistical significance. Activation of IgE-sensitized (1  $\mu$ g/ml) cells by Ag (100 ng/ml) served as the positive control.