Supporting information available:

Size-controlled preparation of magnetic iron oxide nanocrystals within hyperbranched polymers and their magnetofection in vitro

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**Figure S1.** EDS of Mag-HPEI-1.25.

**Figure S2.** XPS spectra of Mag-HPEI-1.
Figure S3. Determination of plasmid DNA condensation by gel retardation assay.

Plasmid DNA was complexed with Mag-HPEI-1 at various Fe/DNA weight ratios 0, 0.1, 0.2, 0.5, 0.75, 1, 1.5, and 2 from left to right and loaded into an agarose gel. Complexation prevented DNA migration into gel.

Figure S4. $^1$H NMR spectra of (a) HPEI and (b) HPEI treated by H$_2$O$_2$. 