

Selective Magnetic Particle Imaging of CD44 Expressing Cells Using Iron Oxide Nanoprobes Functionalized with Chemically Modified Hyaluronan

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(SUPPORTING INFORMATION)

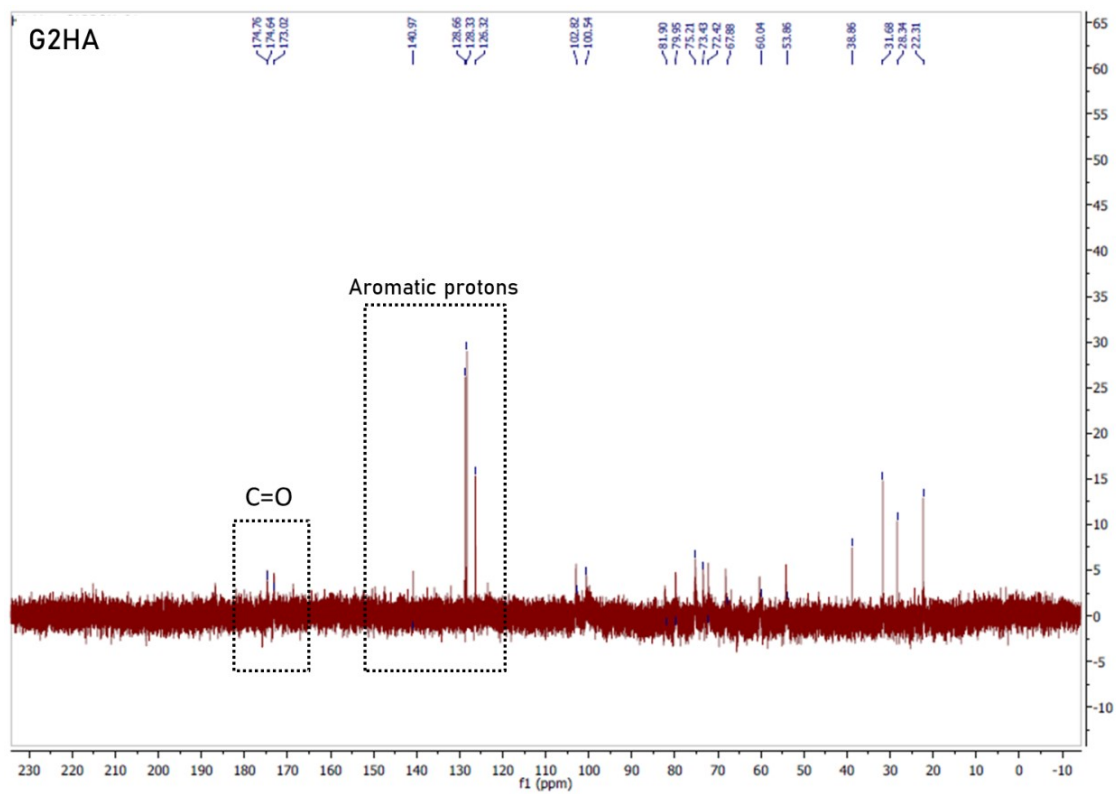
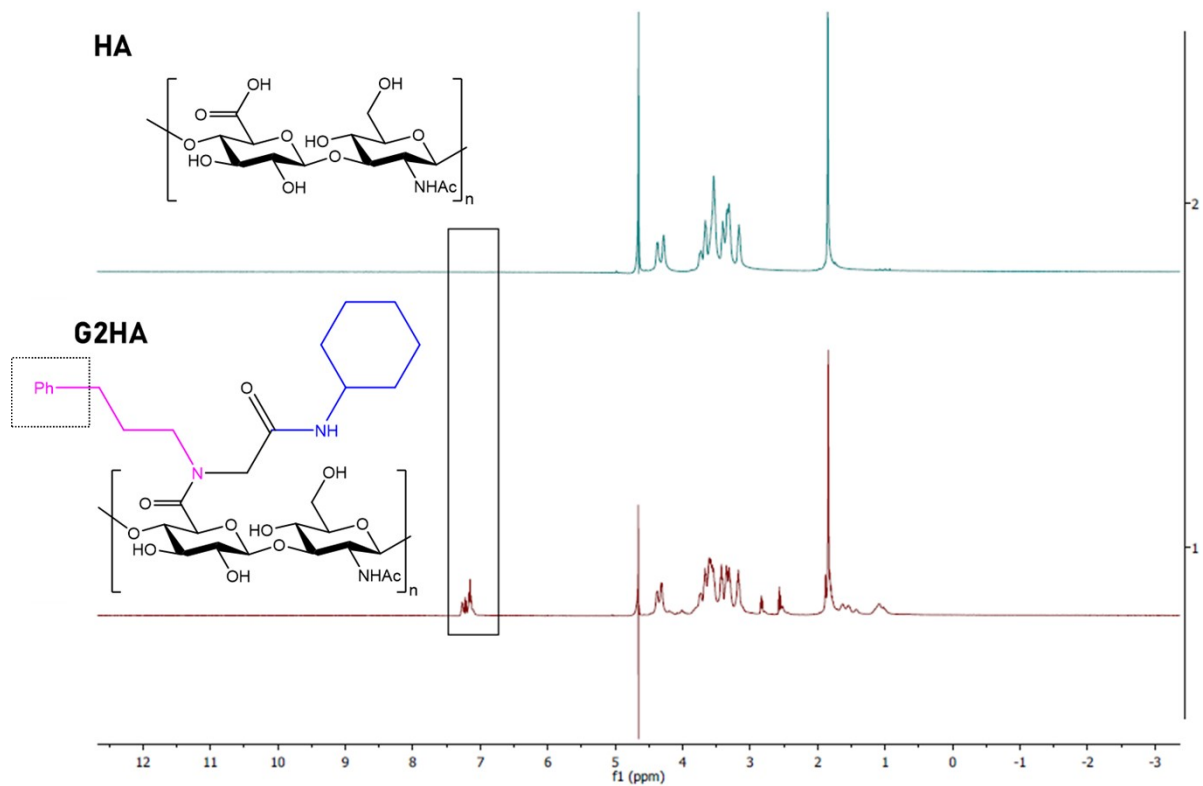
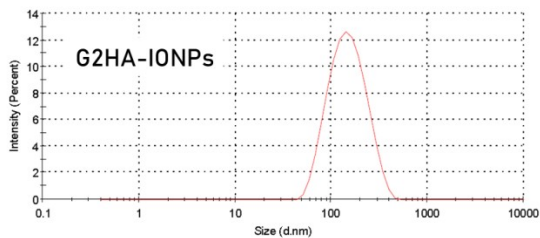


Fig. S1 (a) ^1H -NMR of HA and G2HA spectra; (b) ^{13}C -NMR spectrum for G2HA.

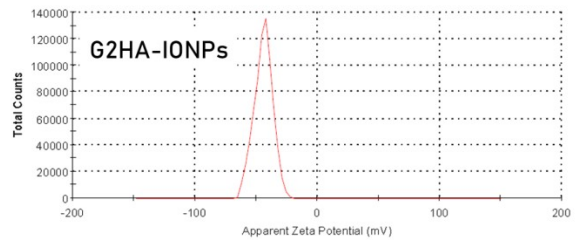
	Size (d.nm):	% Intensity:	St Dev (d
Z-Average (d.nm): 134.1	Peak 1: 158.6	100.0	69.08
Pdl: 0.175	Peak 2: 0.000	0.0	0.000
Intercept: 0.941	Peak 3: 0.000	0.0	0.000
Result quality: Good			

Size Distribution by Intensity



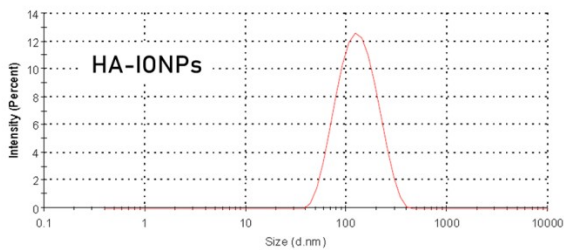
	Mean (mV)	Area (%)	St Dev (mV)
Zeta Potential (mV): -44.2	Peak 1: -44.2	100.0	7.53
Zeta Deviation (mV): 7.53	Peak 2: 0.00	0.0	0.00
Conductivity (mS/cm): 0.00697	Peak 3: 0.00	0.0	0.00
Result quality: Good			

Zeta Potential Distribution



	Size (d.nm):	% Intensity:	St Dev (d.n
Z-Average (d.nm): 114.1	Peak 1: 138.4	100.0	60.26
Pdl: 0.164	Peak 2: 0.000	0.0	0.000
Intercept: 0.955	Peak 3: 0.000	0.0	0.000
Result quality: Good			

Size Distribution by Intensity



	Mean (mV)	Area (%)	St Dev (mV)
Zeta Potential (mV): -27.7	Peak 1: -27.7	100.0	5.34
Zeta Deviation (mV): 5.34	Peak 2: 0.00	0.0	0.00
Conductivity (mS/cm): 0.00332	Peak 3: 0.00	0.0	0.00
Result quality: Good			

Zeta Potential Distribution

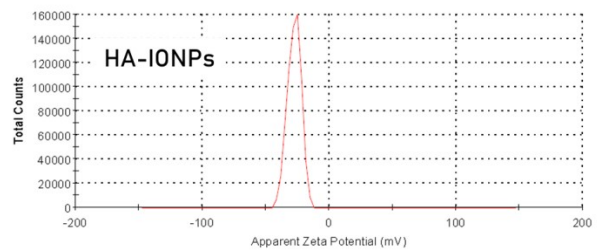


Fig. S2 Hydrodynamic diameter, polydispersity index (PDI), and zeta potential of G2HA-IONPs and HA-IONPs.

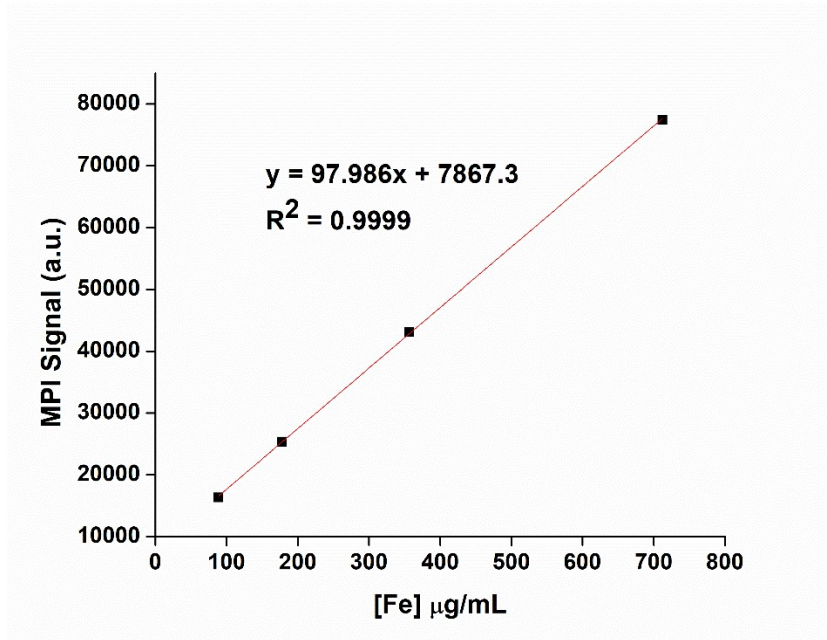


Fig. S3 MPI signal of serial dilutions of HA-IONPs solution showing the linear relationship between iron concentration and the generated MPI signal.

