

SUPPLEMENTAL INFORMATION

Reference	Target (antigen)	QD elution	Solution	Assay time (h)	Detection range
Su et al. ²⁷	E. coli O157:H7	N/A	BHI broth/PBS	2	10 ³ - 10 ⁷ CFU/mL
Park et al. ²⁸	C-reactive protein (CRP)	Imidazole solution	PBS	2.5	0.87 - 8.7 pmol (100-1000 ng; 10 - 100 ng/mL)
Zhu et al. ²⁴	C-reactive protein (CRP)	Urea, SDS, BSA, PBS	human serum	2.5	0.01 - 7 nM (1 - 700 ng/mL)
Park et al. ³¹	sCD40L	Imidazole solution	PBS	2.5	5 - 170 ng/mL
Our work	S100B	Urea, BB	human serum	1	0.01 - 10 ng/mL (0.95 - 950 pM)

Table S1. Comparison of magnetic bead-quantum dot sandwich assays. BHI – brain heart infusion broth, PBS – phosphate buffered saline, BB – borate buffer, SDS – sodium dodecylsulfate, BSA – bovine serum albumin, sCD40L – soluble CD40 ligand.