Electronic Supplementary Information

A microwell plate-based multiplex immunoassay for simultaneous quantitation of antibodies to infectious viruses

Min-Suk Jeong and Dae-Ro Ahn*

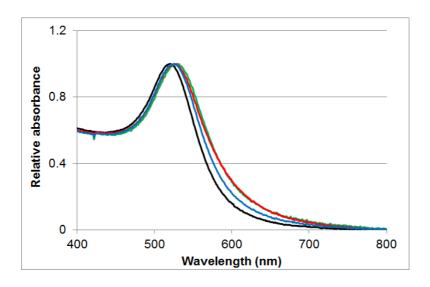


Figure S1. Absorbance of GNP (black trace), Ag_{HIV}-GNP-DNA1 (green trace), Ag_{HCV}-GNP-DNA2 (red trace) and Ag_{HBV}-GNP-DNA3 (blue trace) complexes.

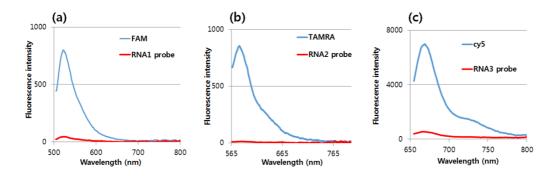


Figure S2. Emission spectra of fluorogenic (a) RNA1, (b) RNA2, and (c) RNA3 probes, and their relevant fluorophores obtained by excitation at the wavelength providing the same absorbance. The relative quantum yield (QY) of the probes was determined based on the known QY of the fluorophores and summarized in Table S1.

Table S1. Relative QY values of the fluorogenic RNA probes.

	RNA Probes			Fluorophores		
QY (%)	RNA1	RNA2	RNA3	FAMa	TAMRA ^b	Cy5 ^c
Q1 (/0)	0.064	0.0081	0.03	0.93	0.28	0.3

a. www.probes.com; b. J. Biomed. Opt., 2009, 14, 054005; c. Nature Methods, 2008, 5, 763.

Table S2. Relative QY values of the fluorogenic RNA probes. The excitation wavelength used were 466 nm for RNA1, 534 nm for RNA2, and 635 nm for RNA3, respectively.

Probe	FWHM (nm)		
RNA1	44.8		
RNA2	49.4		
RNA3	47.8		