Supporting Information

Gold Nanoparticle Paper Immunoassays for Sensing the Presence of *Vibrio parahaemolyticus* in Oyster Hemolymph

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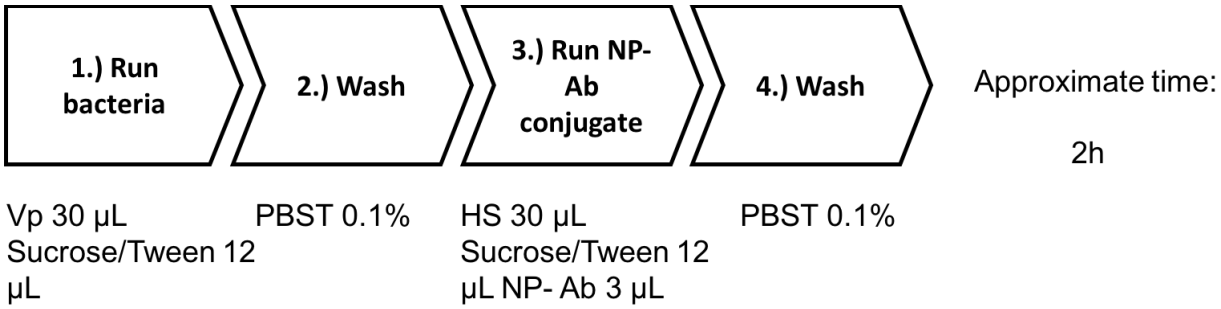

Figure S1. Workflow for the step for running Vp assays. From Rodriguez-Quijada, et al. [1]

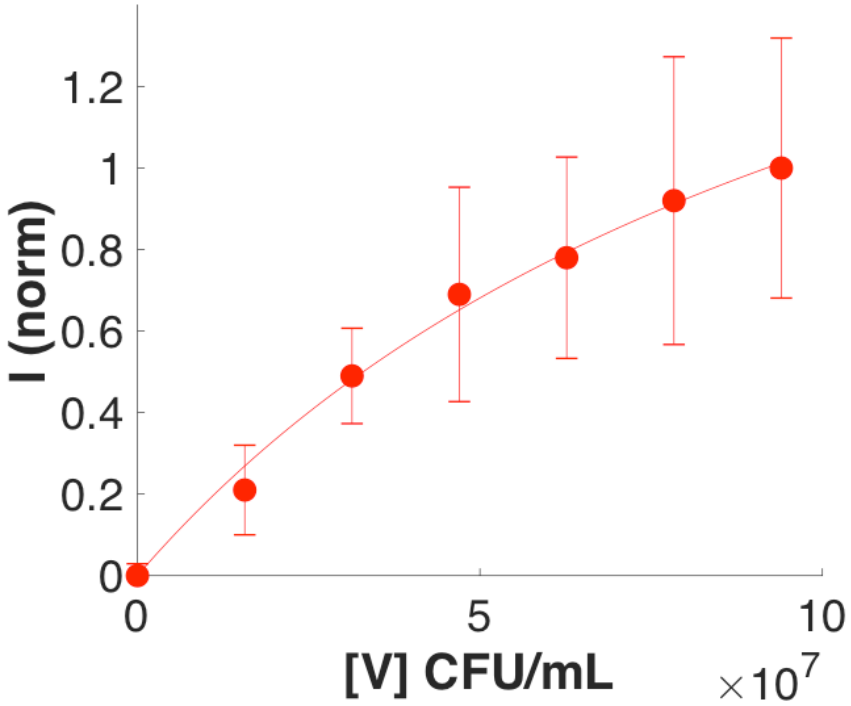

Figure S2. Sensitivity of the test against a Vp environmental isolate. Test line intensity as a function of environmental Vp H731.1 concentration in 1X PBS (circles). Error bars indicate averages of five independent strips. Fit to a modified Langmuir curve (line) to obtain an LOD. The concentration range was chosen so as to span dynamic range of the test signal. At the upper end, the signal was approaching saturation, so higher concentrations were not deemed to be necessary.

Table S1. Performance of the test against environmental samples. Vibrio samples PCR positive (VP PCR), Negative samples (PBS), Positive Rapid Tests (Positive RT), Negative Rapid Tests (Negative RT), Area Under the Curve (AUC), Intensity Normalized Cutoff (I norm).

VP PCR +	Negative (PBS)	Positive (RT)	Negative (RT)	AUC	Cutoff	Sensitivity	Specificity
25	15	24	16	0.989	2.44	0.96	1.00

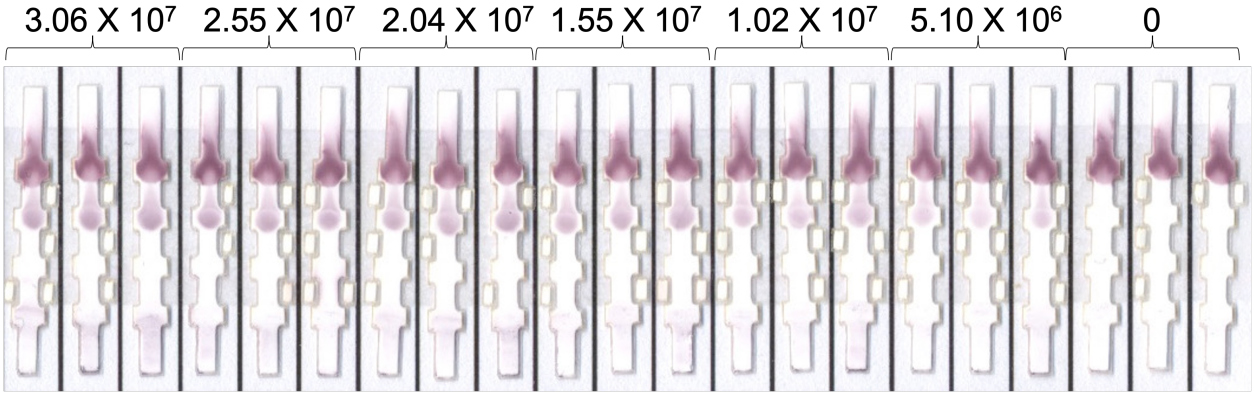

Figure S3. Images of entire strips for Vp run in triplicate (concentration indicated in cfu/mL).

References

1. Rodríguez-Quijada, C.; Lyons, C.; Santamaria, C.; Quinn, S.; Tlusty, M.; Shiaris, M.; Hamad-Schifferli, K. Optimization of Paper-Based Nanoparticle Immunoassays for Direct Detection of the Bacterial Pathogen V. Parahaemolyticus in Oyster Hemolymph. *Analytical Methods* **2020,** *12*, 3056 - 3063.