

Functionalizing silica sol-gel with entrapped plant virus-based immunosorbent nanoparticles

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Supplementary Information

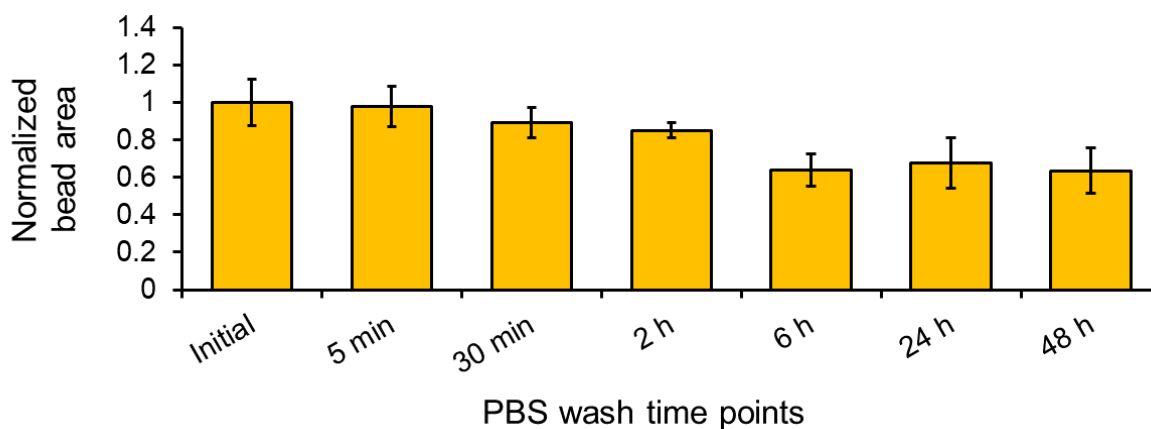


Figure S1. Normalized bead area over time for 2 μL volume silica bead containing Cy5-TMV over 48 hours. Beads were exchanged into fresh PBS buffer after each measurement. Error bars represent one standard deviation with biological triplicate.

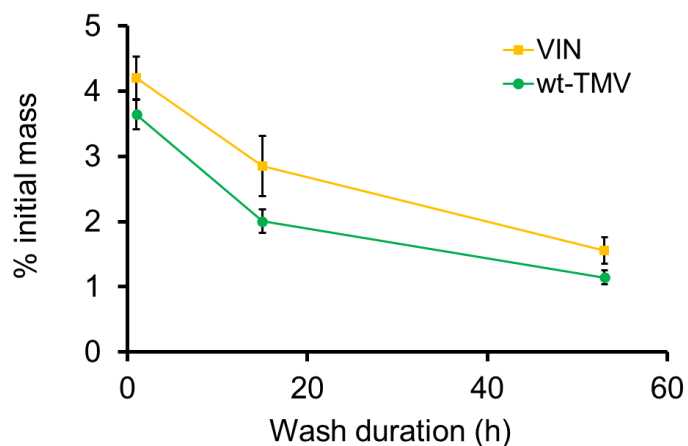


Figure S2. UV-vis A_{280} measurements of the PBS wash solution over ~2 days of equilibration reported as a fraction of the initial A_{280} measurement for the VIN or wt-TMV added into the silica sol-gel synthesis. The PBS wash solution was collected at each sample timepoint and exchanged with fresh buffer. This experiment was conducted using 1 volume PBS wash solution per volume silica sol-gel to improve limit of detection. The retention of the PBS wash solution in the buffer exchange (~50% total wash solution) dictates that these results represent an upper bound of the initial mass lost during washing. Error bars represent 1 S.D. using biological triplicate.