Supporting Information

Enzymatically Enhanced Collisions on Ultramicroelectrodes for Specific and Rapid Detection of Individual Viruses

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Control Experiments

![Figure S1](image)

**Figure S1.** A.) Control amperometric i-t curve of MCMV collisions with the antibody/GOx conjugate in the absence of glucose. Anodic potentials are plotted positive of the origin, and anodic currents are plotted negative to the origin.  
B.) Control amperometric i-t curve of the antibody/GOx conjugate and glucose.  
C.) Control amperometric i-t curve of MCMV in the presence of excess GOx with no antibody conjugation.
Figure S2. Frequency of anodic steps as a function of concentration of MCMV for the experimental results of virus spiked in urine (solid line) plotted with the calculated expectation (dashed line), which assumes mass transfer only by diffusion. These experiments were carried out in urine.
Table S1. Summary of control experiments and responses observed.

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<th>Virus</th>
<th>Antibody</th>
<th>Glucose Oxidase</th>
<th>Glucose</th>
<th>Events Observed</th>
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<td>Yes</td>
<td>No</td>
<td>Blocking</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Steadily Increasing Current</td>
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<tr>
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<td>MCMV</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
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<td>MCMV</td>
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<td>Yes</td>
<td>Yes</td>
<td>Anodic Steps</td>
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<tr>
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<td>MCMV and MHV68</td>
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<td>Yes</td>
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<td>Blocking and Anodic Steps</td>
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