Visual Detection of Multiple Genetically Modified Organisms in a Capillary Array

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Supplementary Figure 1. The hydrophobic coating of the capillary array is necessary for successful sample loading and separation. The same solution was loaded on both capillary arrays with or without the hydrophobic modification of the top surfaces following the same steps described in Fig. 2. Only the capillary array with the hydrophobic modification achieved successful isolation of the solution into individual capillaries.





Hydrophobized Un-hydrophobized

Supplementary Figure 2. CALM is also compatible to large scale screening in 96-well plate format.



Supplementary Figure 3. Successful amplification on CALM platform without cross-contamination. (a) The layout of the capillary array. "P", positives, capillaries with pre-fixed primers; "N", negatives, blank capillaries. (b) The fluorescent photograph of the capillary array after LAMP. The green color showed the positive LAMP amplification. (c) Gel electrophoresis analysis of the LAMP products directly recovered from each capillaries in (b).



Supplementary Figure 4. Sensitivity of the conventional LAMP for the eight targets. Series dilution of 50, 25, 10, 5 and 0 copies of haploid genome per reaction were tested. The bright white fluorescence represents positive reaction.

