

Supplementary Materials:

Detecting glucose levels in blood plasma and artificial tear by Au(I) complex on the carbopol polymer: a microfluidic paper-based method

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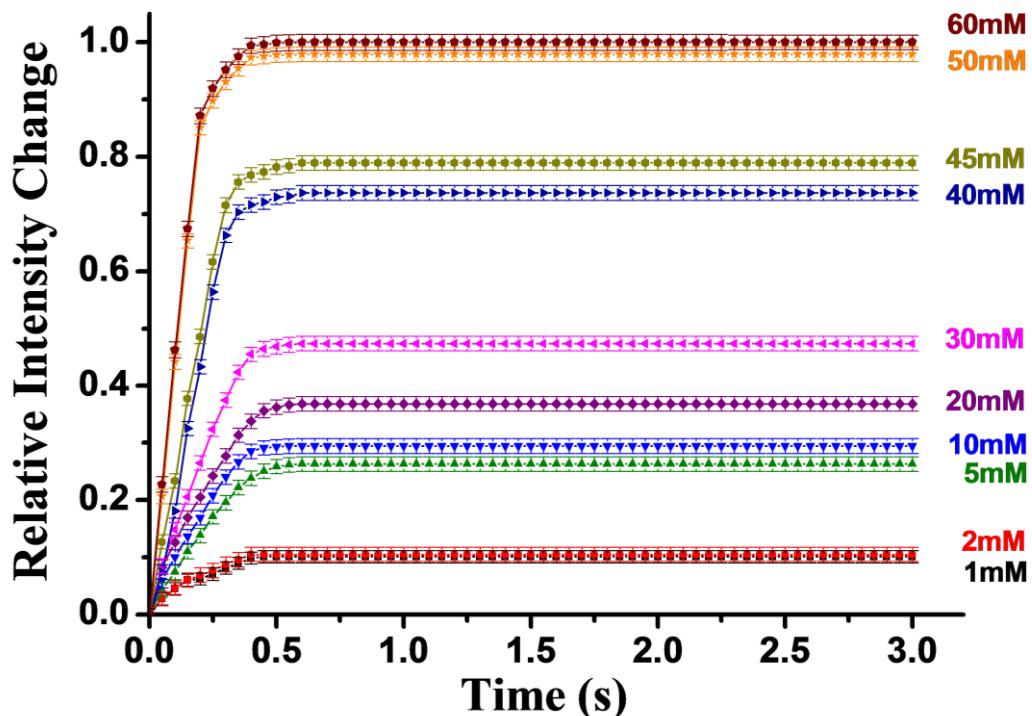


Figure S1 The kinetic behaviour of the glucose sensing system upon addition of different concentrations of glucose (N = 3).

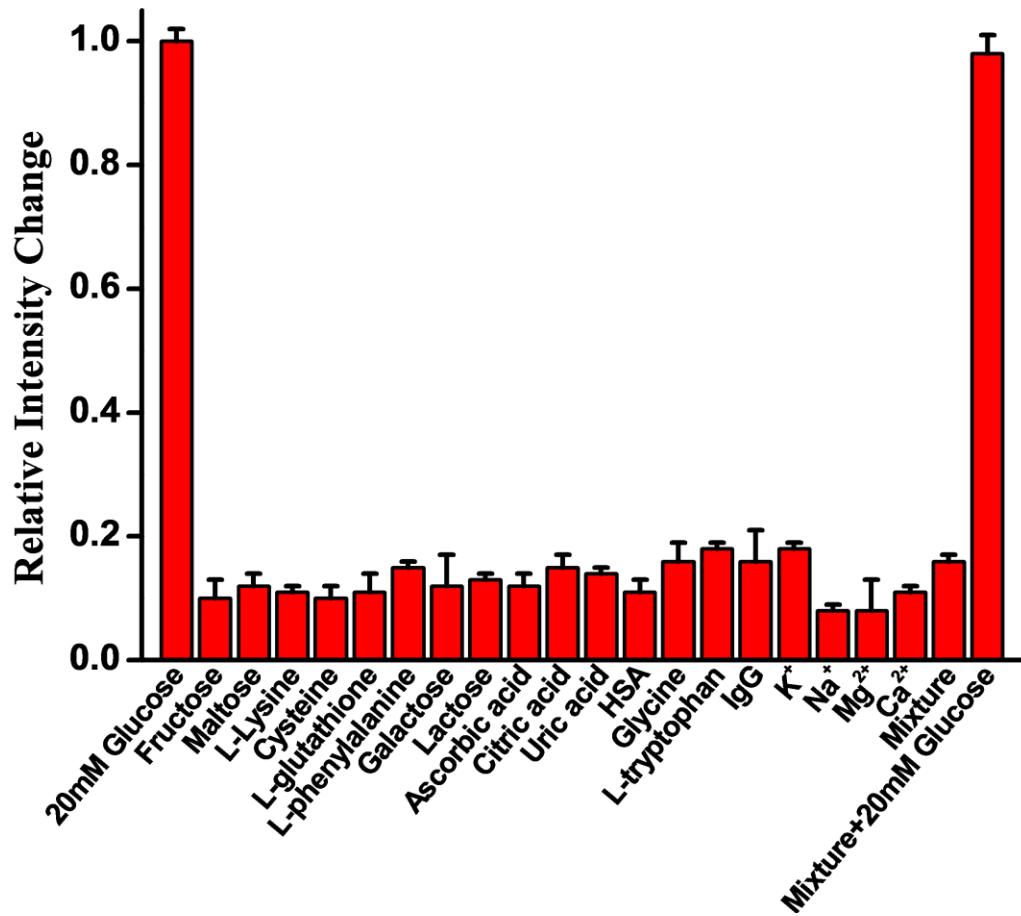


Figure S2 Selectivity analysis of the gel-encapsulated B5 for detection of glucose. Evaluation of the selectivity for the glucose detection by using Fructose 310 μ M, Maltose 120 mM, L-Lysine 3.7 mM, Cysteine 3 mM, L-glutathione 0.65 μ M, L-phenylalanine 496.5 μ M, Galactose 18 μ M, Lactose 180 μ M, Ascorbic acid 340 μ M, Citric acid 540 μ M, Uric acid 5 mM, HSA 0.075 mM, Glycine 4.9 μ M, L-Tryptophan 78 μ M, IgG 0.733 mM, K⁺ 42.5 mM, Na⁺ 1.43 M, Mg²⁺ 8.3 mM, and Ca²⁺ 25 mM. The error bar represents the standard deviation of three independent measurements.

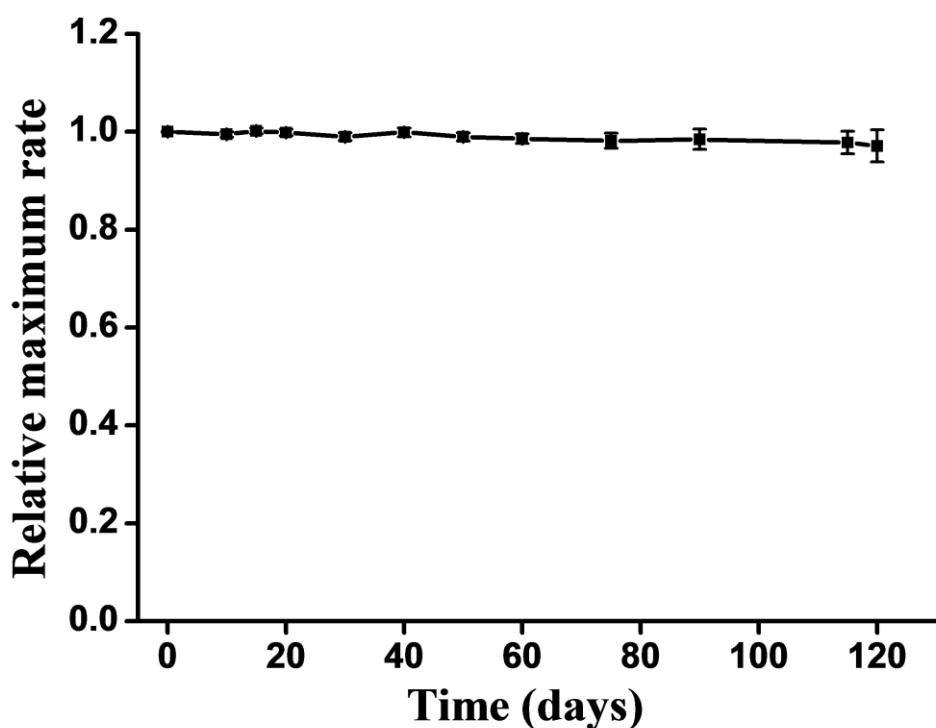


Figure S3 The storage stability of the gel-encapsulated B5 for detection of 20 mM glucose during 120 days storage ($N = 3$). The biosensor was stored at 4 °C and then allowed to stand at room temperature until thawed prior to use.