Supplementary information to:

Development of a microfluidics biosensor for agarose-bead immobilized

Escherichia coli *bioreporter cells for arsenite detection in aqueous samples.*

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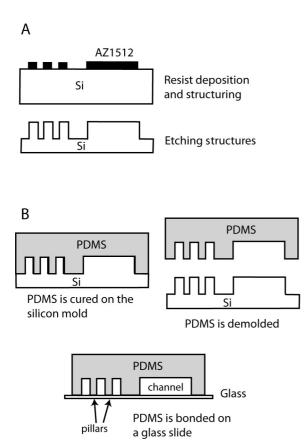


Figure S1: Microfluidic system fabrication procedure. A) Production of the silicon mold. B) Negative imprint of the mold in the PDMS layer. Demolding of the PDMS layer and bonding to glass slide, by which the channels and pillars are formed.

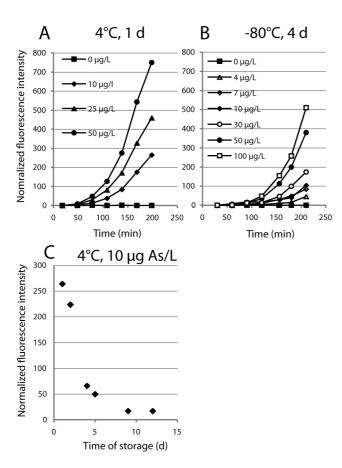


Figure S2: Biosensor performance data for 4°C and -80°C stored cells in beads outside the microfluidics chip. A) Normalized EGFP response from cells in beads stored at 4°C for 1 day to different arsenite concentrations over time (single lane reads). B) As for A, but with -80°C stored beads for 4 d. C) Decrease of signal after 120 min with 10 μg As per L in case of 4°C stored cells in beads.