

## Supplementary Information

Table S1: Aptamer sequences

GA aptamer [1]	5'-/5ThioMC6-D//iSp18/GGTGCGGTTTCGTGCGGTTGTAGTACTCGTGGCCGATAGAGGTAGTTTCG-3'
HSA aptamer 1 [2]	5'-/5BiotinTEG/GTCTCAGCTACCTTACCGTATGTGGCCCAAAGCGTCTGGATGGCTATGAA-3'
HSA aptamer 2 [2]	5'-/5hioMC6-D//iSp18/AATTGGAGTGGGGGGCCACGGTTAAATCATTTCGGTGATTGA-3'
GA control aptamer	5'-/5BiotinTEG/CGAAACTAC CTCTATCGGCCACGAGTACTACAACCGCACGAACCGCACC-3'
HSA control aptamer	5'-/5BiotinTEG/TCAATCACCGAATGATTTAACCGTGGCCCCCACTCCAATT-3'

Table S2: Regression parameters:

	Glycated Albumin	Serum Albumin
Slope	4.503	1.694
Intercept	37.94	41.05
R <sup>2</sup>	0.9644	0.9206

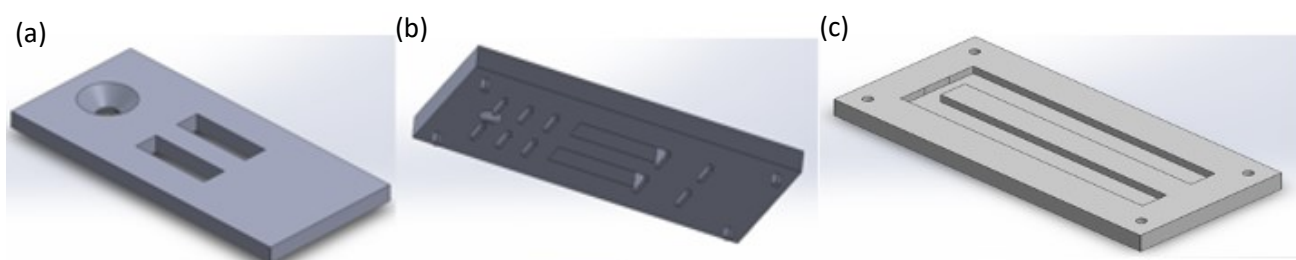


Fig. S1 Dual assay cartridge: top (a) top view; (b) bottom view; (c) cartridge bottom

### References:

- [1] C. Apiwat *et al.*, "Graphene based aptasensor for glycated albumin in diabetes mellitus diagnosis and monitoring," *Biosensors and Bioelectronics*, vol. 82, pp. 140–145, 2016
- [2] M. Takenaka, Y. Okumura, T. Amino, Y. Miyachi, C. Ogino, and A. Kondo, "DNA-duplex linker for AFM-SELEX of DNA aptamer against human serum albumin," *Bioorganic and Medicinal Chemistry Letters*, vol. 27, no. 4, pp. 954–957, 2017