

Supporting Information

DNAzyme-powered AuNRs-DNA walker for Visual Detection of *Escherichia coli*

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Table S1 The sequences of oligonucleotides used in this work.

Oligonucleotides name	Sequence (5' to 3') description
Apt	CCGGACGCTTATGCCTTGCCATCTACAGAGCAGGTGTGACGG
T	TCCGTCACACCTTTTAAAGCGTCCGG
HAP	SH-polyT(10)-TGGGTAGGGCGGGTTGGGACTAT/rA/GGAAGAGA AAAGCCCTAC
I	AAGAGACCGGACGCTTAAAAAGGTGTGACGGA
Dz	SH-polyT(55)-ACCTTTTAAAGCGTCCGGTCTCTCTCCGAGCCGG TCGAAATAGT

Table S2. Comparison of different methods for *E. coli* determination.

Signal read-out methods	LOD (cfu/mL)	Linear range (cfu/mL)	References
Surface Enhanced Raman Spectroscopy	1.5×10^2	$1.5 \times 10^2 - 3.0 \times 10^5$	[1]
Colorimetric Assay	4.1×10^1	$1.2 \times 10^2 - 3.6 \times 10^3$	[2]
Electrochemical	1.0×10^1	$1.0 \times 10^1 - 1.0 \times 10^7$	[3]
Electrochemical	7.0×10^1	$1.0 \times 10^1 - 1.0 \times 10^5$	[4]
Electrochemiluminescence	2.5×10^{-4}	$5.0 \times 10^2 - 5.0 \times 10^5$	[5]
Colorimetric Assay	1.0×10^2	$0 - 1.0 \times 10^5$	[6]
Colorimetric Assay	5.8×10^0	$1.0 \times 10^1 - 1.0 \times 10^5$	This work

Figure S1. Feasibility of polyacrylamide gel electrophoresis analysis.

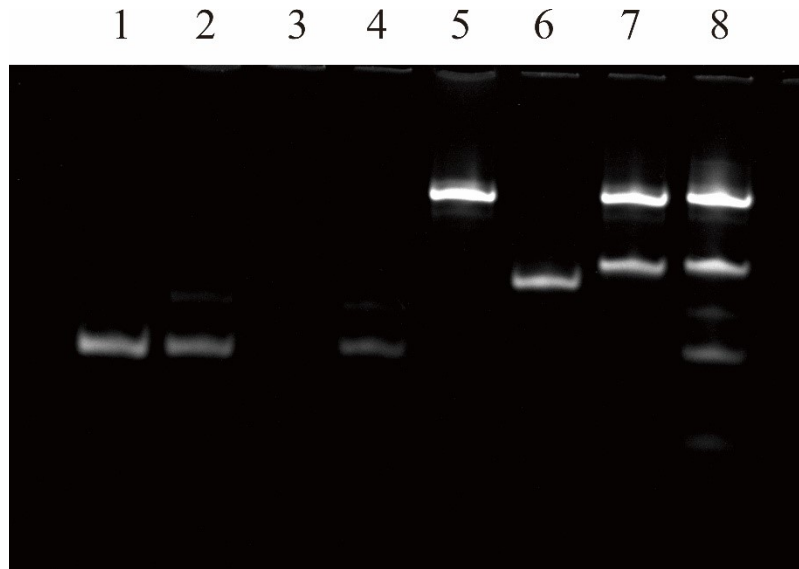


Figure. S1 Feasibility of polyacrylamide gel electrophoresis analysis. Lane 1, Apt; Lane 2, HAP
Lane 3, T; Lane 4, I; Lane 5, Dz; Lane 6, Apt-T; Lane 7, Mix T, I and Dz; Lane 8, probe incubated
with *E. coli*.

References

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