Supporting Information for

Peptide-DNA conjugate-assisted DNA cyclization for highly efficient and sensitive detection of furin

Minghui Wang[a], Cuifei Chen[a], Keqin Ying[b], Lingjun Sha[b], Deqi Kuang[b], Yue Huang[c,*], Jie Yang[a,*], Tingting Yin[d,*]

[a]College of Science, Nanjing Forestry University, Nanjing, 210037, P. R. China

[b]State Key Laboratory of Analytical Chemistry for Life Science, School of Life Sciences, Nanjing University, Nanjing 210023, P.R. China

[c]Department of Food Science and Engineering, College of Light Industry and Food Engineering, Nanjing Forestry University, Nanjing 210037, P.R. China

[d]Department of Obstetrics and Gynecology, the First Affiliated Hospital of Nanjing Medical University, Nanjing 210029, P.R. China

[*]Corresponding authors. E-mail addresses: huangyue@njfu.edu.cn (Y. Huang), jieyang@njfu.edu.cn (J. Yang), tingtingyin@njmu.edu.cn (T. Yin).

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Table 1. Sequences of oligonucleotides used in this work.

Name	Sequence (5' to 3')
NH_2-DNA	NH_2-TTTCTCGTGACAGCAG
DNA-DBCO	CTAGAACAGTGCATAGTAC-DBCO
Padlock-DNA	PO_4-TATGCACTGTTCTAG*CCCAACCCGCCCTACCC*TTT CCTACGTCTCCAACTAACCTGCTGTCACGAGAAAAA GTAC
Splint-DNA	CTAGAACAGTGCATAGTACTTTTTCTCGTGACAGCAG

Table S2. Comparison of the developed method with other fluorescence sensors for detecting furin.

Methods	Target	Linear range	Detection limit	Reference
Fluorescence	furin	2-10 ng/mL (2-40 U/mL)	0.11 ng/μL (0.22 U/mL)	1
Fluorescence	furin	1.00×10^{-3}-2.00×10^{-2} U/mL	3.10×10^{-4} U/mL	2
Fluorescence	furin	0–500 U/mL	0.265 U/mL	3
Fluorescence	furin	0-1.92 U/mL	3.73×10^{-4} U/mL	4
Fluorescence	furin	0-2 U/mL	0.0023 U/mL (1.15 ± 0.08 ng/mL)	5
Fluorescence	furin	0-20 nM (0-2.11 U/mL)	1.5 pM (1.581×10^{-4} U/mL)	This work

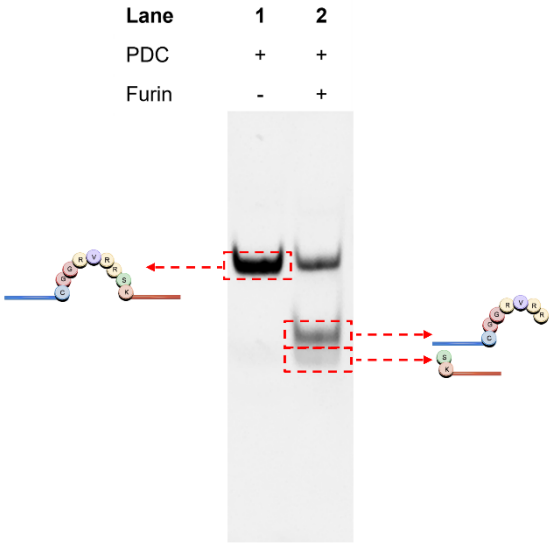

Fig. S1. PAGE analysis of the cleaved products of PDC catalyzed by furin.

References

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