

Supplementary Information

Cleavable Energy Transfer Labeled Oligonucleotide Probe for Enhanced Isothermal Amplification Detection and Nano Digital Chip-based Readout

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Table S1: Primers and target sequence.

Name	Sequence	Sources
HPV 16 FIP	AGTCCTCCAAAATAGTGGAAATTCATTTTTCAAC TGTGCAAAATAACCT	IDT
HPV 16 BIP	CCAGGAGGCACACTAGAAAGAGTGTATGTTTT GACAAGCAAT	IDT
HPV 16 F3	TACGACATGGGGAGGAAT	IDT
HPV 16 B3	AAGGGGATCTTCTTTAGGTG	IDT
HPV 16 LB	TTATAGGTTTGTAACATCCCAGGCA	IDT
HPV 16 FQ LB probe	/56- FAM/TTATAGGTT/ZEN/TGTAACATCCCAGGCA/ 3IABkFQ/	IDT
L1 genes of HPV 16	Catttgtgggtaaccaactatttgttactgttggatactacacgcagtaca aatatgtcattatgtgctgccatatctacttcagaaactacatataaaaat actaactttaaggagtacctacgacatggggaggaatatgatttacagtt tattttcaactgtgcaaaataaccttaactgcagacgttatgacatacat acattctatgaattccactattttggaggactggaattttggtctacaacct ccccaggaggcactagaagatacttataggttgtaacatcccagg caattgctgtcaaaaacatacacctccagcacctaaagaagatcccctt aaaaatacactttttgggaagtaatttaaggaaaagttttctgcaga cctagatcagttccttaggacgcaaattttactacaagc	Synthego
L1 genes of HPV 18	aacaatggtgttctggcataatcaattatttgttactgtgtagataccactcg cagtaccaatftaacaatatgtgcttctacacagtctcctgtacctgggca atatgatgctaccaatftaagcagtagcagacatgttgaggaatatg attgcagtttattttcagttgttactattactttaactgcagatgttatgt cctatattcatagtagaatagcagtagtttagaggattggaactttgggtg ttcccccccgaactactagtttgggtggatacatatcgttttgtacaate tgttgctattacctgtcaaaaggatgctgcaccggctgaaaataaggatc cctatgataagftaaagttttggaatgtggatttaaggaaaagttttcttag acttagatcaatatccccttgacgtaattt	Synthego

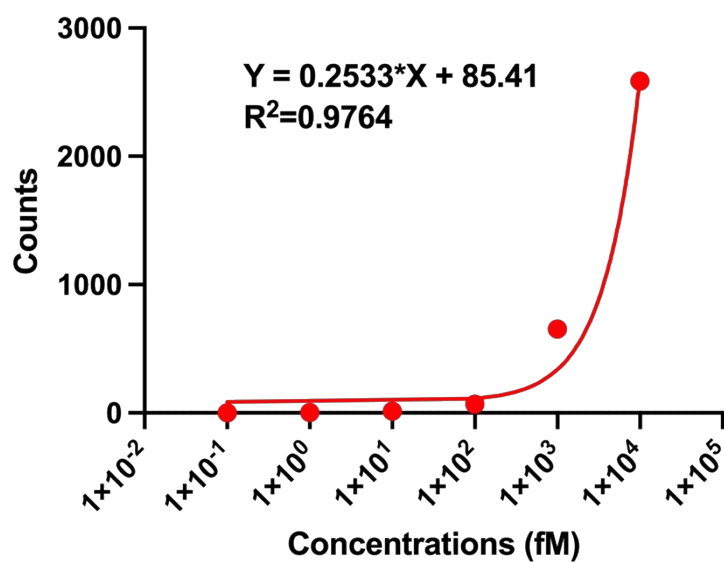


Figure S1. Linear response analysis for positive spots quantification range of the dLAMP assay at target concentrations of 1×10^{-1} to 1×10^4 fM, for each concentration's testing, five replicates were run ($n = 5$).