Table S1 – Nucleic acid sequences. DNA is black-colored while RNA is blue-colored.

Name	Sequence
TFO1, input 1, input*1	5'- UCCUCCUCUUCUCCU -3'
TFO2, input 2, threshold*2	5'- AGGAGAAGAGGAGGA -3'
TTS sense	5'-TCCTCTTCTCCTCCT-3'
TTS antisense	5'-AGGAGGAGAAGAGGA-3'
TU1 sense	5'- TTGACA TCCTCTTCTCCTCC TATAAT AAAAAAA GGAACGAGACGGTCGGGTCCAGATATTCGTATCTGTCGAGTAGAGTGTGGGCTCGT TCC -3'
TU1 antisense	5'- GGA ACG AGC CCA CAC TCT ACT CGA CAG ATA CGA ATA TCT GGA CCC GAC CGT CTC GTT CCT TTT TTT ATT ATA GGA GGA GAA GAG GAT GTC AA -3'
TU2 sense	5'- TTGACAGGAGGAGAAGAGGATATAAT AGGAGGAGAAGAGGA GGAACGAGACGGTCGGGTCCAGATATTCGTATCTGTCGAGTAGAGTGTGGGCTCGT TCC -3'
TU2 antisense	5'- GGAACGAGCCCACACTCTACTCGACAGATACGAATATCTGGACCCG ACCGTCTCGTTCCTCCTCTTCTCCTCCT ATTATATCCTCTTCTCCTCCTGTCAA -3'
TU3 sense	5'- TTGACACTTTATGCTTCCGGTATAATAAAAAAAAGGAGAAGAGGAGG -3'
TU3 antisense	5'- CCTCCTCTTCTCCTTTTTTTTATTATACCGGAAGCATAAAGTGTCAA -3'
TU4 sense	5'- TTGACACTTTATGCTTCCGGTATAATAAAAAAAAGGAGAAGAGGA GGAAAAAAGGAGAAGAGGAGGA -3'
TU4 antisense	5'- TCCTCCTCTTCTCCTTTTTTCCTCCTCTTCTCCTTTTTTTTATTATAC CGGAAGCATAAAGTGTCAA -3'
TU5 sense	5'- TTGACACTTTATGCTTCCGGTATAATAAAAAAAAGGAGAAGAGGA GGAAAAAAGGAGAAGAGGAGGAAAAAAGGAGAAGAGGAGGA -3'
TU5 antisense	5'- TCCTCCTCTTCTCCTTTTTTCCTCCTCTTCTCCTTTTTTCCTCCTCTTC TCCTTTTTTTTATTATACCGGAAGCATAAAGTGTCAA -3'
TU6 sense (XOR gate)	5'- TTGACATCCTCTTCTCCTCCTATAATAGGAGGAGAAGAGGA GGAACGAGACGGTC GGGTCCAGATATTCGTATCTGTCGAGTAGAGTGTGGGCTCGTTCC -3'
TU6 antisense (XOR gate)	5'- GGA ACG AGC CCA CAC TCT ACT CGA CAG ATA CGA ATA TCT GGA CCC GAC CGT CTC GTT CCT CCT CTT CTC CTC CTA TTA TAG GAG GAG AAG AGG ATG TCA A -3'
TU7 sense (XNOR gate)	5'- TTGACAGGAGGAGAAGAGGATATAAT CCTCTTCTCCTCCT GGAACGAGACGGT CGGGTCCAGATATTCGTATCTGTCGAGTAGAGTGTGGGCTCGTTCC -3'
TU7 antisense (XNOR gate)	5'- GGA ACG AGC CCA CAC TCT ACT CGA CAG ATA CGA ATA TCT GGA CCC GAC CGT CTC GTT CCA GGA GGA GAA GAG GAT TAT ATC CTC TTC TCC TCC TGT CAA -3'
TU8 sense (threshold gate)	5'- TTGACA TCCTCTTCTCCTCC TATAAT CCTCTTCTCCTCCT GGAACGAGACGGT CGGGTCCAGATATTCGTATCTGTCGAGTAGAGTGTGGGCTCGTTCC -3'
TU8 antisense (threshold gate)	5'- GGA ACG AGC CCA CAC TCT ACT CGA CAG ATA CGA ATA TCT GGA CCC GAC CGT CTC GTT CCA GGA GGA GAA GAG GAT TAT AGG AGG AGA AGA GGA TGT CAA -3'

*1This TFO1 sequence was used as input 1 for the XOR and XNOR gates, and as input for the threshold gate.

*2This TFO2 sequence was used as input 2 for the XOR and XNOR gates, and as threshold for the threshold gate.
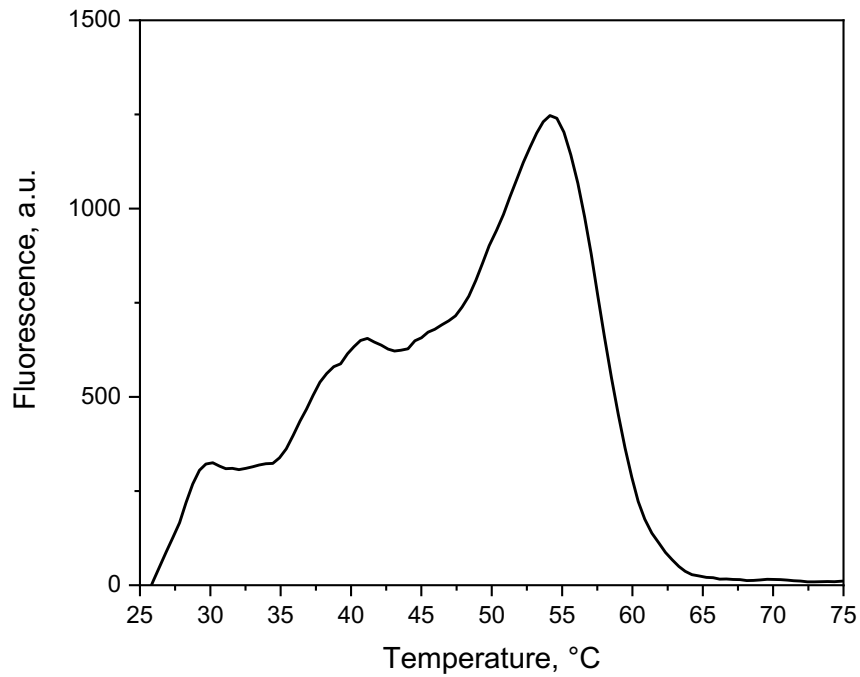
Figure S1 – melting curve of 100 nM of TTS.
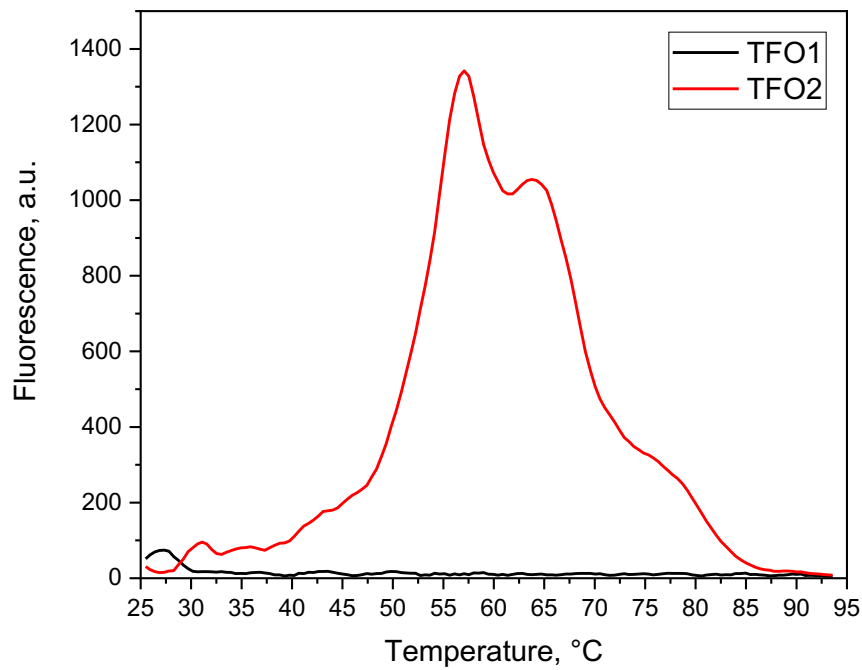
Figure S2 – Melting curves of 1 μM TFO1 (black) and 10 μM TFO2 (red).