

Electronic supplementary information

Selection of DNA aptamers for sensing drugs treating eye disease: atropine and timolol maleate

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Table S1. Oligo sequences used in this work.

Oligo	Sequence (5'→3')
Library (Timolol maleate)	GGAGGCTCTCGGGACGACN30GTCGTCCCGATGCTGCAATCGTAA
Column-binding strand	GTCGTCCCGAGAGCCATA-/3Biosg/
SELEX forward primer	GGAGGCTCTCGGGACGAC
SELEX reverse primer (Timolol maleate)	TTACGATTGCAGCATCGGGACG
SELEX Biotin-reverse primer (Timolol maleate)	/5Biosg/ TTACGATTGCAGCATCGGGACG
Library (Atropine)	GGAGGCTCTCGGGACGACN30GTCGTCCCGATGCTCTGAATCACAG
SELEX reverse primer (Atropine)	CTGTGATTCAGAGCATCGGGACG
SELEX Biotin-reverse primer (Atropine)	/5Biosg/ CTGTGATTCAGAGCATCGGGACG

Table S2. The concentrations of the target and library used in the SELEX for **(A)** timolol maleate and **(B)** atropine.

(A)

No. of round	N ₃₀ Library (pmol)	Drugs (μM)
1	500	1000
2	100	1000
3	100	1000
4	100	1000
5	100	1000
6	100	1000
7	100	1000
8	100	100
9	100	100
10	100	100
11	100	50
12	100	50
13	100	50

(B)

No. of round	N ₃₀ Library (pmol)	Drugs (μM)
1	500	1000
2	100	1000
3	100	1000
4	100	1000
5	100	1000
6	100	1000
7	100	1000
8	100	100
9	100	100
10	100	100
11	100	100
12	100	50
13	100	50
14	100	50
15	100	50