



Figure. S1 The abilities of aptamers (200 ng) from the 11th round to bind SEB (20 μ M) were monitored by binding assay, demonstrating that all aptamers can bind with SEB. Each data represents the mean ($n=3$) \pm SD from three experiments.

Table S1 primers and ssDNA pool

ssDNA	Sequence (5'→3')
Lib	ATACCAGCTTATTCAATT–N60–AGATAGTAAGTGCAATCT
Sense primer 1	ATACCAGCTTA TTCAATT
Sense primer 2	FITC-ATACCAGCTTA TTCAATT
Antisense primer 1	AGATTGCACTTACTATCT
Antisense primer 2	Biotin-AGATTGCACTTACTATCT

Table S2. The conditions of SELEX

Rounds	SEB: ssDNA (ng: pmol)	KCl (mM)	Incubation (min)	Washing (times)
1	100:2000	5	60	2
2-3	100:200	5	55	2
4-6	80:180	10	45	3
7-9	65:150	15	35	4
10-11	50:120	20	25	5