

**Table S1.** Clustered sequencing results of aptamers obtained in 5<sup>th</sup> and 7<sup>th</sup> cycles of SELEX. Red “apt” corresponds to the sequences from 5<sup>th</sup> cycle. Black “hop” corresponds to the sequences from 7<sup>th</sup> cycle.

[illegible]

|       |        |        |  |
|-------|--------|--------|--|
|       | apt 18 | apt17  | GGGATCCATGGGCACTATTTATATCAACGGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
|       | apt 29 | apt18  | GGGATCCATGGGCACTATTTATATCAACGGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
|       | apt 38 | apt29  | GGGATCCATGGGCACTATTTATATCAACGGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
|       | apt 41 | apt38  | GGGATCCATGGGCACTATTTATATCAACGGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
|       | apt 43 | apt41  | GGGATCCATGGGCACTATTTATATCAACGGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
|       |        | apt43  | GGGATCCATGGGCACTATTTATATCAACGGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
| 1 apt | apt 31 | apt31  | GGGATCCATGGGCACTATTTATATCAACAGGCACACCCTTTAGAAGCAATGCGTAAATGTCGTTGGTGGCCC |
| 1 hop | hop 5  | hop 5  | GGGATCCATGGGCACTATTTATATCAACCGATTCTACTTTTCTCAAGGCTCTGAAATGTCGTTGGTGGCCC  |
| 1 apt | apt 39 | apt39  | GGGATCCATGGGCACTATTTATATCAACCGATTCTACTTTTCTCAAGGCTCTGAAATGTCGTTGGTGGCCC  |
| 2 apt | apt 12 | apt 12 | GGGATCCATGGGCACTATTTATATCAACGTCACCTGGCCTCTTCGGTCTTCTAAATGTCGTTGGTGGCCC   |
|       | apt 42 | apt42  | GGGATCCATGGGCACTATTTATATCAACGTCACCTGGCCTCTTCGGTCTTCTAAATGTCGTTGGTGGCCC   |
| 1 hop | hop 8  | hop 8  | GGGATCCATGGGCACTATTTATATCAACTACTTTGAACGCTTTTTTCTTTTCCAAATGTCGTTGGTGGCCC  |
| 1 apt | apt 3  | apt 3  | GGGATCCATGGGCACTATTTATATCAACATAGCCCTGATTTTTTCTACAGACCAAATGTCGTTGGTGGCCC  |
| 1 apt | apt 14 | apt 14 | GGGATCCATGGGCACTATTTATATCAACCGCGCTTTTTTCAGAAGATTGGCGTAAATGTCGTTGGTGGCCC  |
| 1 apt | apt 27 | apt 27 | GGGATCCATGGGCACTATTTATATCAACGTACATGCTGCCTATTGGTCTTGTCAAATGTCGTTGGTGGCCC  |
| 1 apt | apt 32 | apt 32 | GGGATCCATGGGCACTATTTATATCAACAGCACACCCTATTCAAGCAATGTAAATGTCGTTGGTGGCCC    |
| 1 apt | apt 34 | apt 34 | GGGATCCATGGGCACTATTTATATCAACGTATTTTTTCTACATTGATATAGCTAAATGTCGTTGGTGGCCC  |
| 1 apt | apt 37 | apt 37 | GGGATCCATGGGCACTATTTATATCAAC TTCCTGATATTCCTACACTTTTGCAAAATGTCGTTGGTGGCCC |

Suppl. Table S2. List of primers used for defense related genes RT-qPCR (5'-3'):

AtActin2f: GAAACCCTCGTAGATTGGCA

AtActin2r: CTCTCCCGCTATGTATGTTCGC

MEKK1f: TATATGGAGCCTCGGGTGCA

MEKK1r: CAGCAGTTCAGCTGCAGTT

EDS1f: CTGGTACAGTCGATGGGAAAG

EDS1r: TCTTCTATCCATGCTAGTTTC

PAD4f: TTGCCAGTCACCGGAGATGT

PAD4r: GAGATAGAAGCCAAAGTGCGG

PR1f: TCTAAGGGTTCACAACCAGG

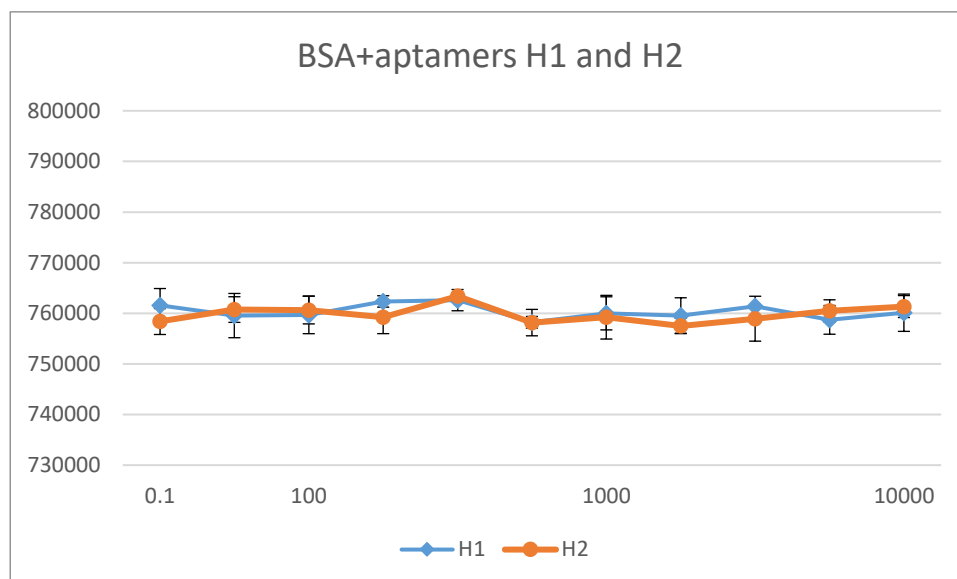
PR1r: CCTTCTCGCTAACCCACATG

WRKY40f: CTAGAGACAATCCATCTCCA

WRKY40r: TGCTGCAACGGGTGTTGAAG

### Supplementary Figure S1

Binding of aptamers H1 and H2 to the BSA protein (Promega, R3961). The concentration of the fluorescently labeled RNA aptamers is 50nM, the concentration of the BSA protein 0.1 - 10000 nM.



### Supplementary Figure S2

Binding of GFP-aptamer and HopU1 protein. The concentration of the fluorescently labeled RNA GFP-aptamer is 50nM, the concentration of the HopU1 protein 0.1 - 10000nM.

