## Supplementary Table 7.

List of the top 50 motifs (3-mers) found to be discriminating between immunoprecipitated miRNAs and remaining miRNAs by Fisher's exact test on the number of sequences with and without the motif in immunoprecipitated and remaining miRNAs.

|  | motif | Fisher pvalue | \% of IPed miRNAs with motif | \% of remaining miRNAs with motif | \% of all miRNAs with motif | ratio <br> (IPed/remaining) | difference (IPedremaining) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | AAB | $4.71 \mathrm{E}-06$ | 63.60\% | 48.00\% | 49.40\% | 1.326 | 15.6 |
| 2 | AAD | $1.42 \mathrm{E}-05$ | 56.10\% | 41.40\% | 42.70\% | 1.355 | 14.7 |
| 3 | AAG | $1.11 \mathrm{E}-05$ | 39.30\% | 25.60\% | 26.90\% | 1.536 | 13.7 |
| 4 | AAH | $1.65 \mathrm{E}-05$ | 50.20\% | 35.80\% | 37.10\% | 1.403 | 14.4 |
| 5 | AAS | 5.53E-06 | 53.60\% | 38.10\% | 39.50\% | 1.406 | 15.5 |
| 6 | AAV | $5.34 \mathrm{E}-06$ | 56.90\% | 41.50\% | 42.90\% | 1.373 | 15.5 |
| 7 | ABR | $5.68 \mathrm{E}-07$ | 89.50\% | 76.10\% | 77.30\% | 1.177 | 13.5 |
| 8 | AGR | 5.13E-07 | 70.70\% | 53.90\% | 55.50\% | 1.311 | 16.8 |
| 9 | AHD | $2.11 \mathrm{E}-06$ | 91.20\% | 79.10\% | 80.20\% | 1.153 | 12.1 |
| 10 | AHG | $9.16 \mathrm{E}-06$ | 65.30\% | 50.30\% | 51.70\% | 1.299 | 15 |
| 11 | AHK | $1.56 \mathrm{E}-05$ | 85.80\% | 73.40\% | 74.60\% | 1.169 | 12.4 |
| 12 | AKV | $1.50 \mathrm{E}-05$ | 92.10\% | 81.60\% | 82.60\% | 1.128 | 10.4 |
| 13 | AMB | $8.49 \mathrm{E}-06$ | 83.30\% | 70.10\% | 71.30\% | 1.188 | 13.2 |
| 14 | AMD | $1.46 \mathrm{E}-06$ | 82.40\% | 67.70\% | 69.10\% | 1.217 | 14.7 |
| 15 | AMK | $1.39 \mathrm{E}-06$ | 74.90\% | 59.20\% | 60.60\% | 1.266 | 15.7 |
| 16 | ARA | $3.10 \mathrm{E}-06$ | 54.80\% | 39.00\% | 40.50\% | 1.406 | 15.8 |
| 17 | ARD | $1.57 \mathrm{E}-05$ | 87.90\% | 76.00\% | 77.10\% | 1.156 | 11.9 |
| 18 | ARR | $2.31 \mathrm{E}-07$ | 81.60\% | 65.70\% | 67.20\% | 1.242 | 15.9 |
| 19 | ASD | $5.55 \mathrm{E}-08$ | 95.00\% | 82.60\% | 83.80\% | 1.15 | 12.4 |
| 20 | ASK | $4.19 \mathrm{E}-06$ | 87.00\% | 74.20\% | 75.40\% | 1.173 | 12.8 |
| 21 | ASR | $6.44 \mathrm{E}-07$ | 81.60\% | 66.20\% | 67.70\% | 1.232 | 15.4 |
| 22 | AVD | $1.21 \mathrm{E}-06$ | 96.20\% | 86.20\% | 87.20\% | 1.116 | 10 |
| 23 | AVG | $7.43 \mathrm{E}-06$ | 70.70\% | 55.80\% | 57.20\% | 1.267 | 14.9 |
| 24 | AVK | $1.07 \mathrm{E}-07$ | 93.70\% | 81.00\% | 82.20\% | 1.158 | 12.8 |
| 25 | AVR | $2.22 \mathrm{E}-06$ | 87.90\% | 74.70\% | 76.00\% | 1.176 | 13.1 |
| 26 | AWB | $1.05 \mathrm{E}-05$ | 83.70\% | 70.70\% | 71.90\% | 1.183 | 13 |
| 27 | AWG | $1.61 \mathrm{E}-05$ | 59.80\% | 45.00\% | 46.40\% | 1.33 | 14.8 |
| 28 | AWS | $3.47 \mathrm{E}-06$ | 77.80\% | 63.00\% | 64.30\% | 1.236 | 14.9 |
| 29 | AWV | $2.71 \mathrm{E}-07$ | 82.40\% | 66.80\% | 68.30\% | 1.234 | 15.6 |
| 30 | AYD | $1.55 \mathrm{E}-05$ | 83.30\% | 70.40\% | 71.60\% | 1.183 | 12.9 |
| 31 | BBT | $4.36 \mathrm{E}-07$ | 83.70\% | 93.80\% | 92.80\% | 0.892 | -10.1 |
| 32 | BGA | $1.06 \mathrm{E}-09$ | 78.20\% | 58.60\% | 60.40\% | 1.335 | 19.7 |


| 33 | BGR | $5.12 \mathrm{E}-07$ | $91.20 \%$ | $78.40 \%$ | $79.60 \%$ | 1.164 | 12.8 |
| ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 34 | BKT | $2.74 \mathrm{E}-06$ | $65.30 \%$ | $79.10 \%$ | $77.80 \%$ | 0.825 | -13.8 |
| 35 | BKY | $3.89 \mathrm{E}-07$ | $90.80 \%$ | $97.80 \%$ | $97.10 \%$ | 0.929 | -7 |
| 36 | BRA | $1.14 \mathrm{E}-08$ | $90.00 \%$ | $74.50 \%$ | $76.00 \%$ | 1.207 | 15.4 |
| 37 | BTY | $6.64 \mathrm{E}-06$ | $62.30 \%$ | $76.30 \%$ | $75.00 \%$ | 0.818 | -13.9 |
| 38 | DAA | $5.46 \mathrm{E}-07$ | $56.10 \%$ | $39.10 \%$ | $40.70 \%$ | 1.433 | 16.9 |
| 39 | DAH | $7.71 \mathrm{E}-09$ | $90.00 \%$ | $74.30 \%$ | $75.80 \%$ | 1.211 | 15.6 |
| 40 | DAM | $1.30 \mathrm{E}-06$ | $77.80 \%$ | $62.30 \%$ | $63.80 \%$ | 1.248 | 15.5 |
| 41 | DAW | $1.98 \mathrm{E}-07$ | $76.60 \%$ | $59.70 \%$ | $61.30 \%$ | 1.283 | 16.9 |
| 42 | DAY | $3.93 \mathrm{E}-08$ | $84.10 \%$ | $67.60 \%$ | $69.10 \%$ | 1.245 | 16.5 |
| 43 | DGA | $5.98 \mathrm{E}-09$ | $82.80 \%$ | $65.00 \%$ | $66.70 \%$ | 1.274 | 17.8 |
| 44 | DRA | $1.39 \mathrm{E}-07$ | $88.70 \%$ | $74.30 \%$ | $75.60 \%$ | 1.194 | 14.4 |
| 45 | DSA | $3.35 \mathrm{E}-07$ | $97.10 \%$ | $87.00 \%$ | $87.90 \%$ | 1.116 | 10.1 |
| 46 | GAA | $1.32 \mathrm{E}-06$ | $36.80 \%$ | $22.20 \%$ | $23.60 \%$ | 1.656 | 14.6 |
| 47 | GAB | $4.88 \mathrm{E}-08$ | $76.20 \%$ | $58.30 \%$ | $60.00 \%$ | 1.306 | 17.9 |
| 48 | GAD | $4.02 \mathrm{E}-09$ | $77.40 \%$ | $58.30 \%$ | $60.10 \%$ | 1.327 | 19.1 |
| 49 | GAH | $1.51 \mathrm{E}-10$ | $73.20 \%$ | $51.90 \%$ | $53.90 \%$ | 1.411 | 21.3 |
| 50 | GAK | $3.37 \mathrm{E}-06$ | $64.40 \%$ | $48.60 \%$ | $50.10 \%$ | 1.327 | 15.9 |

