

Table EV1. High-throughput luciferase miRNAs screening.

Selected miRNAs targeting the 3'UTR of TRF2 tested in the screening are shown below. In *italics* TRF2 targeting miRNAs already reported in the literature. Two independent experiments were performed.

| miRNAs | Renilla/Firefly Ratio | | | Stand.Dev |
|-----------------------|-----------------------|--------------|-------------|-------------|
| | Experiment 1 | Experiment 2 | Average | |
| hsa-miR-182* | 0,311467542 | 0,44608985 | 0,378778696 | 0,095192347 |
| hsa-miR-519e* | 0,331903826 | 0,514975042 | 0,423439434 | 0,129450898 |
| hsa-miR-296-3p | 0,35150408 | 0,709650582 | 0,530577331 | 0,253247821 |
| hsa-miR-508-5p | 0,564598783 | 0,831281198 | 0,697939991 | 0,188572944 |
| hsa-miR-1207-5p | 0,669195399 | 0,740099834 | 0,704647616 | 0,050137007 |
| hsa-miR-1 | 0,78289545 | 0,715806988 | 0,749351219 | 0,047438706 |
| hsa-miR-515-5p | 0,681550061 | 0,835274542 | 0,758412302 | 0,108699623 |
| hsa-miR-363* | 0,607329194 | 0,957737105 | 0,78253315 | 0,24777581 |
| hsa-miR-206 | 0,723444443 | 0,8718802 | 0,797662321 | 0,10495993 |
| hsa-let-7e | 0,545741667 | 1,054908486 | 0,800325076 | 0,360035311 |
| <i>hsa-miR-23a</i> | 0,731804741 | 0,901331115 | 0,816567928 | 0,119873249 |
| hsa-miR-760 | 0,807697667 | 0,945257903 | 0,876477785 | 0,097269776 |
| hsa-miR-596 | 0,742022882 | 1,061397671 | 0,901710276 | 0,225832078 |
| hsa-miR-23b | 0,791627316 | 1,031447587 | 0,911537452 | 0,16957854 |
| hsa-miR-129-5p | 1,016798006 | 0,832113145 | 0,924455575 | 0,130591918 |
| hsa-miR-130a* | 0,855815826 | 1,151081531 | 1,003448678 | 0,208784382 |
| hsa-miR-1909 | 0,693533155 | 1,315973378 | 1,004753266 | 0,440131703 |
| hsa-miR-125b-2* | 0,69121085 | 1,565557404 | 1,128384127 | 0,618256378 |
| hsa-miR-29b-1* | 0,917496246 | 1,354575707 | 1,136035976 | 0,309061851 |
| hsa-miR-148a | 1,057484789 | 1,27437604 | 1,165930414 | 0,153365274 |
| hsa-miR-659 | 0,921862179 | 1,430948419 | 1,176405299 | 0,359978333 |
| hsa-miR-570 | 0,741186853 | 1,655574043 | 1,198380448 | 0,646569383 |
| hsa-miR-1276 | 1,108947067 | 1,353244592 | 1,23109583 | 0,172744437 |
| hsa-miR-663 | 1,184189748 | 1,416306156 | 1,300247952 | 0,164131087 |
| hsa-miR-922 | 1,187626759 | 1,423960067 | 1,305793413 | 0,167112884 |
| hsa-miR-513b | 1,011967612 | 1,720133111 | 1,366050362 | 0,500748627 |
| hsa-miR-412 | 1,293245189 | 1,513311148 | 1,403278169 | 0,155610132 |
| hsa-miR-373* | 1,366351349 | 1,464392679 | 1,415372014 | 0,069325689 |
| hsa-miR-148b | 0,988930346 | 1,91530782 | 1,452119083 | 0,655047794 |
| hsa-miR-369-3p | 1,597188463 | 1,328618968 | 1,462903716 | 0,189907311 |
| hsa-miR-101 | 0,90625629 | 2,023627288 | 1,464941789 | 0,79010061 |
| <i>hsa-miR-490-3p</i> | 1,317954514 | 1,66156406 | 1,489759287 | 0,24296864 |
| hsa-miR-103-2* | 1,53114211 | 1,519800333 | 1,525471221 | 0,008019847 |
| hsa-miR-130b | 1,463702373 | 1,587687188 | 1,525694781 | 0,087670503 |
| hsa-miR-186 | 1,890542026 | 1,22828619 | 1,559414108 | 0,468285593 |
| hsa-miR-130a | 1,52863402 | 1,591846922 | 1,560240471 | 0,044698271 |
| hsa-miR-338-3p | 1,974609466 | 1,156239601 | 1,565424533 | 0,578674881 |
| hsa-miR-301a | 1,628957595 | 1,568219634 | 1,598588614 | 0,042948224 |
| hsa-miR-454 | 1,724172098 | 1,594509151 | 1,659340625 | 0,091685549 |
| hsa-miR-566 | 1,6634206 | 1,684026622 | 1,673723611 | 0,014570658 |
| hsa-miR-301b | 1,674939233 | 1,807321131 | 1,741130182 | 0,093608138 |
| hsa-miR-409-3p | 1,427753093 | 2,074875208 | 1,75131415 | 0,457584436 |
| hsa-miR-214 | 1,409174653 | 2,132113145 | 1,770643899 | 0,51119471 |
| hsa-miR-152 | 1,492034494 | 2,11031614 | 1,801175317 | 0,437191144 |
| hsa-miR-1268 | 1,568298989 | 2,102163062 | 1,835231025 | 0,377498906 |
| hsa-miR-497* | 1,75213265 | 1,973211314 | 1,862671982 | 0,156326223 |
| hsa-miR-616* | 1,870291527 | 2,110815308 | 1,990553417 | 0,170075997 |
| hsa-miR-96 | 1,815578022 | 2,525124792 | 2,170351407 | 0,501725333 |
| hsa-miR-7-2* | 2,021891595 | 2,679201331 | 2,350546463 | 0,464788172 |
| hsa-miR-550 | 2,040748711 | 2,828785358 | 2,434767034 | 0,557226057 |
| hsa-miR-664* | 1,87001285 | 3,033610649 | 2,45181175 | 0,822787894 |
| hsa-miR-126* | 2,494619993 | 2,565723794 | 2,530171894 | 0,050277979 |
| hsa-miR-7-1* | 2,195785791 | 3,151580699 | 2,673683245 | 0,675849061 |
| hsa-miR-940 | 1,713117927 | 3,686688852 | 2,699903389 | 1,395525384 |