Table S1. Various apoptosis-related miRNAs in MI.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **microRNA** | **Expression status** | **Apoptosis status** | **Target** | **Model** | **Cell line** | **Ref** |
| miR-96 | Up | Up | XIAP | In vivo | - | [67] |
| miR-34a | - | - | PNUTS | In vivo | - | [68] |
| MiR-124 | Up | Up | STAT3 | In vivo | - | [69] |
| miR-146a | Down | Down | cyclophilin D | In vivo, in vitro | AC16 | [70] |
| miR-762 | Down | - | ND2 | In vivo | - | [71] |
| miR-431 | Down | Down | HIPK3 | In vivo, in vitro | H9c2 | [72] |
| miR-30e-5p | Up | - | PTEN | In vivo, in vitro | H9c2 | [73] |
| miR-26a | Down | Down | CTGF | In vitro, human | H9c2 | [74] |
| MiR-708-3p | Down | - | ADAM17 | In vivo, in vitro | H9c2 | [75] |
| miR-124 | Up | Up | Dhcr24 | In vivo, human | - | [5] |
| miR-221/222 | Down | Down | PUMA | In vivo, in vitro | H9c2 | [76] |
| MiR-134-5p | Up | Up | KDM2A | In vivo | - | [77] |
| miR-382-5p | Up | - | STC1 | In vivo, in vitro | HL-1 | [78] |
| MiR-147 | Down | Down | HIPK2 | In vivo, in vitro | H9c2 | [79] |
| MiR-204 | - | Down | SIRT1 | In vivo | - | [80] |
| miR-132 | Down | Down | IL-1β | In vivo | - | [81] |
| MiR-26a | - | Down | GSK-3β | In vivo | - | [82] |
| miR-135a-5p | Down | Down | CXCL12 | In vivo, in vitro | H9c2 | [83] |
| MiR-145-5p | Up | Up | PI3K | In vivo, in vitro | H9c2 | [84] |
| MiR-34a | - | - | Wnt | In vivo | - | [85] |
| MiR-30b-5p | Down | Up | Wnt | In vivo | - | [86] |
| MiR-154 | Up | - | Wnt | In vivo | - | [87] |
| MiR-323-3p | Down | Down | TGF-β2 | In vivo, in vitro | H9c2 | [88] |
| miR-124 | - | Up | P38, PI3K | In vitro, human | HUVECs | [33] |
| miR-98 | Down | Down | caspase-3 | In vivo | - | [89] |
| miR-124-3p | Up | - | SIRT1 | In vivo, in vitro | H9C2 | [90] |
| miR-346 | Up | Up | NFIB | In vivo, in vitro | H9c2 | [91] |
| MiR-808 | - | Down | TGF-β1 | In vivo | - | [92] |
| MiR-219a-2 | Down | Down | HIF1α | In vivo, in vitro | HL-1 | [93] |
| Mir-34a | Down | - | ERK1/2 | In vivo | - | [94] |
| miR-26a-5p | - | Down | ADAM17 | In vivo | - | [95] |
| miR-16-5p | Up | Up | IRS1 | In vitro | AC16 | [96] |
| miR-30a, -195, let-7b | Up | - | - | Human | - | [97] |
| miR-335 | Down | Down | MAP3K2 | In vivo | - | [98] |
| miR-431-5p | Up | - | selenoprotein T | In vitro | HL-1 | [99] |
| miR-34a-5p | Up | Up | Notch Receptor 1 | In vivo, in vitro | - | [100] |
| MiR-26a | - | - | PTEN | In vivo, in vitro | NMVC | [101] |
| miR-7a/b | Down | Down | PARP-1 | In vivo, in vitro | H9c2 | [102] |
| miR-214 | - | Down | PUMA, PTEN | In vitro, human | HZ-H358 | [103] |
| MiR-101 | Down | Down | DDIT4 | In vivo, in vitro | H9c2 | [104] |
| miR-126-5p | Down | Down | IL-17A | In vitro, human | H9c2 | [105] |
| miR-125b-5p | - | - | bak1, klf13 | In vivo | - | [106] |
| miR‑133a | Up | Up | Bcl2l1 | In vitro, in vivo, human | 293T | [107] |
| miR-375 | - | Down | PDK-1 | In vivo, in vitro | RAW264.7 | [108] |
| miR-200a | - | - | Keap1 | In vivo, in vitro | NMVCs | [109] |
| miR-203 | Down | Down | Tyrosine Phosphatase 1B | In vivo, in vitro | H9c2 | [110] |
| miR-145 | Up | - | SGK1 | In vitro | H9c2, HL-1 | [111] |
| MiR-125b | Down | Down | P38 | In vivo, in vitro | H9C2 | [112] |
| miR-802-5p | Up | - | PTCH1 | In vitro | H9c2 | [113] |
| MiR-711 | Up | Up | PPARγ | In vivo | - | [114] |
| MiR-128 | Up | Up | SOX7 | In vivo, in vitro | H9c2 | [115] |
| miR-451 | Down | - | AMPK | In vivo | - | [116] |
| MiR-134-5p | Up | Up | XIAP | In vitro | AC16, HCM | [117] |
| mir-21 | - | - | PTEN | In vivo, in vitro | CMEC | [118] |
| miR-409-5p | Down | Down | USP7 | In vivo, in vitro | H9c2 | [119] |
| miR-24 | - | Down | NF-κB | In vivo, in vitro | H9C2 | [120] |
| MiR-489 | Up | Up | IGF1 | In vitro | H9c2 | [51] |
| miR-129 | Down | Down | PTEN | In vivo, in vitro | H9C2 | [121] |
| miR-200a | Up | Up | Fus | In vivo | - | [122] |
| miR-221 | - | Down | myoFB | In vivo, in vitro | H9c2 | [123] |
| miR-96-5p | Down | Up | BCL2L13 | In vitro, human | H9c2 | [124] |
| MiR-448-5p | Up | Up | VEGFA | In vitro | H9C2 | [125] |
| miR-205 | Up | Up | Rnd3 | In vivo | - | [126] |
| MiR-135a | - | Down | TLR4 | In vivo, in vitro | H9c2 | [127] |
| MiR-145-5p | Down | Down | CD40 | In vitro | H9c2 | [128] |
| miR-134-5p | Up | Up | Creb1 | In vivo, in vitro | - | [129] |
| miR-208a | Up | Up | - | In vivo | - | [130] |
| miR-34a-5p | Up | Up | ZEB1 | In vitro | H9c2, HL-1 | [131] |
| MiR-324 | Down | Down | SOCS3 | In vivo | - | [132] |
| miR-124 | Up | - | STAT3 | In vivo | - | [133] |
| miR-384-3p | Up | Up | HSP70 | In vivo | - | [134] |
| miR-129-5p | Down | Down | HMGB1 | In vivo, in vitro | H9c2 | [135] |
| MiR-223-3p | Down | Down | PI3K | In vivo | - | [136] |
| miR-126 | Down | - | - | In vitro | H9c2 | [137] |
| miR-483-3p | Up | Up | IGF‑1 | In vitro, human | H9c2 | [138] |
| MiR-223 | Up | Up | Foxo3a | In vivo | - | [139] |
| MiR-495 | Up | Up | Bcl-2 | In vitro | H9c2 | [140] |
| miR-539 | Up | - | MEK | In vitro | H9C2 | [141] |
| miR-23a-5p | Up | Up | PI3K | In vivo | - | [142] |
| miR-361 | - | Up | PHB1 | In vivo | - | [143] |
| miR-4732-3p | - | Down | - | In vivo | - | [144] |
| MiR-1247-3p | Down | Down | BCL2L11, caspase-2 | In vitro | H9c2 | [145] |
| miR-429 | Down | Up | MO25 | In vivo, in vitro | - | [146] |
| miR-184 | Up | Up | FBXO28 | In vitro | H9c2 | [147] |
| miR-143 | Up | - | Atg7 | In vivo | - | [148] |
| miR-146a-3p | - | Down | IRAK1, TRAF6 | In vivo, in vitro | H9C2 | [149] |
| miR-19a | Down | Down | ACSL1 | In vitro | AC16 | [150] |
| miR-101 | Up | - | DIMT1 | In vitro | H9c2 | [151] |
| miR-148b | Up | Up | Wnt-1 | In vivo, in vitro | H9C2 | [152] |
| miR-375 | Down | Down | NLK | In vivo, in vitro | H9c2 | [153] |
| miR-494 | Down | - | Proapoptotic, antiapoptotic protein | In vivo, in vitro | - | [154] |
| miR-21 | Up | Down | PDCD4 | In vivo, in vitro | HEK293A | [155] |
| miR‑199a‑5p | Up | Down | HIF‑1α | In vitro, human | H9c2 | [156] |
| miR-92a | Up | Up | - | In vivo, in vitro | HL-1 | [157] |
| miR-26a | Up | - | GSK-3β | In vivo | - | [158] |
| miR-206-3p | Down | - | TLR4 | In vivo | - | [159] |
| miR-218-5p | Up | - | MEF2C | In vivo, in vitro | H9c2 | [160] |
| miR-210 | Up | Down | E2F3 | In vitro | - | [161] |
| miR-503 | Down | Up | PI3K, p85, Bcl-2 | In vivo, in vitro | H9c2 | [162] |
| miR-146a | - | Up | VEGF | In vivo | - | [66] |
| miR-499 | Down | Down | Pdcd4, Pacs2 | In vivo, in vitro | H9c2  HeLa | [163] |
| miR-294 | Up | Down | - | In vivo, in vitro | - | [164] |
| miR-340-5p | Down | Down | Act1 | In vivo, in vitro | H9C2 | [165] |
| miR-125b | Up | Down | SFRP5 | In vitro | HEK-293T | [166] |
| miR-499-5p | Down | Down | PDCD4 | In vivo, in vitro | - | [167] |
| miR-105 | Down | Down | RIP3, BNIP3 | In vivo, in vitro | H9C2 | [168] |
| miR-874-3p | Down | Down | GZMB | Human | - | [169] |
| miR-182-5p | Up | Up | STK17A | In vivo, in vitro | H9C2 | [170] |
| miR-99a | Down | Down | mTOR | In vivo, in vitro | - | [171] |
| miR-29 | Down | - | PI3K | In vivo, in vitro | 3B-11 | [172] |
| miR-34a | Down | Down | TNFα | In vivo | - | [173] |
| miR-302 | Up | Up | Mcl-1 | In vitro | H9c2 | [174] |
| miR-145 | Down | Down | PDCD4 | In vivo, in vitro | HEK-293T | [175] |
| miR-363 | Up | Up | Notch1 | In vitro | H9C2, HEK-293T | [176] |
| miR-133b | Down | Down | NLRP3 | In vivo, in vitro | H9c2 | [177] |
| miR-150 | Up | Up | ELK1 | In vitro | HUVECs | [178] |
| miR-101 | Down | Down | RUNX1 | In vivo, in vitro | HEK‐293T | [179] |
| miR-7b | Down | Down | HIF1a | In vivo, in vitro | H9C2 | [180] |
| miR-223 | Up | Down | Akt | In vivo, in vitro | H9c2 | [181] |
| miR-23b | Up | Up | - | Human | - | [182] |
| miR-34a-5p | - | Down | CTRP9 | In vivo, in vitro | - | [183] |
| miR-24-3p | Down | - | p16 | In vitro | H9c2 | [184] |
| miR-486 | Down | Down | FOXD3 | In vivo, in vitro | H9C2 | [185] |
| miR-16 | Up | Up | β2-AR | In vivo, in vitro | - | [186] |
| miR-208a | Up | Up | NLK | In vivo, in vitro | H9C2 | [187] |
| miR‑429 | Up | Up | Notch1 | - | AC16 | [188] |
| miR-28 | Up | Up | ALDH2 | In vivo, in vitro | 293T | [189] |
| miR-615-3p | Down | Down | MEF2A | Human | - | [190] |
| miR-486-5p | Down | Down | PTEN | In vivo | - | [191] |
| miR-489 | Up | Up | SPIN1 | In vivo, in vitro | H9C2 | [192] |
| miR-18-5p | Down | Down | RUNX1 | In vitro | H9C2 | [193] |
| miR-208a | Up | Up | CHD9 | In vitro | H9C2 | [194] |
| miR-194-5p | Up | Up | PAK2 | In vivo, in vitro | H9C2 | [195] |
| miR-214 | Up | Down | Ncx1 | In vivo, in vitro | - | [196] |
| miR-92a | Up | Up | KLF4 | In vivo | - | [197] |
| miR-486 | Down | Down | NDRG2 | In vitro | H9C2 | [198] |
| miR-145-5p | Down | Down | NOH-1 | In vivo, in vitro | H9C2 | [199] |
| miR-325-3p | Down | Down | RIPK3 | In vivo, in vitro | HEK293T | [200] |
| miR-143 | Up | Up | PKCε | In vivo, in vitro | - | [201] |
| miR-484 | Down | Down | Fis1 | In vivo | - | [202] |
| miR-24 | Down | Down | - | In vivo, in vitro | - | [203] |
| miR-27-3p | Down | - | galectin-3 | - | - | [204] |
| miR-324-5p | Down | Down | Mtfr1 | In vivo | - | [205] |
| miR-138 | Down | Down | MLK3 | In vitro | H9C2 | [206] |
| miR-1283 | Down | Down | GADD45A | In vitro | CCC‑HEH‑2 | [207] |
| miR-21 | Down | Down | - | In vivo | - | [208] |
| miR-19b-1 | Down | Down | Bcl2l11 | In vivo, in vitro | - | [209] |
| miR-1, -21 | - | Down | Akt | In vivo, in vitro | - | [210] |
| miR-361-3p | Down | Down | caspase-2/-8/-9 | In vivo, in vitro | H9C2 | [211] |
| miR-29a-3p | Down | Down | Bax | In vivo, in vitro, human | - | [212] |
| miR-150 | Up | Up | c-myb | - | - | [213] |
| miR-21 | Down | Down | PDCD4 | In vivo, in vitro | - | [214] |
| miR-761 | Down | Down | MFF | In vivo | - | [215] |
| miR-455-5p | - | Down | SOCS3 | - | - | [216] |
| miR-21 | - | - | PTEN | In vivo, in vitro | H9C2 | [217] |
| miR-34a | Up | Up | Notch1 | In vivo, in vitro | H9C2 | [218] |
| miR-370 | Down | Down | PLIN5 | In vivo | - | [219] |
| miR-147 | Down | Down | RAPTOR | In vivo | - | [220] |
| miR-195 | Up | Up | Bcl-2 | In vivo, in vitro | - | [221] |
| miR-374 | Down | Down | DTNA | In vivo | - | [222] |
| miR-122 | Up | - | - | In vivo, in vitro | H9C2 | [223] |
| miR-497 | Down | Up | Bcl2, LC3B | In vivo, in vitro | - | [224] |
| miR-212-3p | Down | - | NR4A2 | In vivo, in vitro | H9c2, HEK293 | [225] |
| miR-377 | Down | Down | LILRB2 | In vitro, Human | - | [226] |
| miR-433 | Up | Up | NDRG4 | In vivo, in vitro | H9c2 | [227] |
| miR-26b | - | Down | PTGS2 | In vivo | - | [228] |
| miR-301a | - | Down | PTEN | In vivo, in vitro | H9C2 | [229] |
| miR-34a | - | Up | Bcl-2 | In vitro, Human | H9C2 | [230] |
| miR‑124‑3p | Up | Up | NKRF | In vitro, Human | H9C2 | [231] |
| miR-499-5p | Down | Down | SOX6 | In vitro | H9C2 | [232] |
| miR-129-5p | Down | Down | SOCS2 | In vivo, in vitro | H9C2 | [233] |
| miR-137-3p | Up | Up | KLF15 | In vivo, in vitro | H9C2 | [234] |
| miR-92a | Up | Up | - | In vitro | H9C2 | [235] |
| miR-140-3p | - | Down | - | In vivo | - | [236] |
| miR-27a-5p | Down | Down | Atg7 | In vivo, in vitro | H9C2 | [237] |
| miR-26a-5p | Down | Down | WNT5A | In vitro | H9C2 | [238] |
| miR-423-5p | Up | Up | MYBL2 | In vitro | H9C2 | [239] |
| miR-663b | Up | Up | BCL2L1 | In vitro | H9C2 | [240] |
| miR-496 | Down | Down | Hook3 | In vitro | H9C2 | [241] |
| miR-93 | Up | Down | - | In vivo, Human | - | [242] |
| miR-1278 | Down | Down | IL-22, CXCL14 | In vivo, in vitro | - | [243] |
| miR-34a | Up | Up | ALDH2 | In vivo, Human | - | [244] |
| miR-532-5p | Down | Down | PDCD4 | In vivo, in vitro | H9C2 | [245] |
| miR-124 | Up | Up | SphK1 | In vivo | - | [246] |
| miR-223-3p | Up | Up | KLF15 | In vitro | H9C2 | [247] |
| miR-155 | Up | Up | SOCS1 | In vivo | - | [248] |
| miR-379 | - | Down | TNFAIP8 | In vivo, in vitro | H9C2 | [249] |
| miR-125b-5p | - | Down | NLRC5 | In vivo, in vitro | HL-1 | [250] |
| miR-210 | Up | - | CXCR4 | In vitro | H9C2 | [251] |
| miR-212 | Down | Down | AQP9 | In vivo, in vitro | - | [252] |
| miR-17-5p | Up | Up | STAT3 | In vivo | - | [253] |
| miR-122 | - | Up | - | In vivo, in vitro | - | [254] |
| miR-140-5p | - | Up | MLK3 | In vitro | H9C2 | [255] |
| miR-130a | Up | Up | Smad4 | In vitro | H9C2, HEK293 | [256] |
| miR-24 | Down | Down | Bim | In vivo | - | [257] |
| miR-21 | Up | - | PDCD4 | In vitro | H9C2 | [258] |
| miR-204 | Down | Up | SIRT1 | In vitro | H9C2 | [259] |
| miR-206 | Down | Down | PTP1B | In vivo, in vitro | - | [260] |
| miR-708 | Down | Down | HMGB1 | In vivo, in vitro | H9C2 | [261] |
| miR-30b-5p | Up | Up | Aven | In vitro | AC16 | [262] |
| miR-23a | Up | Up | MnSOD | In vivo | - | [263] |
| miR‑494 | Down | Down | SIRT1 | In vitro | H9C2 | [264] |
| miR-383-5p | Down | Down | PFKM | In vivo, in vitro | H9C2 | [265] |
| miR-145-5p | - | Up | DUSP6 | In vivo, in vitro | H9C2 | [266] |
| miR-21 | Down | - | PDCD4 | In vivo, in vitro, Human | - | [267] |
| miR-204 | Down | - | Cotl1 | In vivo | - | [268] |
| miR-19a | Down | Down | NHE-1 | In vivo, in vitro | - | [269] |
| miR-181b-5p | Up | Up | AKT3, PIK3R3 | In vivo, in vitro | H9C2 | [270] |