**Table S4. Findings of lncRNA-miRNA-mRNA axes in myocardial infarction**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LncRNA | miRNA | mRNA | Mechanism | Ref |
| AK006774 | miR-448 | Bcl-2 | Apoptosis | 1 |
| ANRIL | miR-181a | SIRT1 | Apoptosis | 2 |
| CASC2 | miR-18a | SIRT2 | Oxidative stress | 3 |
| FAF | miR-185-5p | PAK2 | Pyroptosis | 4 |
| HOTAIR | miR-206 | FN1 | Apoptosis | 5 |
| Gm47283 | miR-706 | Ptgs2 | Ferroptosis | 6 |
| 93358 | miR-466c-3p | SLC8A1 | Apoptosis | 7 |
| ZNF561-AS1 | miR-223-3p | NLRP3 | Proliferation; Apoptosis | 8 |
| NORAD | miR-22-3p | PTEN | Apoptosis | 9 |
| HOTTIP | miR-92a-2 | c-Met | N/A | 10 |
| FGD5-AS1 | miR-223-3p | Akt | Apoptosis; Inflammation | 11 |
| KCNQ1OT1 | miR-26a-5p | Atg12 | Autophagy | 12 |
| MALAT1 | miR-26b-5p | Mfn1 | Mitochondrial dynamics; Apoptosis | 13 |
| MALAT1 | miR-25-3p | CDC42 | Angiogenesis; Myocardial regeneration | 14 |
| HULC | miR-377-5p | NLRP3/Caspase‑1/IL‑1β | Apoptosis | 15 |
| RMST | miR-5692 | MAGI3 | NA | 16 |
| LINC00261 | miR-522-3p | TNRC6A | Apoptosis | 17 |
| DANCR | miR-19a-3p | MAPK1/ERK1/2 | Apoptosis | 18 |
| RP11-400K9.4 | miR-423 | PI3K/AKT/ MEK/ERK | Apoptosis | 19 |
| SNHG7 | miR-455-3p | PTAFR | Apoptosis; Inflammation; Fibrosis | 20 |
| MCM3AP-AS1 | miR-24-3p | EIF4G2 | Proliferation; migration | 21 |
| MIAT | miR-488-3p | Wnt/β-catenin | Hypoxia-induced  cardiomyocytes injury | 22 |
| MIAT | miR-181a-5p | JAK2/STAT3 | Apoptosis; Inflammation | 23 |
| MIR4435-2HG | miR-125a-5p | N/A | Apoptosis | 24 |
| SNHG15 | miR-335-3p | TLR4/NF-κB | I/R injury | 25 |
| TTTY15 | miR-98-5p | CRP | N/A | 26 |
| XIST | miR-486-5p | SIRT1 | Hypoxia-induced  cardiomyocytes injury | 27 |
| XIST | miR-191-5p | TRAF3 | Hypoxia-induced  cardiomyocytes injury | 28 |
| XIST | miR-155-5p | N/A | Proliferation; Fibrosis | 29 |
| TUG1 | miR-132-3p | HDAC3 | Apoptosis;  ROS accumulation | 30 |
| MALAT1 | miR-320 | Pten | Apoptosis | 31 |
| ANRIL | miR-7-5p | SIRT1 | Hypoxia-induced  cardiomyocytes injury | 32 |
| Oip5-as1 | miR-29a | SIRT1/AMPK/PGC1α | Apoptosis | 33 |
| TUG1 | miR-142-3p | HMGB1 and Rac1 | Apoptosis; Autophagy | 34 |
| Gpr9 | miR-324-5p | Mtfr1 | Oxidative stress; Apoptosis | 35 |
| MALAT1 | miR-125b-5p | NLCR5 | Apoptosis | 36 |
| MIRF | miR-26a | Bak1 | Apoptosis | 37 |
| Gm4419 | miR-682 | TRAF3 | Apoptosis; Inflammation | 38 |
| Oprm1 | miR-30b-5p | CSE | Apoptosis | 39 |
| HOTAIR | miR-126 | SRSF1 | I/R injury | 40 |
| ROR | miR-138 | Mst1 | Apoptosis | 41 |
| Mirt2 | miR-764 | PDK1 | Apoptosis | 42 |
| ZFAS1 | miR-590-3p | NF-κB | Apoptosis | 43 |
| TTTY15 | let-7b | MAPK6 | Hypoxia-induced  cardiomyocytes injury | 44 |
| RMRP | miR-214-5p | p53 | Apoptosis | 45 |
| SNHG8 | miR-335 | RASA1 | Apoptosis | 46 |
| FGD5-AS1 | miR-195 | RORA | Apoptosis;  Oxidative injury | 47 |
| MIAT | miR-10a-5p | EGR2 | Apoptosis;  Hypoxia-induced  cardiomyocytes injury | 48 |
| HOTAIR | miR-125 | MMP2 | Proliferation; Apoptosis | 49 |
| H19 | miR-22-3p | KDM3A | Apoptosis | 50 |
| AZIN2-sv | miR-214 | PTEN/Akt | Angiogenesis | 51 |
| TUG1 | miR-133b | CTGF | Fibrosis | 52 |
| FTX | miR-29b-1-5p | Bcl2 | Apoptosis | 53 |
| MALAT1 | miR-204 | LC3-II | Autophagy | 54 |
| AK088388 | miR-30a | Beclin-1 and LC3-II | Apoptosis; Autophagy | 55 |
| UCA1 | miR-128 | HSP70 | Autophagy | 56 |
| MALAT1 | miR-125 | JMJD6 | Proliferation; Migration | 57 |
| H19 | miR-675 | PPARα | Apoptosis; Inflammation | 58 |
| H19 | miR-29b-3p | cIAP1 | Apoptosis | 59 |
| MEG3 | miR-22 | HMGB1 | Proliferation | 60 |
| TUG1 | miR-145-5p | Binp3 | Apoptosis; Migration | 61 |

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