Supplementary Table 1. MiRNAs, selected for the network analysis.

| miRNA | Direction of change in expression level in hypertrophy | Biological material | Species (compared groups)\* | Reference |
| --- | --- | --- | --- | --- |
| miR-1-3p | downregulated | left ventricle tissue | human (HCM vs HC) | [[1]](https://www.zotero.org/google-docs/?mTIakN) |
| downregulated | left ventricle tissue | human (HCM vs HC) | [[2]](https://www.zotero.org/google-docs/?USyZZe) |
| miR-19b-3p | downregulated | myocardium | human (aortic stenosis associated hypertrophy vs HC) | [[3]](https://www.zotero.org/google-docs/?zSbDia) |
| downregulated | myocardium | human (HCM vs HC) | [[4]](https://www.zotero.org/google-docs/?nfTqVu) |
| miR-21-5p | upregulated | left ventricle tissue | human (HCM vs HC) | [[5]](https://www.zotero.org/google-docs/?QgJs74) |
| upregulated | ventriculi | mice (DBL with TnI-203/MHC-403 mutations vs non transgenic) | [[6]](https://www.zotero.org/google-docs/?5JtCrg) |
| hsa-miR-29a-3p | downregulated | left ventricle tissue | mice (HCM vs HC) | [[7]](https://www.zotero.org/google-docs/?ecDjay) |
| downregulated | myocardium | mice (transverse aortic constriction, TAC vs ctrl);  human (aortic valve stenosis vs HC) | [[8]](https://www.zotero.org/google-docs/?wLs77H) |
| hsa-miR-93-5p | downregulated | *in vivo*: heart tissue;  *in vitro*: cardiomyocytes | mice (*in vivo:* HCM vs HC; *in vitro:* cardiomyocytes treated with Isoproterenol and Aldosterone vs untreated) | [[9]](https://www.zotero.org/google-docs/?tslUh8) |
| downregulated | cardiomyocytes | rats (*in vitro:* AngII-treated vs untreated cardiomyocytes) | [[10]](https://www.zotero.org/google-docs/?bkAzRf) |
| hsa-miR-133a-3p | downregulated | left ventricle and atria tissues | human (HCM vs HC);  mice (aortic constriction induced hypertrophy vs control; Akt-transgenic vs control);  rats (exercised vs control) | [[11]](https://www.zotero.org/google-docs/?GrhNvH) |
| downregulated | cardiomyocytes | AngII-treated vs untreated cardiomyocytes | [[12]](https://www.zotero.org/google-docs/?EFJqv6) |
| miR-155-5p | downregulated | myocardium | human (HCM vs HC) | [[4]](https://www.zotero.org/google-docs/?hS8Nie) |
| upregulated | left ventricle tissue | human (HCM vs HC) | [[1]](https://www.zotero.org/google-docs/?2vGkmO) |
| hsa-miR-199a-3p | upregulated | myocardium | mice (AngII-treated vs untreated) | [[13]](https://www.zotero.org/google-docs/?GtqRVl) |
| upregulated | left ventricle tissue | human (HCM vs HC) | [[2]](https://www.zotero.org/google-docs/?QvsstQ) |
| hsa-miR-221-3p | upregulated | myocardium | human (HCM vs HC) | [[4]](https://www.zotero.org/google-docs/?WcEI4I) |
| upregulated | left ventricle tissue | human (HCM vs HC), mice (TAC vs ctrl) | [[14]](https://www.zotero.org/google-docs/?yphtH3) |
| hsa-miR-222-3p | upregulated | ventricular cardiomyocytes | rats (physiological hypertrophy vs HC) | [[15]](https://www.zotero.org/google-docs/?4ueC4t) |
| upregulated | myocardium | human (HCM vs HC) | [[4]](https://www.zotero.org/google-docs/?TGtkIB) |
| hsa-miR-451a | downregulated | left ventricle tissue | human (HCM vs HC) | [[5]](https://www.zotero.org/google-docs/?7venGP) |
| downregulated | myocardium | mice (TAC vs HC) | [[16]](https://www.zotero.org/google-docs/?V4FmpW) |
| hsa-miR-497-5p | downregulated | *in vivo*: myocardium;  *in vitro*: cardiomyocytes | mice (*in vivo*: aortic constriction induced hypertrophy vs control;  *in vitro*: *in vitro:* AngII-treated vs untreated cardiomyocytes) | [[17]](https://www.zotero.org/google-docs/?Cz86qk) |
| downregulated | *in vivo*: mycardium;  *in vitro*: cardiomyocytes | rats (*in vivo*: aortic constriction induced hypertrophy vs control;  *in vitro*: *in vitro:* AngII-treated vs untreated cardiomyocytes) | [[18]](https://www.zotero.org/google-docs/?zNtUtY) |

\* According to miRBase database miRNA sequences in studied animal models were identical to those in humans, except for miR-497-5p: in mice and rats it has extra nucleotide on the 3’ end of RNA molecule.

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