

**Table S1.** Symbols, changes in expression and adjusted p-values of 10 most deregulated genes in 7<sup>th</sup>, 15<sup>th</sup> and 30<sup>th</sup> day of cell culture derived from the fragment of right atrial wall.

<b>Right atrial wall D7/D0</b>			
<b>Gene symbol</b>	<b>Gene name</b>	<b>Ratio</b>	<b>Adj. p-value</b>
<i>SFRP2</i>	secreted frizzled-related protein 2	91.25293	3.41E-06
<i>PRRX1</i>	paired related homeobox 1	73.52752	2.28E-06
<i>SNAI2</i>	snail family transcriptional repressor 2	10.69955	1.71E-05
<i>RACGAP1</i>	Rac GTPase activating protein 1	8.056284	0.000174048
<i>RUNX1</i>	RUNX family transcription factor 1	7.688494	0.004060851
<i>TET1</i>	tet methylcytosine dioxygenase 1	7.264942	4.04E-05
<i>PAX6</i>	paired box 6	6.925844	1.44E-05
<i>HIF1A</i>	hypoxia inducible factor 1 subunit alpha	5.643026437	0.002096652
<i>DOCK7</i>	dedicator of cytokinesis 7	5.601316092	2.50E-05
<i>KLF10</i>	Kruppel-like factor 10	5.483210429	0.002867812
<b>Right atrial wall D15/D0</b>			
<b>Gene symbol</b>	<b>Gene name</b>	<b>Ratio</b>	<b>Adj. p-value</b>
<i>PRRX1</i>	paired related homeobox 1	58.0526	2.66E-06
<i>SFRP2</i>	secreted frizzled-related protein 2	45.91556	6.50E-06
<i>TET1</i>	tet methylcytosine dioxygenase 1	8.274278	3.21E-05
<i>RACGAP1</i>	Rac GTPase activating protein 1	7.824558	0.000196515
<i>SNAI2</i>	snail family transcriptional repressor 2	6.952879	3.57E-05
<i>DOCK7</i>	dedicator of cytokinesis 7	6.259523594	2.05E-05
<i>KLF10</i>	Kruppel-like factor 10	6.154489147	0.002262327

<i>HIF1A</i>	hypoxia inducible factor 1 subunit alpha	5.911749057	0.001975997
<i>KITLG</i>	KIT ligand	5.75209235	3.76E-05
<i>ID4</i>	inhibitor of DNA binding 4, HLH protein	5.201814564	0.000160577
<b>Right atrial wall D30/D0</b>			
<b>Gene symbol</b>	<b>Gene name</b>	<b>Ratio</b>	<b>Adj. p-value</b>
<i>PRRX1</i>	paired related homeobox 1	55.30691	2.48E-06
<i>SFRP2</i>	secreted frizzled-related protein 2	32.01501	9.50E-06
<i>TBX3</i>	T-box transcription factor 3	12.71104	1.77E-05
<i>FGF2</i>	fibroblast growth factor 2	9.279203494	7.86E-05
<i>TET1</i>	tet methylcytosine dioxygenase 1	8.381566	3.28E-05
<i>HIF1A</i>	hypoxia inducible factor 1 subunit alpha	7.269599434	0.001293025
<i>DOCK7</i>	dedicator of cytokinesis 7	7.108950161	1.68E-05
<i>KITLG</i>	KIT ligand	6.528684668	3.10E-05
<i>RUNX1</i>	RUNX family transcription factor 1	5.432937	0.01060866
<i>LIF</i>	LIF interleukin 6 family cytokine	5.186656838	0.000310085

**Supplementary Table S2.** Symbols, changes in expression and adjusted p-values of 10 most deregulated genes in 7<sup>th</sup>, 15<sup>th</sup> and 30<sup>th</sup> day of cell culture derived from the fragment of right atrial appendage.

<b>Right atrial appendage D7/D0</b>			
<b>Gene symbol</b>	<b>Gene name</b>	<b>Ratio</b>	<b>Adj. p-value</b>
<i>SFRP2</i>	secreted frizzled-related protein 2	61.19893155	1.81E-07
<i>PRRX1</i>	paired related homeobox 1	24.27644802	9.54E-07
<i>RACGAP1</i>	Rac GTPase activating protein 1	15.49744849	6.78E-06
<i>FANCD2</i>	FA complementation group D2	9.391782881	3.69E-06

<i>SNAI2</i>	snail family transcriptional repressor 2	8.575694836	1.52E-05
<i>ASPM</i>	assembly factor for spindle microtubules	6.994969446	4.82E-06
<i>HIF1A</i>	hypoxia inducible factor 1 subunit alpha	6.557233528	1.92E-05
<i>KLF10</i>	Kruppel-like factor 10	6.553449891	2.20E-06
<i>DOCK7</i>	dedicator of cytokinesis 7	5.783443744	2.49E-06
<i>PAX6</i>	paired box 6	5.268159343	1.35E-05
<b>Right atrial appendage D15/D0</b>			
<b>Gene symbol</b>	<b>Gene name</b>	<b>Ratio</b>	<b>Adj. p-value</b>
<i>SFRP2</i>	secreted frizzled-related protein 2	114.5021533	1.15E-07
<i>PRRX1</i>	paired related homeobox 1	33.31632816	6.94E-07
<i>HIF1A</i>	hypoxia inducible factor 1 subunit alpha	7.752175853	1.58E-05
<i>KLF10</i>	Kruppel-like factor 10	7.474406056	1.85E-06
<i>DOCK7</i>	dedicator of cytokinesis 7	6.587462279	2.15E-06
<i>RACGAP1</i>	Rac GTPase activating protein 1	4.803151211	0.000137476
<i>TET1</i>	tet methylcytosine dioxygenase 1	4.529717852	8.53E-05
<i>KIT</i>	KIT proto-oncogene, receptor tyrosine kinase	4.091056982	2.47E-05
<i>MED14</i>	mediator complex subunit 14	3.985152941	0.000106386
<i>TBX3</i>	T-box transcription factor 3	3.714752736	1.51E-05
<b>Right atrial appendage D30/D0</b>			
<b>Gene symbol</b>	<b>Gene name</b>	<b>Ratio</b>	<b>Adj. p-value</b>
<i>SFRP2</i>	secreted frizzled-related protein 2	110.9425022	1.11E-07
<i>PRRX1</i>	paired related homeobox 1	34.20995421	5.75E-07

<i>HIF1A</i>	hypoxia inducible factor 1 subunit alpha	6.440413457	2.52E-05
<i>DOCK7</i>	dedicator of cytokinesis 7	5.876689307	2.54E-06
<i>KLF10</i>	Kruppel-like factor 10	5.572430881	3.39E-06
<i>TBX3</i>	T-box transcription factor 3	5.538340048	4.18E-06
<i>PAX6</i>	paired box 6	4.958727004	1.99E-05
<i>TET1</i>	tet methylcytosine dioxygenase 1	4.764415595	7.24E-05
<i>WNT2B</i>	Wnt family member 2B	4.417734575	0.00014699
<i>NF1</i>	neurofibromin 1	3.729415734	8.77E-06