Supplementary Table 1 - Sources of microarray data used in the Module Map analysis

GEO Series	Platform	Reference	#Samples	Category	Notes
GSE75	GPL32 (MG-U74Av1)	(24)	24	Aging and development	Effect of aging on hearts from FVB mice
GSE1479	GPL1261 (Mouse 430-2.0)	(24)	30 *	Aging and development	Embryonic development (E12.5 to E18.5) in C57BL/6 mice
GSE2812	GPL81 (MG-U74Av2)	(28)	20	Cardiac teratogen	Pregnant mice were treated with varying doses of TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin, a potent cardiovascular teratogen) on gd14.5. Fetal hearts were collected on gd17.5.
GSE3440	GPL1261 (Mouse 430-2.0)	(30)	15	Drug Treatment	10mcg/kg Aldosterone treatment
GSE3067	GPL1261 (Mouse 430-2.0)	(3)	28	Drug Treatment and Transgenic	Effect of the PPARalpha ligand (WY-14643) on the heart of normal and Delta337T Trbeta1 mutated animals
GSE1471	GPL339 (Mouse 430Av2.0)		12	Knock-out	Cardiac muscle of mdx (dystrophin-deficient) mice compared to WT, two ages
GSE1988	GPL339 (Mouse 430Av2.0)	(20)	7	Knock-out	Comparing aged eNOS KO mice to aged WT mice
GSE2236	GPL1261 (Mouse 430-2.0)	(19)	4	Knock-out	Heart/muscle-specific manganese superoxide dismutase (MnSOD)-deficient mice
GSE6770	GPL1261 (Mouse 430-2.0)	(29)	4	Knock-out	Histone deacetylase-2 (Hdac2) -/- and WT mice
GSE5500	GPL1261 (Mouse 430-2.0)	(1)	21	Knock-out	Mice that express reduced levels of Gata4 at baseline and after pressure overload.
GSE528	GPL75 (Mu11K-A) & GPL76 (Mu11K-B)	(24)	12	Knock-out	E12.5 Homozygous and heterozygous mice harboring a deletion of the Nkx2.5 specific domain (Nkx2.5-SD) were compared to WT
GSE78	GPL75 (Mu11K-A) & GPL76 (Mu11K-B)	(24)	9	Knock-out	Nkx2.5 KO homozygous, heterozygous and WT E9.5 embryos

GSE4120	GPL339 (Mouse 430Av2.0) & GPL340	(9)	10	Knock-out	plakoglobin +/- and wild type mice with/without endurance training
GSE5129	GPL339 (Mouse 430Av2.0) & GPL340	(4)	4	Knock-out	Pressure overload-induced cardiac hypertrophy in IL-18 knockout and littermate control mice
GSE1134	GPL81 (MG-U74Av2)	(16)	4	Knock-out	Transgenic mice lacking one copy of the Na-K-ATPase, isoform alpha1 compared to WT
GSE4710	GPL339 (Mouse 430Av2.0)	(6)	8	Myocardial Infarction	Myocardial Infarction (MI) induced by LAD ligation in Mouse hearts from C57BL/6 and MRL/MpJ strains
GSE775	GPL81 (MG-U74Av2)	(24)	59	Myocardial Infarction	Myocardial Infarction (MI) induced by LAD ligation. Infarcted and non-infarcted regions of the heart checked.
GSE4648	GPL81 (MG-U74Av2) & GPL82 (MG-U7BAv2) & GPL83 (MG-U74C)	(7)	66	Myocardial Infarction	Myocardial Infarction (MI) induced by LAD ligation. Infracted Region (IF), NonInfracted Region (Free Wall - FW) and InterVentricular Septum (IVS) were checked.
GSE415	GPL75 (Mu11K-A) & GPL76 (Mu11K-B)	(14)	18	Myocardial Infarction	Myocardial Infarction (MI) induced by ligation of the coronary artery & Mice suffering from Tranverse Aortic Constriction (TAC), which causes pressure overload.
GSE4616	GPL81 (MG-U74Av2)	(10)	12	Physiological Hypertrophy	Diabetic and control mice with/without exercise
GSE77	GPL81 (MG-U74Av2)	(24)	30	Physiological Hypertrophy	Swimming induced physiological hypertorphy.
GSE76	GPL32 (MG-U74Av1)	(27)	36	Pressure induced overload	Aortic banding leading to pressure induced hypertrophy. The method for creating the model, but not the microarray analysis, is decribed in the paper.
GSE1621	GPL81 (MG-U74Av2)	(31)	26	Pressure induced	Transverse Aortic Constriction (TAC)

				overload	
GSE2459	GPL81 (MG-U74Av2)	(13)	15	Pressure induced overload	Transverse Aortic Constriction (TAC) assayed at 30 weeks (when compensatory hypertrophy is present)
GSE760	GPL32 (MG-U74Av1)	(24)	3	Transgenic	10week old mice transgenic with dominant negative p21ras, causing severe dilated cardiomyopathy.
GSE2355	GPL81 (MG-U74Av2) & GPL82 (MG-U7BAv2)		16	Transgenic	Overexpression of angiotensin II receptor, type 1a
GSE986	GPL81 (MG-U74Av2)	(11)	20	Transgenic	Cardiac transgenesis with the tetracycline transactivator (tTA)
GSE670	GPL75 (Mu11K-A) & GPL76 (Mu11K-B)	(2)	53	Transgenic	Differential Myocardial Gene Expression in the Development and Rescue of Murine Heart Failure
GSE591	GPL81 (MG-U74Av2)	(26)	18	Transgenic	TNFalpha over-expressing transgenic animals
GSE3530	GPL1261 (Mouse 430-2.0)	(15)	36	Transgenic	MAP kinase activation of three major MAP kinase signaling cascades, ERK, p38 and JNK. This article used conditional activation, triggered by Tamoxifen treatment.
GSE4678	GPL339 (Mouse 430Av2.0)	(21)	10	Transgenic	Familial Hypertrophic Cardiomyopathy (FHC) - two alphaTropomyosin mutants
GSE3383	GPL339 (Mouse 430Av2.0) & GPL340	(22)	18	Transgenic	Short and long-term conditional activation of Akt in the heart
GSE1457	GPL81 (MG-U74Av2)		7	Viral Infection	Infection with CVB3 (a cardiotropic virus which leads to cardiac inflammation and fibrosis within 9 days) in Male A/J mice
The following two series were unified into one series (the 3 control samples are identical) - Cardiogenomics.PI3K			18	Transgenic	

GSE558	GPL81 (MG-U74Av2)		9	Transgenic	heterozygous samples of constitutively active PI3K (caPI3K), dominant negative (dnPI3K) and non-transgenic FVB/N littermate controls
GSE1143	GPL81 (MG-U74Av2)	(12)	9	Transgenic	IGF1R overexpressing mice crossed, some of which were crossed with dnPI3K or caPI3K, (the control are the non-transgenic animals from GSE558).
The following three series were unified into one series (the 8 control samples are identical) - EDMD.Mutations			27	Transgenic	
GSE6397	GPL1261 (Mouse 430-2.0)	(18)	15	Transgenic	LmnaH222P Knock In Heterozygous
GSE6398	GPL1261 (Mouse 430-2.0)	(18)	14	Transgenic	LmnaH222P Knock In Homozygous
GSE6399	GPL1261 (Mouse 430-2.0)	(17)	14	Knock-out	Emerin KO

All series were downloaded using the data as processed and presented in the GEO. An exception is the series GSE1988, which was downloaded as raw CEL files from the GEO, and processed locally with the RMA algorithm (8) (using R 2.4, Biocondcutor 1.9 and affy 1.12) (5). All series were then processed further before module creation (see Methods).
GSE558 & GSE1143 were unified to one series. GSE6397, GSE6398 & GSE6399 were unified into one series, since they use the same control samples.
GSE1479 was used without samples from embryonic stages E10.5, E11.5 since they were processed in this manner: "At stages 10.5 and 11.5, we have removed the rostral and caudal parts of the embryo and subjected the middle part, which *includes* the heart, for expression analysis" ((23, 25)[1]) (emphasis added). Such samples which "include" the heart may also include other organs. Preliminary results using these samples raised some questions about their purity and indicated a possible contamination by liver. To avoid confusion, these samples were removed.

[1] The website describing this experiment (schinke, c57bl/6 patterns) has an apparently incorrect description of these samples. The GEO entry (schinke, sample) has a description which seems correct, and this one was used.

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