

Supplementary Table S2: KEGG analysis of the target cluster

	ID	Descriptor	GeneRatio	BgRatio	pvalue	p.adjust	qvalue	geneID	Count
hsa04510	hsa04510	Focal adhe	50/994	203/8393	2.36E-07	7.85E-05	6.35E-05	ACTB/AC	50
hsa04810	hsa04810	Regulation	49/994	229/8393	2.20E-05	0.003659	0.00296	ACTB/AC	49
hsa05205	hsa05205	Proteoglyc	43/994	205/8393	0.00011	0.009579	0.00774	ACTB/AC	43
hsa05165	hsa05165	Human pa	62/994	331/8393	0.00013	0.009579	0.00774	AKT3/AT	62
hsa04360	hsa04360	Axon guid:	39/994	182/8393	0.00014	0.009579	0.00774	BMPR2/I	39
hsa04933	hsa04933	AGE-RAGE	25/994	100/8393	0.00019	0.010508	0.0085	AGT/AKT	25
hsa04218	hsa04218	Cellular ser	34/994	156/8393	0.00027	0.012801	0.01035	AKT3/AT	34
hsa03460	hsa03460	Fanconi an	16/994	54/8393	0.00035	0.014171	0.01146	ATR/BRC	16
hsa04520	hsa04520	Adherens j	23/994	93/8393	0.0004	0.014171	0.01146	ACTB/AC	23
hsa04146	hsa04146	Peroxisom	21/994	82/8393	0.00043	0.014171	0.01146	ABCD2/A	21
hsa04512	hsa04512	ECM-recep	22/994	89/8393	0.00054	0.016149	0.01306	AGRN/C	22
hsa04668	hsa04668	TNF signali	26/994	114/8393	0.00067	0.018361	0.01485	AKT3/BA	26
hsa05418	hsa05418	Fluid shear	30/994	139/8393	0.00072	0.018361	0.01485	ACTB/AC	30
hsa05170	hsa05170	Human imi	41/994	212/8393	0.00094	0.021517	0.0174	AKT3/AF	41
hsa04926	hsa04926	Relaxin sig	28/994	129/8393	0.00097	0.021517	0.0174	ADCY3/A	28
hsa05131	hsa05131	Shigellosis	46/994	247/8393	0.00109	0.021612	0.01747	ACTB/AC	46
hsa05225	hsa05225	Hepatocell	34/994	168/8393	0.00111	0.021612	0.01747	ACTB/AC	34
hsa05100	hsa05100	Bacterial in	19/994	77/8393	0.00128	0.023629	0.0191	ACTB/AC	19
hsa04152	hsa04152	AMPK sign	26/994	121/8393	0.00169	0.027137	0.02194	ACACA/A	26
hsa00562	hsa00562	Inositol ph	18/994	73/8393	0.00172	0.027137	0.02194	ALDH6A	18
hsa01524	hsa01524	Platinum d	18/994	73/8393	0.00172	0.027137	0.02194	AKT3/AF	18
hsa01212	hsa01212	Fatty acid	15/994	57/8393	0.00204	0.03083	0.02493	ACACA/A	15
hsa05166	hsa05166	Human T- α	41/994	222/8393	0.00234	0.033711	0.02726	ADCY3/A	41
hsa04015	hsa04015	Rap1 signa	39/994	210/8393	0.00266	0.036834	0.02978	ACTB/AC	39
hsa05212	hsa05212	Pancreatic	18/994	76/8393	0.00278	0.036855	0.0298	AKT3/BR	18
hsa05142	hsa05142	Chagas dis	22/994	102/8393	0.00354	0.043512	0.03518	AKT3/C3	22
hsa05146	hsa05146	Amoebiasi	22/994	102/8393	0.00354	0.043512	0.03518	ACTN1/A	22
hsa01200	hsa01200	Carbon me	24/994	115/8393	0.00374	0.044356	0.03586	ACAT2/A	24
hsa04666	hsa04666	Fc gamma	21/994	97/8393	0.00413	0.047233	0.03819	ACTR2/A	21
hsa04936	hsa04936	Alcoholic li	28/994	142/8393	0.0043	0.047609	0.03849	ACACA/A	28
hsa05222	hsa05222	Small cell	120/994	92/8393	0.00481	0.051519	0.04165	AKT3/AF	20
hsa00030	hsa00030	Pentose ph	9/994	30/8393	0.00627	0.065002	0.05255	ALDOA/A	9
hsa04380	hsa04380	Osteoclast	25/994	128/8393	0.00764	0.076842	0.06213	AKT3/CY	25
hsa04151	hsa04151	PI3K-Akt si	57/994	354/8393	0.009	0.087884	0.07105	AKT3/BR	57
hsa05135	hsa05135	Yersinia inf	26/994	137/8393	0.00964	0.091418	0.07391	ACTB/AC	26
hsa04750	hsa04750	Inflammatc	20/994	98/8393	0.00993	0.091575	0.07404	ADCY3/A	20
hsa05211	hsa05211	Renal cell	15/994	69/8393	0.01358	0.120237	0.09721	AKT3/BR	15
hsa02010	hsa02010	ABC transp	11/994	45/8393	0.01382	0.120237	0.09721	ABCA1/A	11
hsa00061	hsa00061	Fatty acid	16/994	18/8393	0.01435	0.120237	0.09721	ACACA/A	6
hsa05161	hsa05161	Hepatitis B	29/994	162/8393	0.01449	0.120237	0.09721	AKT3/AF	29
hsa04914	hsa04914	Progester	20/994	102/8393	0.0153	0.123858	0.10014	ADCY3/A	20
hsa04210	hsa04210	Apoptosis	25/994	136/8393	0.01621	0.12813	0.10359	ACTB/AC	25
hsa04910	hsa04910	Insulin sig	25/994	137/8393	0.01768	0.135515	0.10956	ACACA/A	25
hsa04625	hsa04625	C-type leci	20/994	104/8393	0.01872	0.135515	0.10956	AKT3/BC	20
hsa04660	hsa04660	T cell recep	20/994	104/8393	0.01872	0.135515	0.10956	AKT3/BC	20
hsa03440	hsa03440	Homologo	10/994	41/8393	0.01878	0.135515	0.10956	ATM/BA	10
hsa05231	hsa05231	Choline me	19/994	98/8393	0.01991	0.140617	0.11369	AKT3/CH	19
hsa05169	hsa05169	Epstein-Ba	34/994	202/8393	0.02098	0.144026	0.11644	AKT3/AF	34
hsa05145	hsa05145	Toxoplasm	21/994	112/8393	0.02126	0.144026	0.11644	AKT3/GN	21
hsa00280	hsa00280	Valine, leuc	11/994	48/8393	0.02215	0.147079	0.11891	AACS/A	11
hsa05163	hsa05163	Human cyt	37/994	225/8393	0.0232	0.151052	0.12212	ADCY3/A	37
hsa00670	hsa00670	One carbo	6/994	20/8393	0.02438	0.155666	0.12586	ALDH1L	6
hsa04960	hsa04960	Aldosteron	9/994	37/8393	0.0256	0.160387	0.12967	INSR/KR	9
hsa04931	hsa04931	Insulin resi	20/994	108/8393	0.02733	0.168035	0.13586	AGT/AKT	20
hsa04010	hsa04010	MAPK sign	47/994	302/8393	0.02904	0.175045	0.14152	AKT3/BR	47
hsa00640	hsa00640	Propanoat	8/994	32/8393	0.02953	0.175045	0.14152	ACACA/A	8

hsa04621	hsa04621	NOD-like r	31/994	186/8393	0.0301	0.175324	0.14175	ANTXR1.	31
hsa00310	hsa00310	Lysine deg	13/994	63/8393	0.03098	0.177338	0.14338	ACAT2//	13
hsa04068	hsa04068	FoxO sign	23/994	131/8393	0.03345	0.181875	0.14705	AGAP2//	23
hsa01040	hsa01040	Biosynthes	7/994	27/8393	0.03381	0.181875	0.14705	ACOT1//	7
hsa04070	hsa04070	Phosphatic	18/994	97/8393	0.03441	0.181875	0.14705	BPNT2//	18
hsa05215	hsa05215	Prostate c	18/994	97/8393	0.03441	0.181875	0.14705	AKT3/BR	18
hsa04929	hsa04929	GnRH secr	13/994	64/8393	0.03482	0.181875	0.14705	AKT3/G/	13
hsa00051	hsa00051	Fructose a	8/994	33/8393	0.03507	0.181875	0.14705	ALDOA/	8
hsa05162	hsa05162	Measles	24/994	139/8393	0.03615	0.181875	0.14705	ADAR/A	24
hsa04142	hsa04142	Lysosome	23/994	132/8393	0.03616	0.181875	0.14705	ACP2/AF	23
hsa01522	hsa01522	Endocrine	18/994	98/8393	0.03768	0.186702	0.15095	ADCY3//	18
hsa04921	hsa04921	Oxytocin s	26/994	154/8393	0.03852	0.18805	0.15204	ACTB/AC	26
hsa04370	hsa04370	VEGF sign	12/994	59/8393	0.04122	0.194971	0.15763	AKT3/KR	12
hsa04072	hsa04072	Phospholi	25/994	148/8393	0.04161	0.194971	0.15763	ADCY3//	25
hsa04725	hsa04725	Cholinergic	20/994	113/8393	0.04195	0.194971	0.15763	ADCY3//	20
hsa00450	hsa00450	Selenocor	5/994	17/8393	0.04228	0.194971	0.15763	KYAT1/M	5
hsa05210	hsa05210	Colorectal	16/994	86/8393	0.04346	0.197675	0.15982	AKT3/AF	16
hsa04144	hsa04144	Endocytosi	39/994	251/8393	0.04469	0.200504	0.16211	ACTR2//	39
hsa05417	hsa05417	Lipid and	23/994	215/8393	0.04691	0.20765	0.16788	ABCA1//	34
hsa04550	hsa04550	Signaling	24/994	143/8393	0.04822	0.20861	0.16866	ACVR1C.	24
hsa05221	hsa05221	Acute mye	13/994	67/8393	0.04838	0.20861	0.16866	AKT3/BR	13
hsa00511	hsa00511	Other glyc	5/994	18/8393	0.05303	0.225709	0.18249	FUCA1/M	5
hsa03030	hsa03030	DNA replic	8/994	36/8393	0.05576	0.230238	0.18615	LIG1/MC	8
hsa00630	hsa00630	Glyoxylate	7/994	30/8393	0.05682	0.230238	0.18615	ACAT2//	7
hsa04211	hsa04211	Longevity	16/994	89/8393	0.05687	0.230238	0.18615	ADCY3//	16
hsa05235	hsa05235	PD-L1 exp	16/994	89/8393	0.05687	0.230238	0.18615	AKT3/IF	16
hsa04371	hsa04371	Apelin sig	23/994	139/8393	0.05978	0.23635	0.19109	ADCY3//	23
hsa05220	hsa05220	Chronic m	14/994	76/8393	0.06052	0.23635	0.19109	AKT3/BR	14
hsa00071	hsa00071	Fatty acid	9/994	43/8393	0.06127	0.23635	0.19109	ACADM/	9
hsa04340	hsa04340	Hedgehog	11/994	56/8393	0.06129	0.23635	0.19109	CSNK1D	11
hsa05143	hsa05143	African try	8/994	37/8393	0.06408	0.23635	0.19109	APOA1/I	8
hsa04014	hsa04014	Ras signal	36/994	236/8393	0.06504	0.23635	0.19109	AKT3/BL	36
hsa04917	hsa04917	Prolactin	13/994	70/8393	0.0652	0.23635	0.19109	AKT3/G/	13
hsa05230	hsa05230	Central car	13/994	70/8393	0.0652	0.23635	0.19109	AKT3/H/	13
hsa01210	hsa01210	2-Oxocarb	5/994	19/8393	0.06521	0.23635	0.19109	ABHD14	5
hsa04722	hsa04722	Neurotrop	20/994	119/8393	0.06613	0.23635	0.19109	AKT3/AF	20
hsa00410	hsa00410	beta-Alani	7/994	31/8393	0.06621	0.23635	0.19109	ACOX3//	7