Supplementary material

Table S1. lncRNA and mRNA co-expression network profiles based on five validated differentially expressed lncRNAs and 205 interacted mRNAs

GeneSymbol	seqname	pcc	pcc_type	FDR
Scara3	XR_145869	-0.922624024	-	0.068155
Id4	XR_145869	-0.937020925	-	0.059222
Dbt	XR_145869	-0.955042433	-	0.036696
Sun5	XR_340615	0.996551238	+	0.013368
Eno4	XR_340615	0.991228815	+	0.018196
Pm20d1	XR_340615	0.989442179	+	0.018196
Abhd10	XR_340615	0.981630286	+	0.020754
Dcn	XR_340615	0.976510561	+	0.021045
RGD1308065	XR_340615	0.973509718	+	0.02254
Lcmt2	XR_340615	0.968551007	+	0.023243
Gin1	XR_340615	0.965855427	+	0.023904
Dusp14	XR_340615	0.964644927	+	0.024304
Sybu	XR_340615	0.961999305	+	0.025355
Sema3d	XR_340615	0.961376942	+	0.025544
Hopx	XR_340615	0.961263993	+	0.025544
Pxmp4	XR_340615	0.957704209	+	0.02682
Olr1431	XR_340615	0.954556354	+	0.027748
Gng8	XR_340615	0.954305362	+	0.027803
Cdc26	XR_340615	0.953293488	+	0.027947
Cenpk	XR_340615	0.953166698	+	0.027947
Aldh7a1	XR_340615	0.952293792	+	0.028035
Dpy19l4	XR_340615	0.950467162	+	0.028863
Olr338	XR_340615	-0.950212977	-	0.028863
Oprm1	XR_340615	-0.950647111	-	0.028863
Olr20	XR_340615	-0.951153826	-	0.028588
AABR06064533.1	XR_340615	-0.951298929	-	0.028501
Nabp2	XR_340615	-0.952858996	-	0.027994
LOC100911302	XR_340615	-0.953090031	-	0.027947
Olr1307	XR_340615	-0.953977832	-	0.027859
Olr1509	XR_340615	-0.954007129	-	0.027859
Stx2	XR_340615	-0.954076779	-	0.027859
Ldlrap1	XR_340615	-0.95425995	-	0.027803
Rgsl2h	XR_340615	-0.954279332	-	0.027803
LOC100911639	XR_340615	-0.954515157	-	0.027748
LOC100910813	XR_340615	-0.955714566	-	0.027619
Olr1440	XR_340615	-0.956143926	-	0.027385
Gucy2e	XR_340615	-0.957165501	-	0.02703
Timp4	XR_340615	-0.957412709	-	0.026884
Clspn	XR_340615	-0.957550736	-	0.026847
Atp8b1	XR_340615	-0.957642381	-	0.026841
LOC361914	XR_340615	-0.959379498	-	0.026236
Lcn12	XR_340615	-0.959652368	-	0.026199
Gsx1	XR_340615	-0.96216986	-	0.025287
Mical3	XR_340615	-0.962428669	-	0.025275
Efna5	XR_340615	-0.96246447	-	0.025275
Olr1515	XR_340615	-0.963118753	-	0.024999
Kctd10	XR_340615	-0.965051064	-	0.024198
Hgf	XR_340615	-0.965256983	-	0.024116
Galp	XR_340615	-0.965314128	-	0.024115
LOC500331	XR_340615	-0.965915672	-	0.023901
Epn2	XR_340615	-0.966313659	-	0.023794
Olr1517	XR_340615	-0.966628235	-	0.023719
Mtr	XR_340615	-0.967254851	-	0.023632
Ces2a	XR_340615	-0.968146132	-	0.023428
Olr131	XR_340615	-0.968271575	-	0.023393
Olr1350	XR_340615	-0.970379016	-	0.022693
Szt2	XR_340615	-0.970970574	-	0.022592
Prr14	XR_340615	-0.971528402	-	0.022592
Foxm1	XR_340615	-0.971551266	-	0.022592

AABR06083125.1	XR_340615	-0.971864914	-	0.022592
Rps19bp1	XR_340615	-0.972125849	-	0.022592
Gpr174	XR_340615	-0.973497115	-	0.02254
Klk4	XR_340615	-0.973537762	-	0.02254
AABR06047980.1	XR_340615	-0.973679891	-	0.02254
Celsr3	XR_340615	-0.974933479	-	0.02195
LOC100361746	XR_340615	-0.975142979	-	0.021722
ENSRNOG00000045982	XR_340615	-0.975302552	-	0.021638
AABR06024257.1	XR_340615	-0.976080708	-	0.021193
Prl3d4	XR_340615	-0.976466691	-	0.021045
Pcdh12	XR_340615	-0.978602175	-	0.021045
Apoa2	XR_340615	-0.980209888	-	0.020995
Olr1482	XR_340615	-0.98127481	-	0.020754
1700092M07Rik	XR_340615	-0.981618222	-	0.020754
Wdr43	XR_340615	-0.986054057	-	0.019618
Clec18a	XR_340615	-0.987849901	-	0.018932
LOC498836	XR_351843	0.996073621	+	0.014238
Adam18	XR_351843	0.993619441	+	0.017323
Wdr11	XR_351843	0.988075881	+	0.018709
Recql5	XR_351843	0.986448036	+	0.019618
Ice2	XR_351843	0.986065869	+	0.019618
LOC100362658	XR_351843	0.982342391	+	0.020754
Dpy19l4	XR_351843	0.980220568	+	0.020995
Cgn	XR_351843	0.978011749	+	0.021045
Otc	XR_351843	0.974132724	+	0.022214
Fam110a	XR_351843	0.972761424	+	0.022592
AABR06091203.1	XR_351843	0.97174902	+	0.022592
Sdc1	XR_351843	0.971639526	+	0.022592
Olr303	XR_351843	0.969727521	+	0.022859
Cdc26	XR_351843	0.969628705	+	0.022859
Stc2	XR_351843	0.969083885	+	0.023137
Hnrnpf	XR_351843	0.963989694	+	0.024877
Tpbgl	XR_351843	0.962651625	+	0.025198
Mmp10	XR_351843	0.96023902	+	0.025879
LOC683422	XR_351843	0.958418916	+	0.026656
Carf	XR_351843	0.95679117	+	0.027145
Filip1l	XR_351843	-0.950120725	-	0.028863
Chchd5	XR_351843	-0.950156454	-	0.028863
Pramef8	XR_351843	-0.95026482	-	0.028863
Cd151	XR_351843	-0.950702751	-	0.028849
Sidt1	XR_351843	-0.950844714	-	0.028824
LOC365778	XR_351843	-0.952422885	-	0.028035
Olr1029	XR_351843	-0.952489921	-	0.028035
Foxm1	XR_351843	-0.95307646	-	0.027947
Mmd	XR_351843	-0.954196457	-	0.027803
LOC691277	XR_351843	-0.954229348	-	0.027803
LOC100910851	XR_351843	-0.954904767	-	0.02765
Apoa2	XR_351843	-0.954954305	-	0.02765
Celsr3	XR_351843	-0.955052413	-	0.02765
Tgif2-ps1	XR_351843	-0.955900547	-	0.027499
Epn2	XR_351843	-0.956289638	-	0.027313
Olr338	XR_351843	-0.956388126	-	0.027308
Ttc13	XR_351843	-0.956464208	-	0.027308
Mug1	XR_351843	-0.957314503	-	0.026961
Gpr174	XR_351843	-0.961394005	-	0.025544
Galp	XR_351843	-0.961822584	-	0.02544
Szt2	XR_351843	-0.962034167	-	0.025339
Ly6al	XR_351843	-0.962443078	-	0.025275
Olr1440	XR_351843	-0.962648993	-	0.025198
Prss3	XR_351843	-0.962912652	-	0.025123
Msrb3	XR_351843	-0.963099618	-	0.024999
Slc5a12	XR_351843	-0.963743222	-	0.024922
Vom2r70	XR_351843	-0.964735358	-	0.024304
Sla2	XR_351843	-0.964998791	-	0.024198
Efna5	XR_351843	-0.965334227	-	0.024115
Angptl7	XR_351843	-0.966364874	-	0.023794

Tssc1	XR_351843	-0.96653648	-	0.023785
Shroom2	XR_351843	-0.966697712	-	0.023719
Olr373	XR_351843	-0.966778468	-	0.023719
Olr1517	XR_351843	-0.9669127	-	0.023719
Alx4	XR_351843	-0.967823456	-	0.023495
Ldlrap1	XR_351843	-0.969346369	-	0.023128
Olr1523	XR_351843	-0.969829595	-	0.022859
Myrfl	XR_351843	-0.970148668	-	0.022693
Lcn12	XR_351843	-0.970149654	-	0.022693
Clspn	XR_351843	-0.970343141	-	0.022693
Olr75	XR_351843	-0.970490571	-	0.022693
Mkrn3	XR_351843	-0.970795204	-	0.022639
Tas2r134	XR_351843	-0.970949757	-	0.022592
Olr162	XR_351843	-0.972259891	-	0.022592
Olr875	XR_351843	-0.974670815	-	0.022124
Orai3	XR_351843	-0.976360671	-	0.021045
Serpine1	XR_351843	-0.976903883	-	0.021045
Gsx1	XR_351843	-0.976968956	-	0.021045
Olr23	XR_351843	-0.977730631	-	0.021045
AABR06003530.1	XR_351843	-0.980024449	-	0.020995
LOC100911302	XR_351843	-0.981155172	-	0.020754
Vstm4	XR_351843	-0.98152539	-	0.020754
Acp5	XR_351843	-0.981779736	-	0.020754
AABR06103350.1	XR_351843	-0.981840631	-	0.020754
AABR06091214.1	XR_351843	-0.982133439	-	0.020754
Smcr8	XR_351843	-0.982409285	-	0.020754
AABR06052422.1	XR_351843	-0.982936732	-	0.020754
Eps8l1	XR_351843	-0.983034579	-	0.020754
LOC103695172	XR_351843	-0.984468483	-	0.02029
Cdx2	XR_351843	-0.984668762	-	0.020116
Wnk4	XR_351843	-0.985230621	-	0.019703
Tdo2	XR_351843	-0.986974913	-	0.019491
Ermap	XR_351843	-0.988105976	-	0.018709
Ammecr1	XR_351843	-0.988560519	-	0.018196
Wdr64	XR_351843	-0.989280576	-	0.018196
LOC689435	XR_351843	-0.989715724	-	0.018196
Ppp1r3a	XR_351843	-0.98972038	-	0.018196
Gpr52	XR_351843	-0.992927468	-	0.017323
Lrrc28	XR_597032	0.993528382	+	0.017323
Pmp22	XR_597032	0.988966173	+	0.018196
Pot1b	XR_597032	0.984900806	+	0.01986
Fastkd2	XR_597032	0.983643362	+	0.020754
Zfp518a	XR_597032	0.983107092	+	0.020754
Wbscr27	XR_597032	0.98208756	+	0.020754
LOC689064	XR_597032	0.980004066	+	0.020995
Yif1b	XR_597032	0.974481916	+	0.022214
Prss35	XR_597032	0.972829022	+	0.022592
B3galt2	XR_597032	0.972355657	+	0.022592
G4	XR_597032	0.966994308	+	0.023719
Has2	XR_597032	0.966485212	+	0.023794
Bckdha	XR_597032	0.96438497	+	0.024563
Rph3al	XR_597032	0.958503463	+	0.026656
Camkk1	XR_597032	0.956647754	+	0.027259
Erich1	XR_597032	0.95632748	+	0.027313
Ret	XR_597032	0.954861399	+	0.02765
Fzd1	XR_597032	0.952367996	+	0.028035
Rasd1	XR_597032	0.952152354	+	0.028035
LOC301124	XR_597032	0.950119954	+	0.028863
Pgm2	XR_597032	-0.959479728	-	0.026236
Plscr4	XR_597032	-0.963446153	-	0.024974
Apex2l1	XR_597664	0.999007031	+	0.005564
Lcmt2	XR_597664	0.986885022	+	0.019491
Paqr9	XR_597664	0.980374522	+	0.020995
Zfp949	XR_597664	0.979139066	+	0.021045
Pxmp4	XR_597664	0.978125412	+	0.021045
Hbb-b1	XR_597664	0.976055191	+	0.021193

Dusp14	XR_597664	0.975739816	+	0.021434
Nfatc2ip	XR_597664	0.971769877	+	0.022592
Cryab	XR_597664	0.967056353	+	0.023719
Ccdc18	XR_597664	0.964241407	+	0.024688
Eno4	XR_597664	0.963477546	+	0.024963
Tstd3	XR_597664	0.962125707	+	0.025287
Itsn1	XR_597664	0.961360576	+	0.025544
Pm20d1	XR_597664	0.960982681	+	0.025583
Mzt1	XR_597664	0.960463383	+	0.025817
Sun5	XR_597664	0.959940944	+	0.026108
Hba-a1	XR_597664	0.959002613	+	0.026347
Sema3d	XR_597664	0.956908221	+	0.027053
Erich1	XR_597664	0.955789037	+	0.027557
Hnrnpf	XR_597664	0.955195996	+	0.02765
Clpsl2	XR_597664	0.954930429	+	0.02765
Bloc1s2	XR_597664	0.953731301	+	0.027871
Olr1431	XR_597664	0.953016547	+	0.027947
Noxred1	XR_597664	0.9517865	+	0.028177
RGD1308065	XR_597664	0.951149218	+	0.028588
LOC100362040	XR_597664	0.950429439	+	0.028863
Ammecr1	XR_597664	-0.950323381	-	0.028863
LOC103695172	XR_597664	-0.95057666	-	0.028863
Ppp1r3a	XR_597664	-0.95136431	-	0.028483
Cdx2	XR_597664	-0.952176555	-	0.028035
Galp	XR_597664	-0.952204189	-	0.028035
LOC365778	XR_597664	-0.952958447	-	0.027947
Magec2	XR_597664	-0.953140127	-	0.027947
Myrfl	XR_597664	-0.953505002	-	0.027909
Zfhx3	XR_597664	-0.953808832	-	0.027871
Plscr4	XR_597664	-0.953895898	-	0.027871
Olr483	XR_597664	-0.954503631	-	0.027748
Ddit4	XR_597664	-0.954616097	-	0.027729
Klk4	XR_597664	-0.954900917	-	0.02765
Olfml2b	XR_597664	-0.955195429	-	0.02765
Mmd	XR_597664	-0.955601496	-	0.027623
Clspn	XR_597664	-0.955621193	-	0.027623
C6	XR_597664	-0.956378707	-	0.027308
Apoa2	XR_597664	-0.956396103	-	0.027308
AABR06052422.1	XR_597664	-0.956447852	-	0.027308
Adgrg2	XR_597664	-0.956506225	-	0.027308
Gpr174	XR_597664	-0.95663448	-	0.027259
Crhr2	XR_597664	-0.957824288	-	0.026724
Chchd5	XR_597664	-0.957881832	-	0.026699
Prss3	XR_597664	-0.958205555	-	0.026699
Olr1346	XR_597664	-0.959007267	-	0.026347
AABR06103350.1	XR_597664	-0.959039668	-	0.026347
Vom2r6	XR_597664	-0.959096124	-	0.026347
Rnase12	XR_597664	-0.95912371	-	0.026347
Slc25a26	XR_597664	-0.95934356	-	0.026252
Shroom2	XR_597664	-0.960229944	-	0.025879
Usp37	XR_597664	-0.960455721	-	0.025817
Ldlrap1	XR_597664	-0.960992068	-	0.025583
Wdr43	XR_597664	-0.961098109	-	0.025583
Pck1	XR_597664	-0.96148202	-	0.025544
Sidt1	XR_597664	-0.961705786	-	0.02544
Vstm4	XR_597664	-0.96175505	-	0.02544
Cstf2t	XR_597664	-0.96180186	-	0.02544
Olr373	XR_597664	-0.962177895	-	0.025287
Olr1517	XR_597664	-0.962228951	-	0.025287
LOC100911302	XR_597664	-0.963538873	-	0.024943
Cd151	XR_597664	-0.965281397	-	0.024115
Celsr3	XR_597664	-0.965288941	-	0.024115
Ly6al	XR_597664	-0.965664557	-	0.023904
Mug1	XR_597664	-0.966326272	-	0.023794
LOC100910851	XR_597664	-0.966642468	-	0.023719
AABR06078960.1	XR_597664	-0.966710674	-	0.023719

Acp5	XR_597664	-0.966728155	-	0.023719
Erlin2	XR_597664	-0.96736444	-	0.023599
Filip1l	XR_597664	-0.967558701	-	0.023588
Smcr8	XR_597664	-0.968603126	-	0.023236
Vom2r29	XR_597664	-0.968711052	-	0.023236
Sla2	XR_597664	-0.969118162	-	0.023137
Mrps5	XR_597664	-0.969878679	-	0.022859
Efna5	XR_597664	-0.970128148	-	0.022693
Tas2r145	XR_597664	-0.970314338	-	0.022693
Tgif2-ps1	XR_597664	-0.97093227	-	0.022592
Necab2	XR_597664	-0.971232498	-	0.022592
Olr23	XR_597664	-0.971434549	-	0.022592
LOC500331	XR_597664	-0.971496123	-	0.022592
Tas2r134	XR_597664	-0.97186726	-	0.022592
Vom1r61	XR_597664	-0.971942638	-	0.022592
Kctd10	XR_597664	-0.97253642	-	0.022592
Olr1482	XR_597664	-0.972759127	-	0.022592
Taar7b	XR_597664	-0.973573688	-	0.02254
Mkrn3	XR_597664	-0.97413406	-	0.022214
Nek9	XR_597664	-0.974213846	-	0.022214
Orai3	XR_597664	-0.974454466	-	0.022214
Kirrel2	XR_597664	-0.975286319	-	0.021638
Vom2r70	XR_597664	-0.976358238	-	0.021045
Gucy1a3	XR_597664	-0.976590276	-	0.021045
Trav7-2	XR_597664	-0.977777011	-	0.021045
LOC100910462	XR_597664	-0.9784985	-	0.021045
Pramef8	XR_597664	-0.979057178	-	0.021045
Bok	XR_597664	-0.979536532	-	0.020995
Olr1523	XR_597664	-0.980968698	-	0.020801
Zfp383	XR_597664	-0.982454273	-	0.020754
Epn2	XR_597664	-0.983700132	-	0.020754
Alx4	XR_597664	-0.983975271	-	0.020754
LOC100360095	XR_597664	-0.985777683	-	0.0197
Setd7	XR_597664	-0.986270892	-	0.019618
Tmem30c	XR_597664	-0.987109527	-	0.019491
Ces2a	XR_597664	-0.990245953	-	0.018196