

Supplementary Table SII ERA gene list and fold changes.

Gene ID	Fold change	P-value	Adjusted P-value
ACTA2	1.980797977	0.026934306*	0.995859766
GOS2	2.635005388	0.061839887	0.995859766
LRP4	1.272317391	0.065733523	0.995859766
SI00P	-6.613665394	0.071451472	0.995859766
EFEMPI	-1.619882615	0.074847322	0.995859766
TTC21B	1.396709266	0.113156303	0.995859766
MFAP5	-1.566770441	0.125679492	0.995859766
SPDEF	1.544181484	0.178281668	0.995859766
TMEM16A	1.525564471	0.181708897	0.995859766
CYP2J2	2.428695519	0.187907699	0.995859766
ADRA2A	1.46137882	0.195713174	0.995859766
TAGLN	1.593939267	0.195934709	0.995859766
PSMB10	-1.333560929	0.219075159	0.995859766
AMIGO2	-1.332736612	0.223260992	0.995859766
SLPI	-1.284047794	0.227099735	0.995859766
ECMI	1.308260482	0.228457049	0.995859766
HMHA1	-1.324092064	0.229145736	0.995859766
TSPAN8	-1.609930361	0.233472938	0.995859766
SLC15A1	1.459554275	0.240146716	0.995859766
TRA@	-1.184178114	0.248122149	0.995859766
ANXA4	-1.405254349	0.254781677	0.995859766
KMO	1.311588636	0.259416296	0.995859766
POLD4	-1.167917566	0.260814524	0.995859766
OLFM4	1.80177224	0.26330907	0.995859766
PRKCQ	1.194066117	0.26825733	0.995859766
GALNT12	1.256236355	0.271005503	0.995859766
OPRK1	1.81352553	0.286245873	0.995859766
ARID5B	-1.427399508	0.290472443	0.995859766
RASSF2	1.326185031	0.294441757	0.995859766
FGB	-1.393271996	0.298172755	0.995859766
DEFB1	-1.316032969	0.29863283	0.995859766
SOD2	-1.689005072	0.301973188	0.995859766
COMP	-1.4996141	0.30526339	0.995859766
FAM59A	-1.222919998	0.319029936	0.995859766
MAOA	-1.390965157	0.321926178	0.995859766
PBK	-1.433570172	0.322326461	0.995859766
SCGB2A2	-1.552731563	0.322822385	0.995859766
KCNJ2	1.497628434	0.323287338	0.995859766
C3	-1.595440547	0.326872546	0.995859766
LEPREL1	-1.431893342	0.328914922	0.995859766
POSTN	1.197501152	0.330878137	0.995859766
CLDN4	-1.308927587	0.332025902	0.995859766
SLC15A2	1.465573832	0.337587487	0.995859766
PROM1	-1.141388761	0.339073883	0.995859766
NNMT	-1.79636584	0.339804725	0.995859766
MRPS2	-1.236724672	0.340094981	0.995859766

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Gene ID	Fold change	P-value	Adjusted P-value
HPSE	-1.677438737	0.342345462	0.995859766
SERPING1	-1.315031232	0.355480244	0.995859766
CTNNA2	1.597464338	0.357090249	0.995859766
ATP1B1	1.514531866	0.358875669	0.995859766
C14orf161	-1.365122431	0.370606241	0.995859766
CLDN10	-1.397860727	0.373726464	0.995859766
IL15	-1.319372678	0.373816655	0.995859766
GREM2	1.435000049	0.377968174	0.995859766
EMCN	-1.120392664	0.379161445	0.995859766
SYNE2	-1.331690043	0.381419351	0.995859766
STAR	-1.453842531	0.382000576	0.995859766
GBP2	-1.324534585	0.382311317	0.995859766
SLC16A6	1.345562254	0.38401677	0.995859766
PROS1	-1.210395425	0.385208053	0.995859766
C10orf10	-1.788916525	0.386372221	0.995859766
MGC11242	1.613126591	0.390768664	0.995859766
MT2A	-1.128324787	0.391476298	0.995859766
CFD	-1.128053566	0.391971786	0.995859766
CKB	1.215555502	0.393304888	0.995859766
IGF2	-1.167887544	0.398745168	0.995859766
DEPDC6	1.147276286	0.40301268	0.995859766
DUOX1	1.624900028	0.40330445	0.995859766
SERPINA5	1.729431685	0.406121485	0.995859766
COBL	1.223592936	0.415286581	0.995859766
FOSL2	-1.212990638	0.421680036	0.995859766
GABARAPL1	-1.229595302	0.423866795	0.995859766
MSX1	1.51008813	0.430888412	0.995859766
ABCC3	-1.328367058	0.432835343	0.995859766
GPRC5C	-1.16621975	0.433189035	0.995859766
HEY2	1.197034076	0.433598508	0.995859766
CSRP2	1.513300175	0.435278601	0.995859766
RAD54B	1.271596943	0.435490193	0.995859766
ANG	-1.371220169	0.438224961	0.995859766
CCNB2	-1.234780267	0.438500585	0.995859766
AGR2	-1.314061852	0.450891331	0.995859766
TIMP3	-1.176553285	0.451723959	0.995859766
MMP26	1.465117076	0.456036921	0.995859766
SLC7A1	1.561377512	0.460086607	0.995859766
CDC20	1.326277218	0.461333075	0.995859766
RANBP17	1.270502341	0.46524398	0.995859766
PENK	-1.177383195	0.473366124	0.995859766
EFNA1	-1.279842911	0.476208086	0.995859766
MUC16	1.198931337	0.4772511	0.995859766
FXRD2	-1.086541885	0.477985382	0.995859766
AQP3	-1.430681951	0.478041147	0.995859766
KIAA0888	1.123734409	0.47902325	0.995859766
GZMA	-1.252916257	0.483913778	0.995859766

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Gene ID	Fold change	P-value	Adjusted P-value
GAST	-1.785829938	0.484271917	0.995859766
ADAMTS1	-1.12130018	0.487836761	0.995859766
KCNG1	1.529531393	0.492623132	0.995859766
C4.4A	-1.424448784	0.494634674	0.995859766
LRRC17	1.222759286	0.500750223	0.995859766
CXCL13	-1.210034891	0.503406034	0.995859766
CXCL14	-1.961961983	0.503761042	0.995859766
NR4A2	1.500515368	0.503912789	0.995859766
GADD45A	-1.305123538	0.509688009	0.995859766
IDH1	1.339579938	0.514710731	0.995859766
EDNRB	-1.186552697	0.515337895	0.995859766
SNX10	-1.384859625	0.516437833	0.995859766
PECI	1.321358465	0.516692137	0.995859766
NP	-1.12817081	0.518018653	0.995859766
C11orf8	1.259306905	0.51805248	0.995859766
ID4	-1.1579709	0.518058771	0.995859766
KHDRBS3	1.30660998	0.518192595	0.995859766
DDX52	-1.254441987	0.520001765	0.995859766
BUB1B	1.078550425	0.525536156	0.995859766
HSD11B2	1.431541454	0.529381854	0.995859766
GAS1	-1.342873584	0.530629315	0.995859766
CREB3LI	1.337771168	0.53163387	0.995859766
PRCI	1.110655344	0.53569374	0.995859766
CORO1A	-1.179978816	0.536569035	0.995859766
CP	-1.461859067	0.539679508	0.995859766
LAMB3	-1.420128211	0.539780685	0.995859766
C4BPA	-1.597907236	0.54051875	0.995859766
OFD1	1.202089343	0.549467254	0.995859766
CRABP2	1.171164162	0.551165672	0.995859766
SI00A4	-1.202757229	0.552215445	0.995859766
SLC38A1	-1.168856034	0.554199979	0.995859766
HAL	-1.105548963	0.557247513	0.995859766
PAEP	-1.833030247	0.560035026	0.995859766
SLC1A1	-1.325311142	0.565467728	0.995859766
CDC2	1.117008868	0.577824555	0.995859766
ARHGDI B	-1.15662599	0.578227366	0.995859766
LRRC1	1.216941425	0.580432001	0.995859766
SOX17	1.227820074	0.582261352	0.995859766
HLA-DOB	1.353139919	0.584379915	0.995859766
SORD	1.522280452	0.585527087	0.995859766
NDRG2	1.332212429	0.592574436	0.995859766
XCL1	-1.126731873	0.594676723	0.995859766
GPX3	-1.412569322	0.604030682	0.995859766
LMOD1	-1.105435213	0.607091346	0.995859766
DFNB31	1.255834203	0.607642706	0.995859766
DPP4	-1.091406759	0.611976184	0.995859766
C10orf3	-1.083877369	0.621740989	0.995859766

*Continued*Supplementary Table SII *Continued*

Gene ID	Fold change	P-value	Adjusted P-value
SCYE1	-1.108398222	0.632528165	0.995859766
GALNT4	1.176478395	0.6341705	0.995859766
RNASE4	-1.127818923	0.641949127	0.995859766
ATP6V0E2	1.174211533	0.648869478	0.995859766
MYL9	1.119188708	0.653726354	0.995859766
KIF20A	1.080588396	0.654357833	0.995859766
TRH	1.098079618	0.659134204	0.995859766
IMPA2	-1.179100461	0.659664555	0.995859766
VCAM1	1.059136629	0.662016298	0.995859766
PAQR4	1.091787632	0.662912166	0.995859766
KIF4A	-1.056280401	0.66428739	0.995859766
ABLIM3	-1.086269923	0.665944765	0.995859766
LMCD1	-1.186350856	0.672218755	0.995859766
COL16A1	-1.196123472	0.673962813	0.995859766
EPHB3	1.17926332	0.679096472	0.995859766
RRAS	-1.075590157	0.682470121	0.995859766
CENPE	1.048417711	0.684478336	0.995859766
PTPRR	1.198734795	0.684642815	0.995859766
STEAP4	1.116712075	0.687852866	0.995859766
ARG2	-1.127222733	0.688391248	0.995859766
BCL6	-1.101847991	0.690228402	0.995859766
IGFBP1	-1.121134778	0.690758518	0.995859766
FLJ10719	-1.047768249	0.691199956	0.995859766
MFAP2	-1.103564251	0.692444942	0.995859766
CBR3	1.263098147	0.701090559	0.995859766
CDA	-1.231846989	0.702751855	0.995859766
TOP2A	1.057040403	0.710314377	0.995859766
ASS1	-1.143049586	0.711515284	0.995859766
ACADSB	-1.065265783	0.712171732	0.995859766
GPR64	1.104242757	0.72391749	0.995859766
CTSW	-1.083981772	0.727480274	0.995859766
TMEPAI	-1.065524037	0.727814133	0.995859766
HEY1	-1.1342611	0.736515865	0.995859766
HPGD	1.112973248	0.748080936	0.995859766
THBS2	1.155880308	0.74823391	0.995859766
SPP1	1.122552446	0.750326774	0.995859766
DKK1	-1.099464065	0.756562744	0.995859766
MTIG	1.03602187	0.759207225	0.995859766
HRASLS3	1.112362227	0.759962961	0.995859766
DHRS3	-1.128144657	0.762276243	0.995859766
XCL2	-1.089459869	0.772779168	0.995859766
MAP2K6	1.225570647	0.77415907	0.995859766
TMSL8	1.034715311	0.775383288	0.995859766
TACC3	1.038245383	0.791908607	0.995859766
ATP6V1A	-1.041638516	0.793567178	0.995859766
NRG2	1.034517007	0.794315732	0.995859766
CES1	-1.039300491	0.79497817	0.995859766

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Supplementary Table SII *Continued*

Gene ID	Fold change	P-value	Adjusted P-value
BIRC3	1.098032019	0.795488733	0.995859766
INDO	-1.074779599	0.809205758	0.995859766
CLU	-1.109903166	0.817989155	0.995859766
COTLI	-1.067240363	0.819976742	0.995859766
ALPL	1.111369522	0.820689315	0.995859766
BARD1	1.07380778	0.821947075	0.995859766
GDF15	1.070556241	0.831116923	0.995859766
NKG7	-1.052290948	0.834916528	0.995859766
TH	-1.05829763	0.837725126	0.995859766
CRISP3	1.051511613	0.838095056	0.995859766
TBC1D2	-1.025825077	0.847235686	0.995859766
MT1H	-1.029818093	0.847412903	0.995859766
CYP3A5	-1.036119056	0.848964196	0.995859766
FLJ20152	1.041023068	0.855179807	0.995859766
TCN1	1.057878584	0.863103322	0.995859766
PTGER2	-1.038640244	0.86328243	0.995859766
HABP2	-1.068475458	0.868579312	0.995859766
GNLY	-1.050808481	0.871098579	0.995859766
RARRES1	-1.06604636	0.871855245	0.995859766
CAPN6	1.086986055	0.880744151	0.995859766
CD7	1.021200915	0.899489499	0.995859766
OLFM1	1.014229158	0.900941821	0.995859766
LRFN4	-1.018422513	0.902161205	0.995859766
KLRC1	-1.029945732	0.902298372	0.995859766
EDN3	1.018669215	0.90246682	0.995859766
SFRP4	-1.050855654	0.902982254	0.995859766
DLG7	1.018685052	0.903801308	0.995859766
PPARGCIA	-1.016314205	0.906201491	0.995859766
GLIPRI	1.037602167	0.907531112	0.995859766
RARRES3	-1.03257503	0.911846297	0.995859766
THBD	-1.06135801	0.921286015	0.995859766
CYBRD1	-1.018126697	0.921424498	0.995859766
AOX1	-1.027134049	0.921480199	0.995859766
EVC	1.011659447	0.926511383	0.996420191
ANK3	1.046319376	0.935227973	0.996420191
KCNK7	1.014079109	0.936587222	0.996420191
HAND2	1.02233015	0.941875971	0.996420191
SI00A1	1.014928956	0.944695767	0.996420191
ADAMTS8	-1.019401697	0.951129929	0.996420191
IL2RB	-1.011999695	0.952802076	0.996420191
RPRM	-1.022120872	0.956106286	0.996420191
KIF11	1.004219895	0.9750218	0.996420191
ENPEP	-1.005850116	0.983230366	0.996420191
KIAA0802	-1.004108168	0.983383658	0.996420191
IER3	-1.004729517	0.986350635	0.996420191
ASPM	-1.002182681	0.986519196	0.996420191
LIF	-1.002838613	0.987688174	0.996420191

*Continued*Supplementary Table SII *Continued*

Gene ID	Fold change	P-value	Adjusted P-value
KRT7	1.003804908	0.987847311	0.996420191
KNTC2	1.002262102	0.988151144	0.996420191
CALB2	-1.000386284	0.997638016	0.999318848
PLA1A	1.000097266	0.999318848	0.999318848

*P < 0.05