

The PI3K regulatory subunits p55 α and p50 α regulate cell death *in vivo*

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SUPPLEMENTARY TABLES

Supplementary Table 1

Top 20 genes upregulated in the $p55\alpha^{-/-}/p50\alpha^{-/-}$ mice

Gene Symbol	Definition	Fold change	FDR ^a
Spp1	Mus musculus secreted phosphoprotein 1 (Spp1), mRNA.	6.6519	0.4535
2210415K03Rik	-	3.8412	0.4836
Saa1	Mus musculus serum amyloid A 1 (Saa1), mRNA.	3.6535	0.4585
Saa2	Mus musculus serum amyloid A 2 (Saa2), mRNA.	3.4667	0.4903
LOC268393	Mus musculus similar to 40S ribosomal protein S2 (LOC268393), mRNA.	2.9547	0.6513
Csnd	casein delta	2.7674	0.5711
Csnd	casein delta	2.7355	0.5574
Saa3	Mus musculus serum amyloid A 3 (Saa3), mRNA.	2.5693	0.5002
Sfrp1	Mus musculus secreted frizzled-related sequence protein 1 (Sfrp1), mRNA.	2.5581	0.4835
Lao1	Mus musculus L-amino acid oxidase 1 (Lao1), mRNA.	2.4390	0.4896
3300001A09Rik	Mus musculus RIKEN cDNA 3300001A09 gene (3300001A09Rik), mRNA.	2.2795	0.5154
Slc28a3	Mus musculus solute carrier family 28 (sodium-coupled nucleoside transporter), member 3 (Slc28a3), mRNA.	2.1301	0.4876
Cdc42ep3	Mus musculus CDC42 effector protein (Rho GTPase binding) 3 (Cdc42ep3), mRNA.	2.0982	0.4322
Lrg1	Mus musculus leucine-rich alpha-2-glycoprotein 1 (Lrg1), mRNA.	2.0333	0.3611
Ppfibp1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	2.0172	0.5491
Tlr2	Mus musculus toll-like receptor 2 (Tlr2), mRNA.	2.0065	0.5857
Idb2	Mus musculus inhibitor of DNA binding 2 (Idb2), mRNA.	1.9944	0.3317
Ccl9	Mus musculus chemokine (C-C motif) ligand 9 (Ccl9), mRNA.	1.9791	0.5202
Gjb6	Mus musculus gap junction membrane channel protein beta 6 (Gjb6), mRNA.	1.9701	0.3337
AU040576	Mus musculus expressed sequence AU040576 (AU040576), mRNA.	1.9063	0.4384

^a FDR, false discovery rate

Supplementary Table 2

Top 20 genes downregulated in the $p55\alpha^{-/-}/p50\alpha^{-/-}$ mice

Gene Symbol	Definition	Fold change	FDR ^a
Pik3r1	Mus musculus phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha) (Pik3r1), mRNA.	0.2084	0.3716
Rnase1	Mus musculus ribonuclease, RNase A family, 1 (pancreatic) (Rnase1), mRNA.	0.2819	0.4622
1600029D21Rik	Mus musculus RIKEN cDNA 1600029D21 gene (1600029D21Rik), mRNA.	0.3476	0.5419
Actb	Mus musculus actin, beta, cytoplasmic (Actb), mRNA.	0.3501	0.5785
9130229N11	-	0.3513	0.3686
Hmox1	Mus musculus heme oxygenase (decycling) 1 (Hmox1), mRNA.	0.3566	0.5731
Synpo	Mus musculus synaptopodin (Synpo), mRNA.	0.4123	0.4414
	Murine leukemia virus	0.4198	0.4481
Mt2	Mus musculus metallothionein 2 (Mt2), mRNA.	0.4580	0.3576
1810028F09Rik	-	0.4616	0.4352
Sorl1	Mus musculus sortilin-related receptor, LDLR class A repeats-containing (Sorl1), mRNA.	0.4656	0.5092
Arrdc3	Mus musculus arrestin domain containing 3 (Arrdc3), mRNA.	0.4698	0.5418
Ccng2	Mus musculus cyclin G2 (Ccng2), mRNA.	0.4792	0.5943
A330031N05Rik	mitogen inducible gene mig-2 homolog [Homo sapiens]	0.4851	0.5002
C920004C08Rik	-	0.4865	0.5429
Dscr1	Mus musculus Down syndrome critical region homolog 1 (human) (Dscr1), mRNA.	0.4901	0.3317
2310032D16Rik	Mus musculus RIKEN cDNA 2310032D16 gene (2310032D16Rik), mRNA.	0.4929	0.4821
Slpi	Mus musculus secretory leukocyte protease inhibitor (Slpi), mRNA.	0.5013	0.4121
A030010B06Rik	-	0.5135	0.3641
Grb7	Mus musculus growth factor receptor bound protein 7 (Grb7), mRNA.	0.5245	0.4460

^a FDR, false discovery rate

Supplementary Table 3

Comparison of differentially regulated genes in 24h involution $p55\alpha^{-/-}/p50\alpha^{-/-}$ and $Stat3^{-/-}$ mammary glands

Ranking in $p55\alpha^{-/-}/p50\alpha^{-/-}$	Fold change in $p55\alpha^{-/-}/p50\alpha^{-/-}$	Symbol	Definition	Ranking in $Stat3^{-/-}$
<i>Downregulated</i>				
6	-2.8	Hmox1	Heme oxygenase (decycling) 1	26
7	-2.43	Synpo	Synaptopodin	54
11	-2.15	Sorl1	Sortilin-related receptor, LDLR class A repeats-containing	730
18	-1.99	Slpi	Secretory leukocyte protease inhibitor	5
22	-1.86	Sbsn	Mus musculus suprabasin (Sbsn), mRNA	3
29	-1.76	Kcnj15	Potassium inwardly-rectifying channel, subfamily J, member 15	19
38	-1.69	Sorl1	Sortilin-related receptor, LDLR class A repeats-containing	559
46	-1.65	Chi3l1	Chitinase 3-like 1	43
47	-1.65	Angptl4	Angiopoetin-like 4	18
66	-1.57	Cyp2d22	Cytochrome P450, family 2, subfamily d, polypeptide 22	23
69	-1.57	Hspb8	Heat shock 27kDa protein 8	20
<i>Upregulated</i>				
2	6.65	Spp1	Secreted phosphoprotein 1	51
7	2.77	Csnd	Casein delta	52
11	2.44	Lao1	L-amino acid oxidase 1	136
15	2.03	Lrg1	Leucin-rich alpha-2-glycoprotein 1	4
16	2.02	Ppfibp1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	916
18	1.99	Idb2	Inhibitor of DNA binding 2	132
22	1.87	B2m	Mus musculus beta-2 microglobulin (B2m), mRNA	120
26	1.76	Daam1	Dishevelled associated activator of morphogenesis 1	86
30	1.72	Slc7a5	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 5	7
37	1.66	Gyk	Glycerol kinase	106
39	1.65	Ceacam10	CEA-related cell adhesion molecule 10	324
41	1.65	Folr1	Folate receptor 1	45
43	1.63	G0s2	G0/G1 switch gen 2	64
44	1.62	Orm1	Orsomucoid 1	2
50	1.58	Orm2	Orsomucoid 2	1

