Supplementary Table 5: Significantly changed genes, as identified by SAM (≥2 fold and 0% FDR), with expression patterns highly similar to *Arid5b* (CC≥0.9400). The Gene Ontology (GO) biological process, molecular function and cellular localization is provided for each of these genes.

CC to Arid5b	Affy ID	Gene Name	Symbol	GO Biological Process	GO Molecular Function	GO Cellular Component
0.9899	1455383_a t	hypothetical protein C730043O17	C730043O17			
0.9882	1436504_x _at	apolipoprotein A- IV	Apoa4	innate immune response in mucosa /// transport /// lipid transport /// regulation of cholesterol absorption // lipoprotein metabolic process	lipid transporter activity /// lipid binding	extracellular region /// extracellular space /// extracellular space /// chylomicron
0.9860	1451788_a t	coagulation factor XI	F11	proteolysis /// blood coagulation /// regulation of blood coagulation	coagulation factor XIa activity /// catalytic activity /// serine-type endopeptidase activity /// heparin binding /// peptidase activity /// hydrolase activity	extracellular region
0.9825	1434036_a t	metastasis suppressor 1	Mtss1	actin filament organization /// signal transduction /// nervous system development /// nervous system development /// muscle development /// actin filament polymerization /// filopodium formation		cytoplasm /// cytoplasm /// cytoskeleton /// actin cytoskeleton
0.9799	1442331_a					
0.9771	t 1449945_a t	peroxisome proliferative activated receptor, gamma, coactivator 1 beta	Ppargc1b	transcription /// regulation of transcription, DNA-dependent /// estrogen receptor signaling pathway /// positive regulation of transcription from RNA polymerase II promoter	nucleotide binding /// nucleic acid binding /// RNA binding /// protein binding /// ligand-dependent nuclear receptor transcription coactivator activity /// AF-2 domain binding	nucleus /// nucleus
0.9768	1424934_a t	UDP glucuronosyltrans ferase 2 family, polypeptide B1	Ugt2b1	metabolic process /// metabolic process	glucuronosyltransferase activity /// glucuronosyltransferase activity /// transferase activity /// transferase activity /// transferase activity, transfering glycosyl groups /// transferase activity, transferring glycosyl groups // transferase activity, transferring hexosyl groups /// transferase activity, transferring hexosyl groups	microsome /// integral to membrane
0.9730	1417761_a t	apolipoprotein A- IV	Apoa4	innate immune response in mucosa /// transport /// lipid transport /// regulation of cholesterol absorption //, lipoprotein metabolic process	lipid transporter activity /// lipid binding	extracellular region /// extracellular space /// extracellular space /// chylomicron
0.9710	1419559_a t	cytochrome P450, family 4, subfamily f, polypeptide 14	Cyp4f14	oxidation reduction	monooxygenase activity /// iron ion binding /// electron carrier activity /// oxidoreductase activity /// heme binding /// metal ion binding /// leukotriene-B4 20-monooxygenase activity	extracellular space /// endoplasmic reticulum /// endoplasmic reticulum /// endoplasmic reticulum membrane /// microsome /// microsome /// membrane /// membrane
0.9679	1421214_a t	cytidine monophospho-N- acetyIneuraminic acid hydroxylase	Cmah	transport /// CMP-N- acetylneuraminate metabolic process /// oxidation reduction	iron ion binding /// ubiquinol-	cytoplasm /// cytoplasm /// endoplasmic reticulum /// membrane
0.9640	t	hydroxysteroid 11- beta dehydrogenase 1		lipid metabolic process /// metabolic process /// steroid metabolic process /// lung development	catalytic activity /// 11-beta- hydroxysteroid dehydrogenase activity /// 11-beta-hydroxysteroid dehydrogenase activity /// binding /// oxidoreductase activity	endoplasmic reticulum /// endoplasmic reticulum membrane /// microsome /// membrane /// integral to membrane
0.9635	1452893_s _at	RIKEN cDNA 1110065P19 gene /// RIKEN cDNA 2310040A07 gene	1110065P19 Rik /// 2310040A07 Rik			membrane /// integral to membrane

0.9614	t as	eta-chain (TCR) ssociated rotein kinase	Zap70	protein amino acid phosphorylation /// protein amino acid phosphorylation /// signal transduction /// intracellular signaling cascade /// peptidyl-tyrosine phosphorylation /// petidyl-tyrosine phosphorylation /// petidyl-tyrosine phosphorylation /// beta selection /// positive thymic T cell selection /// negative thymic T cell selection /// thymic T cell selection /// positive regulation of T cell differentiation /// positive regulation of T cell differentiation /// positive regulation of T cell differentiation /// positive regulation of alpha-beta T cell differentiation /// positive regulation of alpha-beta T cell proliferation /// protein amino acid autophosphorylation /// protein amino acid autophosphorylation /// protein signaling /// T cell receptor signaling pathway	phosphotyrosine binding /// protein kinase activity /// protein kinase activity /// protein tyrosine kinase activity /// protein tyrosine kinase activity /// protein tyrosine kinase activity /// protein tyrosine kinase activity /// protein binding activity /// protein tyrosine kinase activity /// protein binding /// protein binding /// ATP binding /// ATP binding /// kinase activity /// transferase activity	cytoplasm /// cytosol /// T cell receptor complex
0.9590	1443180_a	-				
0.9565		omer homolog 2 Drosophila)	Homer2	metabotropic glutamate receptor signaling pathway	actin binding /// protein binding /// GKAP/Homer scaffold activity	cytoplasm /// cytoplasm /// membrane /// cell junction /// synapse /// postsynaptic membrane
0.9559	1432543_a K _at fa	ruppel-like ictor 13	Klf13	transcription /// regulation of transcription, DNA-dependent /// transcription from RNA polymerase II promoter /// positive regulation of transcription from RNA polymerase II promoter	/// DNA binding /// DNA binding ///	intracellular /// nucleus
0.9552	1418808_a re t de	etinol ehydrogenase 5	Rdh5	metabolic process /// metabolic process	catalytic activity /// retinol dehydrogenase activity /// retinol dehydrogenase activity /// binding /// oxidoreductase activity	integral to membrane
0.9463	1435255_a pl t	lexin B1	Plxnb1	signal transduction /// multicellular organismal development /// positive regulation of axonogenesis	receptor activity /// protein binding	intracellular /// membrane /// integral to membrane
0.9441	1447458_a t	-				
	1454880_s B _at fa 1416023_a st	ictor	Bmf Fabp3	apoptosis /// apoptosis /// regulation of apoptosis phosphatidylcholine biosynthetic	protein binding transporter activity /// binding /// lipid	cytoplasm /// actin cytoskeleton /// myos complex /// myosin complex cytoplasm
	de 1424118_a S _at ki _cc	oenzyme A esaturase 1 PC25, NDC80 netochore omplex omponent, omolog (S.	Spc25	process /// transport cell cycle /// mitosis /// cell division	binding	chromosome, pericentric region /// nucleus
	1417449_a a	erevisiae) cyl-CoA iioesterase 8	Acot8	acyl-CoA metabolic process /// acyl- CoA metabolic process /// peroxisome organization and biogenesis	carboxylesterase activity /// palmitoyl CoA hydrolase activity /// acyl-CoA thioesterase activity /// acyl-CoA thioesterase activity /// hydrolase activity /// choloyl-CoA hydrolase	
-0.9423	_at lip	ery low density poprotein eceptor	Vldlr	lipid metabolic process /// transport /// lipid transport /// endocytosis /// steroid metabolic process /// cholesterol metabolic process /// positive regulation of protein kinase activity	activity receptor activity /// lipid transporter activity /// calcium ion binding /// protein binding	extracellular space /// extracellular spac /// membrane fraction /// coated pit /// membrane /// integral to membrane /// integral to membrane
-0.9428	1438310_a	-				
-0.9438	t 1450884_a C t	D36 antigen	Cd36	transport /// cell adhesion /// cell adhesion /// cholesterol transport /// apoptotic cell clearance	receptor activity /// protein binding /// high-density lipoprotein binding	plasma membrane /// membrane /// integral to membrane /// integral to membrane
-0.9444	рі	icrotubule- ssociated rotein 1 light nain 3 alpha	Map1lc3a	autophagic vacuole formation /// autophagic vacuole formation /// ubiquitin cycle /// autophagy	protein binding /// microtubule binding	cytoplasm /// cytoplasm /// autophagic vacuole /// autophagic vacuole /// autophagic vacuole /// microtubule /// microtubule /// endomembrane system, membrane /// organelle membrane /// organelle membrane /// cytoplasmic vesicle
-0.9444			B230337E12 Rik			

-0.9449	1419435 a ald	lehyde oxidase	Aox1	oxidation reduction	catalytic activity /// aldehyde oxidase	cytoplasm
	t 1				activity /// aldehyde oxidase activity /// activity /// aldehyde oxidase activity /// activity /// electron carrier activity /// oxidoreductase activity /// molybdenum ion binding /// metal ion binding /// FAD binding /// NAD binding /// ion-sulfur cluster binding /// 2 ion, 2 sulfur cluster binding	
	1418486_a vai t	nin 1		nitrogen compound metabolic process	hydrolase activity /// hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds /// hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in linear amides /// pantetheine hydrolase activity	extracellular space /// plasma membrane /// membrane /// anchored to membrane
	de (3, Co	enzyme A Ita isomerase 2 trans-enoyl- eenyme A		lipid metabolic process /// fatty acid metabolic process /// fatty acid beta- oxidation /// metabolic process		mitochondrion /// mitochondrion /// mitochondrion /// mitochondrial inner membrane /// mitochondrial matrix
-0.9453	iso 1451421_a rog	omerase) gdi homolog		positive regulation of cell proliferation		
-0.9453	_at (Di 1438448_a oto	rosophila) poetrin 1		/// hemopoiesis ossification /// detection of gravity ///		extracellular region /// membrane ///
	t		-	inner ear morphogenesis		membrane /// integral to membrane
-0.9455		oo caicium iding protein 0 (calpactin)	S100a10		calcium ion binding	
-0.9458	1450391_a mo		Mgll		catalytic activity /// carboxylesterase activity /// hydrolase activity /// acylglycerol lipase activity	
-0.9459	ac <u>;</u> thi sin	oesterase 1 /// yl-CoA	Acot2 ///	long-chain fatty acid metabolic process /// lipid metabolic process /// acyl-CoA metabolic process	carboxylesterase activity /// palmitoyl CoA hydrolase activity /// acyl-CoA thioesterase activity /// acyl-CoA thioesterase activity /// hydrolase activity	cytoplasm /// cytoplasm /// mitochondrion /// mitochondrion /// mitochondrion /// mitochondrial matrix
		ncer sceptibility ndidate 4	Casc4			membrane /// integral to membrane
-0.9465	1450883_a CE _at			transport /// cell adhesion /// cell adhesion /// cholesterol transport ///	receptor activity /// protein binding /// high-density lipoprotein binding	plasma membrane /// membrane /// integral to membrane /// integral to
	kin	ruvate hydrogenase lase, lenzyme 4	Pdk4	apoptotic cell clearance carbohydrate metabolic process /// glucose metabolic process f// acetyl- CoA biosynthetic process from pyruvate /// signal transduction /// phosphorylation /// peptidyl-histidine phosphorylation	two-component sensor activity /// protein histidine kinase activity /// protein serine/threonine/tyrosine kinase activity /// pyruvate dehydrogenase (acetyl-transferring) kinase activity /// ATP binding /// kinase activity /// transferrase activity /// transferase activity, transferring phosphorus-containing groups	membrane mitochondrion /// mitochondrion /// mitochondrial inner membrane /// mitochondrial matrix
-0.9496		osphomannom ase 1		metabolic process /// mannose biosynthetic process	catalytic activity /// phosphomannomutase activity /// isomerase activity	cytoplasm
-0.9497	ion	lute carrier nily 39 (metal n transporter), ember 5		transport /// ion transport /// zinc ion transport /// zinc ion transport /// cellular zinc ion homeostasis /// metal ion transport	zinc ion transmembrane transporter activity /// zinc ion binding /// metal	membrane /// integral to membrane /// basolateral plasma membrane /// basolateral plasma membrane
-0.9498	1419365_a pe	roxisomal ogenesis factor	Pex11a	peroxisome organization and biogenesis /// peroxisome organization and biogenesis /// signal transduction /// peroxisome fission	`	peroxisome /// peroxisoma /// peroxisomal membrane /// integral to peroxisomal membrane /// membrane /// integral to membrane /// integral to membrane
	t of	AB34, member RAS oncogene nily		transport /// endocytosis /// small GTPase mediated signal transduction /// protein transport	nucleotide binding /// GTPase activity /// GTP binding /// guanyl nucleotide binding	ruffle /// cytoplasm /// early endosome /// Golgi apparatus
-0.9517	1438258_a ver t lipe		VldIr	/// protein transport lipid metabolic process /// transport /// lipid transport /// endocytosis /// steroid metabolic process /// cholesterol metabolic process /// positive regulation of protein kinase activity		extracellular space /// extracellular space /// membrane fraction /// coated pit /// membrane /// integral to membrane /// integral to membrane
-0.9519	1450061_a ect		Enc1	ubiquitin cycle /// multicellular	actin binding /// protein binding	cytoplasm /// cytoskeleton
	1428083_a RII t 23	10043N10		organismal development		
-0.9528	ge 1436313_a SC t ce		Scyl2	protein amino acid phosphorylation	protein kinase activity /// binding /// ATP binding	cytoplasm /// endosome /// Golgi apparatus /// endosome membrane ///
-0.9529	1417963_a ph t tra	ospholipid nsfer protein	Pltp	transport /// lipid transport	lipid binding	membrane /// cytoplasmic vesicle extracellular region /// extracellular space

-0.95	t	retinol saturase (all trans retinol 13,14 reductase)	Retsat	carotenoid biosynthetic process /// retinol metabolic process /// oxidation reduction	oxidoreductase activity /// oxidoreductase activity, acting on	nuclear outer membrane /// endoplasmic reticulum /// endoplasmic reticulum membrane /// endoplasmic reticulum membrane /// membrane /// nuclear membrane
-0.95	t		Acot1 /// LOC1000448 30	long-chain fatty acid metabolic process /// lipid metabolic process /// acyl-CoA metabolic process	carboxylesterase activity /// palmitoyl CoA hydrolase activity /// acyl-CoA thioesterase activity /// acyl-CoA thioesterase activity /// hydrolase activity	cytoplasm /// cytoplasm
-0.954	t		Serinc2 /// LOC1000442 21	phosphatidylserine metabolic process /// positive regulation of transferase activity		membrane /// integral to membrane /// integral to membrane
-0.954	1419504_a	monoacylglycerol O-acyltransferase 1 /// similar to monoacylglycerol O-acyltransferase 1		glycerol metabolic process /// lipid metabolic process /// diacylglycerol biosynthetic process /// lipid biosynthetic process /// cell redox homeostasis	2-acylglycerol O-acyltransferase activity /// 2-acylglycerol O- acyltransferase activity /// diacylglycerol O-acyltransferase activity /// acyltransferase activity /// transferase activity	membrane fraction /// endoplasmic reticulum /// endoplasmic reticulum /// endoplasmic reticulum membrane /// membrane /// integral to membrane
-0.954	_	regulator of	Rcan2	calcium-mediated signaling		
-0.954	48 1436314_a	calcineurin 2 SCY1-like 2 (S. cerevisiae)	Scyl2	protein amino acid phosphorylation	protein kinase activity /// binding /// ATP binding	cytoplasm /// endosome /// Golgi apparatus /// endosome membrane /// membrane /// cytoplasmic vesicle
-0.95	52 1447845_s _at	vanin 1	Vnn1	nitrogen compound metabolic process	hydrolase activity /// hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds /// hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds, in linear amides /// pantetheine hydrolase activity	<pre>/// membrane /// anchored to membrane /// membrane /// anchored to membrane</pre>
-0.95	t	solute carrier family 27 (fatty acid transporter), member 1	Slc27a1	long-chain fatty acid metabolic process /// lipid metabolic process /// fatty acid metabolic process /// transport /// lipid transport /// metabolic process	nucleotide binding /// catalytic activity	cytoplasm /// plasma membrane /// plasma membrane /// endomembrane system /// membrane /// integral to membrane /// cytoplasmic vesicle
-0.95		mitogen-activated protein kinase 9	Mapk9	protein amino acid phosphorylation /// JNK cascade	<pre>/ nucleotide binding /// protein kinase activity /// protein serine/threonine kinase activity /// JUN kinase activity /// MAP kinase activity /// protein binding /// ATP binding /// kinase activity /// transferase activity</pre>	nucleus
-0.95	_at	hydroxysteroid dehydrogenase like 2	Hsdl2	metabolic process	catalytic activity /// binding /// sterol carrier activity /// sterol carrier activity /// oxidoreductase activity	mitochondrion
-0.950	53 1423166_a t	CD36 antigen	Cd36	transport /// cell adhesion /// cell adhesion /// cholesterol transport /// apoptotic cell clearance	receptor activity /// protein binding /// high-density lipoprotein binding	plasma membrane /// membrane /// integral to membrane /// integral to membrane
-0.956	t	transient receptor potential cation channel, subfamily M, member 4	Trpm4	transport /// ion transport /// cation transport /// calcium ion transport /// calcium ion transport /// calcium ion transport /// immune response /// regulation of membrane potential	nucleotide binding /// ion channel activity /// calcium activated cation channel activity /// voltage-gated ion channel activity /// calcium channel activity /// calcium channel activity /// calcium channel activity /// calcium ion binding /// calmodulin binding /// ATP binding	plasma membrane /// plasma membrane /// membrane /// membrane /// integral to membrane /// integral to membrane /// integral to membrane
-0.95	t	cytochrome P450, family 4, subfamily a, polypeptide 31	Cyp4a31	oxidation reduction	monooxygenase activity /// iron ion binding /// electron carrier activity /// oxidoreductase activity /// heme binding /// metal ion binding	
-0.95	30 1451488_a	RIKEN cDNA 1110028A07 gene	1110028A07 Rik			extracellular space /// membrane /// integral to membrane /// integral to membrane
-0.95	94 1418989_a t	cathepsin E	Ctse	proteolysis /// antigen processing and presentation of exogenous peptide antigen via MHC class II	/// cathepsin E activity /// cathepsin E activity /// pepsin A activity /// neutrophil collagenase activity /// peptidase activity /// hydrolase activity /// hydrolase activity /// protein homodimerization activity	extracellular space /// endosome /// endosome /// viral envelope
-0.95		RAD51-like 1 (S. cerevisiae)	Rad51I1	DNA metabolic process /// DNA repair /// DNA recombination /// response to DNA damage stimulus	nucleotide binding /// DNA binding /// ATP binding /// DNA-dependent ATPase activity /// nucleoside- triphosphatase activity	nucleus
-0.95	99 1441971_a					
-0.960		RIKEN cDNA 4933404M19 gene	4933404M19 Rik			

-0.9628	1421011_a hydroxyster t (17-beta) dehydroger 11		steroid biosynthetic process /// androgen catabolic process /// metabolic process /// metabolic process /// lipid biosynthetic process	catalytic activity /// estradiol 17-beta- dehydrogenase activity /// binding /// steroid dehydrogenase activity /// oxidoreductase activity	extracellular region /// cytoplasm
-0.9631	1417177_a galactokina t	ise 1 Galk1	carbohydrate metabolic process /// galactose metabolic process /// galactose metabolic process /// galactose metabolic process /// metabolic process /// hosphorylation /// galactitol metabolic process /// carbohydrate phosphorylation	nucleotide binding /// galactokinase activity /// galactokinase activity /// protein binding /// ATP binding /// kinase activity /// transferase activity /// phosphotransferase activity, alcohol group as acceptor	cytoplasm
-0.9634	1415776_a aldehyde t dehydroger family 3, subfamily A		aldehyde metabolic process /// metabolic process	aldehyde dehydrogenase (NAD) activity /// aldehyde dehydrogenase [NAD(P)+] activity /// oxidoreductase activity	mitochondrial inner membrane /// endoplasmic reticulum /// endoplasmic reticulum membrane /// membrane /// integral to membrane /// integral to membrane
-0.9634	1426146_a choline _at phosphotra se 1	Chpt1 nsfera	phosphatidylcholine biosynthetic process /// platelet activating factor biosynthetic process /// apoptosis /// phospholipid biosynthetic process /// regulation of apoptosis /// negative regulation of apoptosis // negative regulation of caspase activity	magnesium ion binding /// diacy[glycerol cholinephosphotransferase activity /// diacy[glycerol cholinephosphotransferase activity /// transferase activity /// phosphotransferase activity, for other substituted phosphate groups /// manganese ion binding /// metal ion binding	Golgi membrane /// cytoplasm /// Golgi apparatus /// membrane /// integral to membrane /// integral to membrane
-0.9646	1418438_a fatty acid bi t protein 2, intestinal	nding Fabp2	transport	transporter activity /// binding /// lipid binding	cytoplasm
-0.9653	1421422_a RIKEN cDN t 5033411D1 gene		metabolic process	catalytic activity /// transferase activity	
-0.9656	1455267_a estrogen-re t receptor ga		transcription /// regulation of transcription, DNA-dependent /// regulation of transcription, DNA- dependent /// regulation of transcription, DNA-dependent /// mutticellular organismal development /// positive regulation of transcription, DNA-dependent	DNA binding /// DNA binding /// DNA binding /// transcription factor activity /// transcription factor activity /// steroid hormone receptor activity /// receptor activity /// receptor activity /// ligand-dependent nuclear receptor activity /// ligand-dependent nuclear receptor activity /// steroid binding /// calmodulin binding /// steroid binding /// calmodulin binding /// transcription activator activity /// transcription activator activity /// sequence- specific DNA binding /// metal ion binding /// AF-2 domain binding	
-0.9683	1430780_a phosphoma _at utase 1	annom Pmm1	metabolic process /// mannose biosynthetic process	catalytic activity /// phosphomannomutase activity /// isomerase activity	cytoplasm
-0.9691	1435446_a choline _at phosphotra se 1	Chpt1 nsfera	phosphatidylcholine biosynthetic process /// platelet activating factor biosynthetic process /// apoptosis /// phospholipid biosynthetic process /// regulation of apoptosis /// negative regulation of apoptosis // negative regulation of caspase activity	magnesium ion binding /// diacy[glycerol cholinephosphotransferase activity /// diacy[glycerol cholinephosphotransferase activity /// transferase activity /// phosphotransferase activity, for other substituted phosphate groups /// manganese ion binding /// metal ion binding	Golgi membrane /// cytoplasm /// Golgi apparatus /// membrane /// integral to membrane /// integral to membrane
-0.9696	1429786_a ZW10 inter	actor Zwint	cell cycle /// mitosis /// cell division		chromosome, pericentric region ///
-0.9702	_at 1415932_x ATPase, cli _at type 9A	ass II, Atp9a	transport /// cation transport /// metabolic process /// phospholipid transport		nucleus membrane /// integral to membrane /// integral to membrane
-0.9723	1422906_a ATP-bindin t cassette, si family G (WHITE), member 2		transport	nucleotide binding /// ATP binding /// ATPase activity /// nucleoside- triphosphatase activity	plasma membrane /// membrane /// integral to membrane /// integral to membrane
-0.9799	1456769_a dual specifi t phosphatas (vaccinia vi phosphatas related)	se 3 rus	protein amino acid dephosphorylation /// dephosphorylation	phosphoprotein phosphatase activity /// protein tyrosine phosphatase activity /// protein tyrosine/serine/threonine phosphatase activity /// protein tyrosine/serine/threonine phosphatase activity /// hydrolase activity /// phosphoric monoester hydrolase activity	