

Table S1. Up- and downregulated differentially expressed circular RNAs in E19 compared with E21 and E21 compared with P3.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr17:19160994-19321551	0.0000000001	Positive infinite	Up	Atxn1	mo_circ:chr20:14335985-14348042	0.0000002542	Positive infinite	Up	Spec11
mo_circ:chr17:12322146-12352876	0.0000000138	Positive infinite	Up	Auh	mo_circ:chr5:168985430-168991261	0.0000003301	Positive infinite	Up	Camta1
mo_circ:chr6:136059672-136071884	0.0000000462	Positive infinite	Up	Mark3	mo_circ:chr4:147869323-147869704	0.0000004928	Positive infinite	Up	Pknox1
mo_circ:chr8:104199588-104202285	0.0000000509	Positive infinite	Up	Atp1b3	mo_circ:chrX:114016360-114041613	0.0000005645	Positive infinite	Up	Tmem164
mo_circ:chr8:22862817-22863273	0.0000001325	Positive infinite	Up	Dock6	mo_circ:chr8:119447348-119465058	0.0000013742	Positive infinite	Up	Lrrfip2
mo_circ:chr7:98849305-98853891	0.000001804	Positive infinite	Up	Mtss1	mo_circ:chr6:129864989-129871224	0.0000026067	Positive infinite	Up	Vrk1
mo_circ:chr3:62719200-62733674	0.000003045	Positive infinite	Up	Agps	mo_circ:chr6:129864989-129890111	0.0000073809	Positive infinite	Up	Vrk1
mo_circ:chr10:73854212-73857079	0.0000005791	Positive infinite	Up	Rps6kb1	mo_circ:chr2:25786589-25787923	0.0000212784	Positive infinite	Up	Ahrgef28
mo_circ:chr4:120295643-120298656	0.0000011210	Positive infinite	Up	Eefsec	mo_circ:chr19:55118679-55121209	0.0000268489	Positive infinite	Up	Zfpml
mo_circ:chr3:1988750-1998592	0.0000024891	Positive infinite	Up	Ehmt1	mo_circ:chr5:167486001-167581074	0.0000284719	Positive infinite	Up	Rere
mo_circ:chr8:79234306-79249597	0.0000024891	Positive infinite	Up	Rfx7	mo_circ:chr10:104622040-104624774	0.0000320405	Positive infinite	Up	Unc13d
mo_circ:chr3:14973056-14990824	0.0000027967	Positive infinite	Up	Dab2ip	mo_circ:chr16:62023411-62026513	0.0000459219	Positive infinite	Up	Rbpms
mo_circ:chr12:16560642-216566201	0.0000044876	Positive infinite	Up	Kcnq1	mo_circ:chr15:34277381-34277914	0.0000969624	Positive infinite	Up	Rnf31
mo_circ:chr16:20606480-20606895	0.0000077468	Positive infinite	Up	Eil	mo_circ:chr6:28272106-28272697	0.000110247	Positive infinite	Up	Dnmt3a
mo_circ:chr3:82716131-82725485	0.0000082393	Positive infinite	Up	Ext2	mo_circ:chr6:7718824-7738462	0.000110247	Positive infinite	Up	Thada
mo_circ:chr1:185306404-185307538	0.0000135946	Positive infinite	Up	Pik3c2a	mo_circ:chr1:80443035-80446422	0.000117608	Positive infinite	Up	Ppp1r37
mo_circ:chr5:167547693-167558250	0.0000135946	Positive infinite	Up	Rere	mo_circ:chr7:34057078-34058440	0.000133956	Positive infinite	Up	Cdk17
mo_circ:chr6:122738862-122739995	0.0000135946	Positive infinite	Up	Zc3h14	mo_circ:chr2:195795435-195795666	0.000143029	Positive infinite	Up	Snx27
mo_circ:chr4:65761402-65770025	0.0000154418	Positive infinite	Up	Atp6v0a4	mo_circ:chr8:67801800-67812158	0.000152762	Positive infinite	Up	Pias1
mo_circ:chr3:81909221-81910484	0.0000213222	Positive infinite	Up	Prdm11	mo_circ:chr5:72119820-72136205	0.000163208	Positive infinite	Up	Rad23b
mo_circ:chr9:11209034-11219449	0.0000259541	Positive infinite	Up	Uxs1	mo_circ:chr7:114523676-114540933	0.00019941	Positive infinite	Up	Ptk2
mo_circ:chr4:57539277-57561542	0.000027262	Positive infinite	Up	Ube2h	mo_circ:chr14:91797457-91804795	0.000228273	Positive infinite	Up	Ikbz1
mo_circ:chr5:58551128-58564765	0.0000338564	Positive infinite	Up	Unc13b	mo_circ:chr5:172949060-172965700	0.000300353	Positive infinite	Up	Gnb1
mo_circ:chr10:48109533-48125139	0.0000362074	Positive infinite	Up	Ulk2	mo_circ:chr6:22242071-22250518	0.000321963	Positive infinite	Up	Spast
mo_circ:chr2:187048486-187051162	0.0000414456	Positive infinite	Up	Arhgef11	mo_circ:chr16:9124152-9150149	0.000397438	Positive infinite	Up	Vstm4
mo_circ:chr10:67965487-67982051	0.0000443616	Positive infinite	Up	Myo1d	mo_circ:chr7:73808151-73848871	0.000397438	Positive infinite	Up	Stk3
mo_circ:chr4:178349959-178389965	0.0000474969	Positive infinite	Up	Sox5	mo_circ:chr19:54803498-54815443	0.00052907	Positive infinite	Up	Banp
mo_circ:chr9:38582634-38584696	0.0000474969	Positive infinite	Up	Prim2	mo_circ:chr10:67579952-67587851	0.0007088	Positive infinite	Up	Rhot1
mo_circ:chr16:2138232-2142317	0.0000584022	Positive infinite	Up	Slmap	mo_circ:chr11:34612627-34631134	0.0007088	Positive infinite	Up	Ttc3
mo_circ:chr3:123829471-123833222	0.0000626068	Positive infinite	Up	Pank2	mo_circ:chr15:52636357-52646476	0.0007088	Positive infinite	Up	Gfra2
mo_circ:chr7:118173410-118173672	0.0000829480	Positive infinite	Up	Rbfox2	mo_circ:chr10:48188215-48200848	0.000763361	Positive infinite	Up	Akap10
mo_circ:chr18:27428857-27429245	0.000102801	Positive infinite	Up	Kif20a	mo_circ:chr6:76455340-76461552	0.000763361	Positive infinite	Up	Ralgap1
mo_circ:chr7:47865531-47889037	0.000110503	Positive infinite	Up	Mettl25	mo_circ:chr1:21160905-21211619	0.000956055	Positive infinite	Up	Akap7
mo_circ:chr14:104942288-104946182	0.000118825	Positive infinite	Up	Afpb	mo_circ:chr20:34646376-34647163	0.001113346	Positive infinite	Up	Cep85l
mo_circ:chr4:168260038-168267184	0.000137552	Positive infinite	Up	Lrp6	mo_circ:chr5:72119820-72124022	0.001113346	Positive infinite	Up	Rad23b
mo_circ:chr8:21663861-21664122	0.000137552	Positive infinite	Up	Ubp5	mo_circ:chr8:64205386-64233082	0.00129895	Positive infinite	Up	Arlh1
mo_circ:chr6:124625936-124629605	0.000171823	Positive infinite	Up	Rps6ka5	mo_circ:chr11:15457479-15474826	0.00151832	Positive infinite	Up	Usp25
mo_circ:chr14:88761036-88762419	0.000185199	Positive infinite	Up	Tns3	mo_circ:chr1:142556681-142565170	0.001642604	Positive infinite	Up	Iqgap1
mo_circ:chr17:19160994-19250082	0.000185199	Positive infinite	Up	Atxn1	mo_circ:chr18:16536783-16538604	0.001925156	Positive infinite	Up	Stc39a6
mo_circ:chr7:109055032-109071915	0.000293044	Positive infinite	Up	Zfat	mo_circ:chr6:828602-907083	0.00208565	Positive infinite	Up	Crim1

Table S1. Continued.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr11:73126466-73130502	0.000342739	Positive infinite	Up	Acap2	mo_circ:chr11:89034506-89036388	0.00226064	Positive infinite	Up	Spidr
mo_circ:chr2:238543065-238566933	0.000370936	Positive infinite	Up	Ppa2	mo_circ:chr1:193097001-193104538	0.00226064	Positive infinite	Up	Tnrc6a
mo_circ:chr12:23518963-23523839	0.000435143	Positive infinite	Up	Pkrip1	mo_circ:chr9:116070134-116079263	0.00226064	Positive infinite	Up	Arhgap28
mo_circ:chr14:106232395-106233401	0.000435143	Positive infinite	Up	Ugp2	mo_circ:chr19:2506536-2521388	0.002451562	Positive infinite	Up	Cdh11
mo_circ:chr1:266201079-266206952	0.000711701	Positive infinite	Up	Sufu	mo_circ:chr1:123959921-123970510	0.002451562	Positive infinite	Up	Chma7
mo_circ:chr11:53158975-53178615	0.000774095	Positive infinite	Up	Bbx	mo_circ:chr18:60572935-60578301	0.002660007	Positive infinite	Up	Neddd41
mo_circ:chr6:8257474-8261060	0.000774095	Positive infinite	Up	Ppm1b	mo_circ:chr19:21448162-21457761	0.002660007	Positive infinite	Up	Loup2
mo_circ:chr5:100493404-100502456	0.00084247	Positive infinite	Up	Nfib	mo_circ:chr6:49198513-49218570	0.002887742	Positive infinite	Up	Sng2
mo_circ:chr7:35041630-35048464	0.00084247	Positive infinite	Up	Fgd6	mo_circ:chr10:35816390-35818308	0.003136733	Positive infinite	Up	Canx
mo_circ:chr12:2144453-2145584	0.00091744	Positive infinite	Up	Camsap3	mo_circ:chr4:57387152-57419089	0.003409167	Positive infinite	Up	Nrf1
mo_circ:chr14:7796209-7810203	0.00091744	Positive infinite	Up	Ptpn13	mo_circ:chr2:25770099-25777403	0.004392944	Positive infinite	Up	Arhgef28
mo_circ:chr19:52162391-52163525	0.00091744	Positive infinite	Up	Mbips1	mo_circ:chr11:84533843-84539325	0.004786525	Positive infinite	Up	Parl
mo_circ:chr3:61464029-61469720	0.00091744	Positive infinite	Up	Lnp	mo_circ:chr1:188510274-188516444	0.005218939	Positive infinite	Up	LOC361635
mo_circ:chr5:64346707-64352506	0.00091744	Positive infinite	Up	Tmeff1	mo_circ:chr10:94172444-94173418	0.005694451	Positive infinite	Up	Ace
mo_circ:chr2:199001328-199002930	0.000996999	Positive infinite	Up	Gpr89b	mo_circ:chr13:68812619-68815978	0.005694451	Positive infinite	Up	Trmt11
mo_circ:chr2:113177840-113198013	0.001418485	Positive infinite	Up	Fndc3b	mo_circ:chr16:71849834-71853546	0.005694451	Positive infinite	Up	Adam9
mo_circ:chr1:273952429-273953596	0.001698859	Positive infinite	Up	Add3	mo_circ:chr1:104793271-104795565	0.005694451	Positive infinite	Up	Nav2
mo_circ:chr8:64133480-64145423	0.001698859	Positive infinite	Up	Bbs4	mo_circ:chr9:96746440-96751314	0.005694451	Positive infinite	Up	Agap1
mo_circ:chr12:25207283-25209050	0.001862784	Positive infinite	Up	Clip2	mo_circ:chr6:105694451-105703335	0.006217844	Positive infinite	Up	Penx
mo_circ:chr12:38225223-38227988	0.001862784	Positive infinite	Up	Katc1	mo_circ:chr9:93208928-93239075	0.006217844	Positive infinite	Up	Armc9
mo_circ:chr19:43254907-43263533	0.002475539	Positive infinite	Up	Ddx19a	mo_circ:chr16:2297907-2298816	0.0067945	Positive infinite	Up	Dennd6a
mo_circ:chr3:122130941-122141403	0.002475539	Positive infinite	Up	Sirpa	mo_circ:chr3:10656571-10663946	0.0067945	Positive infinite	Up	Gpr107
mo_circ:chr10:78063351-78073611	0.003013246	Positive infinite	Up	Stxbp4	mo_circ:chr5:166060053-166067876	0.0067945	Positive infinite	Up	Kif1b
mo_circ:chr10:43142689-43146991	0.003331658	Positive infinite	Up	Galnt10	mo_circ:chr9:69840110-69849129	0.0067945	Positive infinite	Up	Ino80d
mo_circ:chrX:63552834-63602914	0.003331658	Positive infinite	Up	Apoa	mo_circ:chr18:60575938-60578301	0.007430474	Positive infinite	Up	Neddd41
mo_circ:chr13:35769419-35784163	0.003689192	Positive infinite	Up	Ptpn4	mo_circ:chr6:54981139-54993439	0.007430474	Positive infinite	Up	Ahr
mo_circ:chr20:50676394-50687868	0.004091279	Positive infinite	Up	Hace1	mo_circ:chr16:62132750-62160831	0.008132591	Positive infinite	Up	Ghf2e2
mo_circ:chr10:106108767-106109018	0.00454418	Positive infinite	Up	Sec14l1	mo_circ:chr6:125523808-125569718	0.008132591	Positive infinite	Up	Tc2n
mo_circ:chr1:193104517-193114307	0.00454418	Positive infinite	Up	Tnrc6a	mo_circ:chr8:78051192-78055624	0.008132591	Positive infinite	Up	Myzap
mo_circ:chr3:123299120-123304722	0.00454418	Positive infinite	Up	RGD1565616	mo_circ:chr8:78415870-78521751	0.008132591	Positive infinite	Up	Tcf12
mo_circ:chr5:116593430-116658945	0.00454418	Positive infinite	Up	Nfia	mo_circ:chr18:24662368-24665851	0.008908558	Positive infinite	Up	Wdr33
mo_circ:chr5:777226-7798747	0.00454418	Positive infinite	Up	Prex2	mo_circ:chr3:91334376-91349258	0.008908558	Positive infinite	Up	Prr51
mo_circ:chr2:39234893-39236629	0.005055132	Positive infinite	Up	Anape5	mo_circ:chr4:66193731-66214585	0.008908558	Positive infinite	Up	Ubn2
mo_circ:chr6:126864143-126894194	0.005055132	Positive infinite	Up	Unc79	mo_circ:chr6:44055353-44112432	0.008908558	Positive infinite	Up	Mboat2
mo_circ:chr8:65745192-65754110	0.005055132	Positive infinite	Up	Uaca	mo_circ:chr9:11202671-11219449	0.008908558	Positive infinite	Up	Uxsl1
mo_circ:chr9:100583715-100588953	0.005055132	Positive infinite	Up	Hdlbp	mo_circ:chr15:51925689-51944899	0.009767084	Positive infinite	Up	Ppp3cc
mo_circ:chrX:114016360-114077939	0.005055132	Positive infinite	Up	Tmem164	mo_circ:chr17:83375370-83440038	0.009767084	Positive infinite	Up	Pkxdc2
mo_circ:chr7:13044637-13047059	0.005632499	Positive infinite	Up	Mier2	mo_circ:chr7:129678610-129680736	0.009767084	Positive infinite	Up	Brd1

Table S1. Continued.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr14:107728612-107728893	0.006285974	Positive infinite	Up	Commd1	mo_circ:chr19:33010738-33073342	0.010718028	Positive infinite	Up	Slc10a7
mo_circ:chr6:125053167-125053501	0.006285974	Positive infinite	Up	Ppp4r3a	mo_circ:chr3:60744743-60756038	0.010718028	Positive infinite	Up	Aif2
mo_circ:chr18:28223794-28242662	0.007026795	Positive infinite	Up	Si11	mo_circ:chr8:69780138-69780985	0.010718028	Positive infinite	Up	Dis3l1
mo_circ:chr4:87186852-87188712	0.007026795	Positive infinite	Up	Fkbp9	mo_circ:chr4:7700000-7706702	0.011177257	Positive infinite	Up	Fam126a
mo_circ:chr18:77272004-77275861	0.007868012	Positive infinite	Up	Nfatc1	mo_circ:chr2:187525295-187529234	0.012943397	Positive infinite	Up	Mef2d
mo_circ:chr14:47949965-47952986	0.007868012	Positive infinite	Up	Wtap	mo_circ:chr3:136874645-136896550	0.012943397	Positive infinite	Up	Kif16b
mo_circ:chr1:87010380-87010777	0.007868012	Positive infinite	Up	Ech1	mo_circ:chr18:2016346-20322491	0.014244933	Positive infinite	Up	Mib1
mo_circ:chr4:57560121-57561542	0.007868012	Positive infinite	Up	Ube2h	mo_circ:chr9:60516204-60542093	0.014244933	Positive infinite	Up	Hcwc2
mo_circ:chr8:68089178-68154119	0.007868012	Positive infinite	Up	Map2k5	mo_circ:chr7:49867756-49871184	0.015688749	Positive infinite	Up	Cdk13
mo_circ:chr10:18396548-18408534	0.008824796	Positive infinite	Up	Ranbp17	mo_circ:chr18:2005294-20322491	0.015688749	Positive infinite	Up	Mib1
mo_circ:chr2:240854068-240861760	0.008824796	Positive infinite	Up	Nfkb1	mo_circ:chr5:106109624-106121498	0.015688749	Positive infinite	Up	Mllt3
mo_circ:chr6:92173587-92181774	0.008824796	Positive infinite	Up	Map4k5	mo_circ:chr9:20596863-20599410	0.015688749	Positive infinite	Up	Tnfrsf21
mo_circ:chr8:6150134-6161740	0.008824796	Positive infinite	Up	Yap1	mo_circ:chr9:50892486-50906966	0.015688749	Positive infinite	Up	Bivm
mo_circ:chr12:17513488-17519957	0.009914801	Positive infinite	Up	Sun1	mo_circ:chr10:74471246-74480363	0.017289842	Positive infinite	Up	Trim37
mo_circ:chr1:77872644-77874388	0.009914801	Positive infinite	Up	Gltser1	mo_circ:chr2:206956638-206976810	0.017289842	Positive infinite	Up	Lrig2
mo_circ:chr2:258932028-258932200	0.009914801	Positive infinite	Up	Adgrl2	mo_circ:chr10:97800114-97815554	0.019074209	Positive infinite	Up	Arsrg
mo_circ:chr6:124416560-124420161	0.009914801	Positive infinite	Up	Ttc7b	mo_circ:chr11:66082755-66083227	0.019074209	Positive infinite	Up	Gtf2e1
mo_circ:chr6:75959532-75965681	0.009914801	Positive infinite	Up	RGD1304624	mo_circ:chr18:71141382-71149287	0.019074209	Positive infinite	Up	Dym
mo_circ:chr10:108971032-108982577	0.011155278	Positive infinite	Up	Rptor	mo_circ:chr1:185113570-185118052	0.019074209	Positive infinite	Up	Nucb2
mo_circ:chr12:37628207-37628640	0.011155278	Positive infinite	Up	Sbno1	mo_circ:chr7:138739114-138820528	0.019074209	Positive infinite	Up	Peed1b
mo_circ:chr1:224963592-224963896	0.011155278	Positive infinite	Up	Nxf1	mo_circ:chr5:70098761-70139170	0.02107468	Positive infinite	Up	Diaph3
mo_circ:chr6:108323657-108324894	0.011155278	Positive infinite	Up	Abcd4	mo_circ:chr7:79623091-79644806	0.02107468	Positive infinite	Up	Igag8
mo_circ:chr12:37462807-37465389	0.012564346	Positive infinite	Up	Ddx55	mo_circ:chr19:43069651-43071000	0.02107468	Positive infinite	Up	Glg1
mo_circ:chr17:83567831-83589045	0.012564346	Positive infinite	Up	Plxdc2	mo_circ:chr1:128575534-128576607	0.02107468	Positive infinite	Up	Lrrc28
mo_circ:chr1:154439745-154446214	0.012564346	Positive infinite	Up	Picalm	mo_circ:chr1:142192435-142194379	0.02107468	Positive infinite	Up	Furin
mo_circ:chr1:37522470-37535617	0.012564346	Positive infinite	Up	Adcy2	mo_circ:chr2:219382723-219427368	0.02107468	Positive infinite	Up	Cdc14a
mo_circ:chr1:89004403-89004978	0.012564346	Positive infinite	Up	Proser3	mo_circ:chr4:180589337-180613165	0.02107468	Positive infinite	Up	Iptr2
mo_circ:chr3:123285078-123304722	0.012564346	Positive infinite	Up	RGD1565616	mo_circ:chr5:113637649-113647215	0.02107468	Positive infinite	Up	Ift74
mo_circ:chr5:148546311-148556027	0.012564346	Positive infinite	Up	Zechc17	mo_circ:chr7:130113212-130116591	0.02107468	Positive infinite	Up	Mapk12
mo_circ:chr7:123242579-123244218	0.012564346	Positive infinite	Up	Desl1	mo_circ:chr11:73148784-73158138	0.023333191	Positive infinite	Up	Acap2
mo_circ:chr13:73255237-73265813	0.014175416	Positive infinite	Up	Aebd6	mo_circ:chr12:25007056-25007716	0.023333191	Positive infinite	Up	Eln
mo_circ:chr15:17872839-17882722	0.014175416	Positive infinite	Up	LOC361016	mo_circ:chr19:55895255-55896592	0.023333191	Positive infinite	Up	Spg7
mo_circ:chr2:202479064-202493972	0.014175416	Positive infinite	Up	Gdap2	mo_circ:chr1:188481301-188483565	0.023333191	Positive infinite	Up	LOC361635
mo_circ:chr2:247248411-247333499	0.014175416	Positive infinite	Up	Unc5c	mo_circ:chr5:138606008-138646976	0.023333191	Positive infinite	Up	Foxj3
mo_circ:chr2:34244477-34247402	0.014175416	Positive infinite	Up	Trappc13	mo_circ:chr9:54637741-54652452	0.023333191	Positive infinite	Up	Myo1b
mo_circ:chr4:10225077-10233323	0.014175416	Positive infinite	Up	Fam185a	mo_circ:chr10:110535457-110536927	0.02590394	Positive infinite	Up	Wdr45b
mo_circ:chr7:18427969-18430356	0.014175416	Positive infinite	Up	Adamts10	mo_circ:chr11:34612627-34616155	0.02590394	Positive infinite	Up	Ttc3
mo_circ:chrX:105156405-105156903	0.014175416	Positive infinite	Up	Cenpi	mo_circ:chr11:47165426-47169764	0.02590394	Positive infinite	Up	Cep97
mo_circ:chr10:10849180-10852471	0.016032988	Positive infinite	Up	Mgml1	mo_circ:chr2:39446592-39455858	0.02590394	Positive infinite	Up	Erec8

Table S1. Continued.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr10:43539819-43547905	0.016032988	Positive infinite	Up	Cnot8	mo_circ:chr5:131781284-131787748	0.02590394	Positive infinite	Up	Spata6
mo_circ:chr10:86110192-86110496	0.016032988	Positive infinite	Up	Med1	mo_circ:chr5:166066342-166067876	0.02590394	Positive infinite	Up	Kif1b
mo_circ:chr11:79361488-79399831	0.016032988	Positive infinite	Up	Lpp	mo_circ:chr6:26011662-26047446	0.02590394	Positive infinite	Up	Bre
mo_circ:chr12:12259130-12265139	0.016032988	Positive infinite	Up	Baiap2l1	mo_circ:chr7:35094600-35095720	0.02590394	Positive infinite	Up	Nr2c1
mo_circ:chr12:36958864-36970828	0.016032988	Positive infinite	Up	Ncor2	mo_circ:chr9:61355085-61359768	0.02590394	Positive infinite	Up	Ankrd44
mo_circ:chr20:7549783-7552021	0.016032988	Positive infinite	Up	Anks1a	mo_circ:chr15:33558468-33558619	0.028857719	Positive infinite	Up	Pabpn1
mo_circ:chr2:128479164-128494195	0.016032988	Positive infinite	Up	Jadel	mo_circ:chr15:38130856-38137897	0.028857719	Positive infinite	Up	Zdhhc20
mo_circ:chr7:122178804-122184430	0.016032988	Positive infinite	Up	Adsl	mo_circ:chr13:74041875-74042333	0.032266715	Positive infinite	Up	Soat1
mo_circ:chr1:133448752-133462521	0.018196754	Positive infinite	Up	Mcp2	mo_circ:chr16:83037947-83050935	0.032266715	Positive infinite	Up	Arhgef7
mo_circ:chr5:119932558-119942707	0.018196754	Positive infinite	Up	Raver2	mo_circ:chr20:14335985-14340940	0.032266715	Positive infinite	Up	Specc1l
mo_circ:chr14:37238505-37241679	0.020748006	Positive infinite	Up	Dcun1d4	mo_circ:chr4:58093735-58097892	0.032266715	Positive infinite	Up	Copg2
mo_circ:chr19:34266719-34272145	0.020748006	Positive infinite	Up	Arhgap10	mo_circ:chr10:4624614-4625498	0.036191095	Positive infinite	Up	Txndc1l
mo_circ:chr1:274700623-274701534	0.020748006	Positive infinite	Up	Shoc2	mo_circ:chr10:90308259-90308570	0.036191095	Positive infinite	Up	Slc4a1
mo_circ:chr20:50659751-50670469	0.020748006	Positive infinite	Up	Hace1	mo_circ:chr10:95853352-95869889	0.036191095	Positive infinite	Up	Helz
mo_circ:chr3:100398643-100398878	0.020748006	Positive infinite	Up	Kif18a	mo_circ:chr4:21075632-21093811	0.036191095	Positive infinite	Up	Rufy3
mo_circ:chr3:22198808-22239368	0.020748006	Positive infinite	Up	Dennd1a	mo_circ:chr19:34239430-34241861	0.036191095	Positive infinite	Up	Arhgap10
mo_circ:chr3:8547346-8547585	0.020748006	Positive infinite	Up	Sptan1	mo_circ:chr1:126819845-126824250	0.036191095	Positive infinite	Up	Pesk6
mo_circ:chr10:1413338-1419399	0.023784315	Positive infinite	Up	Parn	mo_circ:chr12:221065774-221067559	0.036191095	Positive infinite	Up	Ehbp1l1
mo_circ:chr10:71770016-71775089	0.023784315	Positive infinite	Up	Aatf	mo_circ:chr4:158151102-158166045	0.036191095	Positive infinite	Up	Vwf
mo_circ:chr11:84521876-84522603	0.023784315	Positive infinite	Up	Parl	mo_circ:chr5:60390691-60393196	0.036191095	Positive infinite	Up	Zcchc7
mo_circ:chr12:16429462-16432717	0.023784315	Positive infinite	Up	Mad1l1	mo_circ:chr7:137226465-137256074	0.036191095	Positive infinite	Up	Ano6
mo_circ:chr13:53167593-53179800	0.023784315	Positive infinite	Up	Camsap2	mo_circ:chr5:56804970-56808138	0.040696963	Positive infinite	Up	Lrch1
mo_circ:chr15:38228016-38244652	0.023784315	Positive infinite	Up	Micu2	mo_circ:chr16:48621477-48622700	0.040696963	Positive infinite	Up	Irf2
mo_circ:chr17:78922772-78942311	0.023784315	Positive infinite	Up	Nmt2	mo_circ:chr18:44833464-44837220	0.040696963	Positive infinite	Up	Hsd17b4
mo_circ:chr17:87795320-87797427	0.023784315	Positive infinite	Up	Arhgap21	mo_circ:chr20:22822066-22856689	0.040696963	Positive infinite	Up	Jmjd1c
mo_circ:chr1:164055294-164064815	0.023784315	Positive infinite	Up	Uvrag	mo_circ:chr4:121539775-121545300	0.040696963	Positive infinite	Up	Chchd6
mo_circ:chr2:226954949-226974826	0.023784315	Positive infinite	Up	Pde5a	mo_circ:chr6:33841292-33841582	0.040696963	Positive infinite	Up	Pum2
mo_circ:chr4:57387152-57412758	0.023784315	Positive infinite	Up	Nrf1	mo_circ:chr8:456819-509712	0.040696963	Positive infinite	Up	Gucy1a2
mo_circ:chr8:21457148-21458507	0.023784315	Positive infinite	Up	Zfp26	mo_circ:chr8:87503726-87506039	0.040696963	Positive infinite	Up	Senp6
mo_circ:chr10:56620123-56620370	0.027386145	Positive infinite	Up	Acadvl	mo_circ:chr10:89406848-89409533	0.045849339	Positive infinite	Up	Brcal
mo_circ:chr12:15980239-15981325	0.027386145	Positive infinite	Up	Amz1	mo_circ:chr17:89900184-89908283	0.045849339	Positive infinite	Up	Acbd5
mo_circ:chr13:110837569-110856315	0.027386145	Positive infinite	Up	Rcor3	mo_circ:chr18:73479863-73498648	0.045849339	Positive infinite	Up	Pias2
mo_circ:chr13:72818897-72822123	0.027386145	Positive infinite	Up	Stx6	mo_circ:chr19:39176540-39187048	0.045849339	Positive infinite	Up	Sntb2
mo_circ:chr1:142744886-142750856	0.027386145	Positive infinite	Up	Sec11a	mo_circ:chr1:207040277-207088396	0.045849339	Positive infinite	Up	Docl1
mo_circ:chr2:208198684-208203924	0.027386145	Positive infinite	Up	Repla	mo_circ:chr8:22513983-22521943	0.045849339	Positive infinite	Up	Dnm2
mo_circ:chr5:128468460-128473338	0.027386145	Positive infinite	Up	Txndc12	mo_circ:chr5:16592163-16602186	0.04868011	4.099535674	Up	Lyn
mo_circ:chr7:117603186-117603491	0.027386145	Positive infinite	Up	Fbxl6	mo_circ:chr6:10349057-10364260	0.023834099	4.025535092	Up	Epas1
mo_circ:chr8:69793755-69795155	0.027386145	Positive infinite	Up	Dis1	mo_circ:chr5:7830490-7872679	0.045493224	3.74723393	Up	Prex2
mo_circ:chr9:16036525-16047807	0.027386145	Positive infinite	Up	Ubr2	mo_circ:chr1:136017017-136017482	0.029286652	3.684498174	Up	Slco3a1
mo_circ:chr16:21357016-21358007	0.031639095	Positive infinite	Up	Gmp1	mo_circ:chr10:16724062-16730140	0.001996808	3.313660479	Up	Crebrf

Table S1. Continued.

E19 vs. E21		E21 vs. P3							
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr19:34305791-34312530	0.031639095	Positive infinite	Up	Arhgap10	mo_circ:chr2:227687641-227700240	0.017000194	3.169925001	Up	Prss12
mo_circ:chr1:142191060-142191760	0.031639095	Positive infinite	Up	Furin	mo_circ:chr3:71788186-71800225	0.017703458	3.156119202	Up	Calcr1
mo_circ:chr1:282396507-282412514	0.031639095	Positive infinite	Up	Grik5	mo_circ:chr20:21978047-21986948	0.007506314	3.108524457	Up	Rtkn2
mo_circ:chr20:7568495-7573740	0.031639095	Positive infinite	Up	Anks1a	mo_circ:chr17:87758882-87760775	0.031372212	2.46792308	Up	Arhgap21
mo_circ:chr2:219620159-219626341	0.031639095	Positive infinite	Up	Trmt13	mo_circ:chr14:86104151-86104632	0.0112438084	2.085596483	Up	Aebp1
mo_circ:chr2:225365473-225371154	0.031639095	Positive infinite	Up	Abcd3	mo_circ:chr11:34612627-34614139	0.025200628	1.586601617	Up	Ttc3
mo_circ:chr2:226954949-226963787	0.031639095	Positive infinite	Up	Pde5a	mo_circ:chr2:226925637-226926225	0.035377543	1.554330882	Up	Pde5a
mo_circ:chr7:121219130-121220758	0.031639095	Positive infinite	Up	Pdgfrb	mo_circ:chr9:20596863-20599410	0.015688749	Negative infinite	Down	Tnfrsf21
mo_circ:chr7:28905432-28911656	0.031639095	Positive infinite	Up	Dram1	mo_circ:chr1:164046102-164064815	0.000000000	Negative infinite	Down	Uvrsg
mo_circ:chr9:111748642-111756949	0.031639095	Positive infinite	Up	Fer	mo_circ:chr1:236196243-236198026	0.000000000	Negative infinite	Down	Pcsk5
mo_circ:chr11:69106259-69125042	0.036625304	Positive infinite	Up	Mylk	mo_circ:chr1:116604549-116610544	0.0000000292	Negative infinite	Down	Ube3a
mo_circ:chr12:23962947-23968609	0.036625304	Positive infinite	Up	Styx11	mo_circ:chr10:106264856-106265494	0.0000000390	Negative infinite	Down	Sept9
mo_circ:chr15:34428289-34428656	0.036625304	Positive infinite	Up	Dhrs1	mo_circ:chr1:200648164-200658087	0.000001607	Negative infinite	Down	Fgfr2
mo_circ:chr7:114534021-114540933	0.036625304	Positive infinite	Up	Ptk2	mo_circ:chr9:65361368-65364133	0.000001607	Negative infinite	Down	Orc2
mo_circ:chr8:39220529-39221244	0.036625304	Positive infinite	Up	Stt3a	mo_circ:chr1:84060848-84061187	0.0000015562	Negative infinite	Down	Adck4
mo_circ:chr8:5233866-5260696	0.036625304	Positive infinite	Up	Dync2h1	mo_circ:chr3:14973056-14990824	0.0000015562	Negative infinite	Down	Dab2ip
mo_circ:chr17:34828759-34836021	0.042515043	Positive infinite	Up	Exoc2	mo_circ:chr1:81437928-81438850	0.0000027245	Negative infinite	Down	Xrcc1
mo_circ:chr18:60671477-60685515	0.042515043	Positive infinite	Up	Nedd4l	mo_circ:chr18:36244090-36271261	0.0000077719	Negative infinite	Down	Prelid2
mo_circ:chr1:276295100-276295378	0.042515043	Positive infinite	Up	Zdhc6	mo_circ:chr3:123077758-123078115	0.0000077719	Negative infinite	Down	Ptpra
mo_circ:chr1:80266113-80267275	0.042515043	Positive infinite	Up	Ercc1	mo_circ:chr1:185306404-185307538	0.0000083177	Negative infinite	Down	Pik3c2a
mo_circ:chr2:25901254-2592179	0.042515043	Positive infinite	Up	Arhgef28	mo_circ:chr3:81909221-81910484	0.0000134899	Negative infinite	Down	Prdm11
mo_circ:chr5:136789486-136795602	0.042515043	Positive infinite	Up	St3gal3	mo_circ:chr9:11209034-11219449	0.0000166741	Negative infinite	Down	Uxs1
mo_circ:chr9:60536090-60542093	0.042515043	Positive infinite	Up	Hecw2	mo_circ:chr2:226973749-226974826	0.0000206709	Negative infinite	Down	Pde5a
mo_circ:chrX:112033981-112034696	0.042515043	Positive infinite	Up	Mid2	mo_circ:chr1:164046102-164064815	0.0000000000	Negative infinite	Down	Uvrsg
mo_circ:chrX:157321294-157321668	0.042515043	Positive infinite	Up	Bgn	mo_circ:chr5:58551128-58564765	0.0000222207	Negative infinite	Down	Unc13b
mo_circ:chr15:25320488-25335135	0.049585794	Positive infinite	Up	Tmem260	mo_circ:chr2:187048486-187051162	0.0000276601	Negative infinite	Down	Arhgef11
mo_circ:chr2:25870923-25909703	0.049585794	Positive infinite	Up	Arhgef28	mo_circ:chr10:62574791-62575768	0.0000320643	Negative infinite	Down	Taok1
mo_circ:chr3:21782079-21786585	0.049585794	Positive infinite	Up	Rabgap1	mo_circ:chr19:49158646-49159228	0.0000320643	Negative infinite	Down	Cdy12
mo_circ:chr3:46087676-46090889	0.049585794	Positive infinite	Up	Baz2b	mo_circ:chr1:187776387-187777086	0.0000320643	Negative infinite	Down	Arfip1
mo_circ:chr5:129448885-129491380	0.049585794	Positive infinite	Up	Faf1	mo_circ:chr19:34270069-34298610	0.0000345416	Negative infinite	Down	Arhgap10
mo_circ:chr7:117464026-117465159	0.049585794	Positive infinite	Up	Mroh1	mo_circ:chr16:2138232-2142317	0.0000401299	Negative infinite	Down	Slmap
mo_circ:chr9:65428570-65436606	0.049585794	Positive infinite	Up	Fam126b	mo_circ:chr3:61781151-61813898	0.0000635141	Negative infinite	Down	Mix2
mo_circ:chr1:12910392-129114410	0.045139533	3.321928095	Up	Neeh1	mo_circ:chr2:24067948-24073884	0.0000803436	Negative infinite	Down	Ap3b1
mo_circ:chr10:67695779-67711884	0.015189512	3.263034406	Up	Rhbdl3	mo_circ:chr4:165621036-165622669	0.0000941744	Negative infinite	Down	Ybx3
mo_circ:chr6:125523808-125524984	0.0000301492	2.807568481	Up	Tc2n	mo_circ:chr12:51310588-51313722	0.000110581	Negative infinite	Down	Pitpnb
mo_circ:chr8:129123864-129133074	0.018592661	2.783866569	Up	Myrip	mo_circ:chr17:46675533-46693522	0.000119909	Negative infinite	Down	Elmo1
mo_circ:chr7:2558105-2558739	0.003422791	2.759115625	Up	Rbms2	mo_circ:chr1:216737401-216742438	0.000130083	Negative infinite	Down	Nap114
mo_circ:chr8:94069184-94070462	0.009393555	2.684991319	Up	Ubc3d	mo_circ:chr8:94069184-94084373	0.000130083	Negative infinite	Down	Ubc3d
mo_circ:chr14:14620910-14624933	0.003912883	2.3310112	Up	Fras1	mo_circ:chr5:129448885-129457884	0.000166559	Negative infinite	Down	Faf1

Table S1. Continued.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr2:116586880-116591616	0.016513734	2.083213368	Up	Egfm1	mo_circ:chr4:26336094-26341599	0.00018104	Negative infinite	Down	Cdk14
mo_circ:chr6:125568127-125569718	0.020364955	1.980999038	Up	Tc2n	mo_circ:chr18:63391439-63393541	0.000196878	Negative infinite	Down	Cep76
mo_circ:chr6:10920914-10923681	0.03588026	1.978393544	Up	Tic7a	mo_circ:chr4:124694516-124767723	0.00021421	Negative infinite	Down	Adams19
mo_circ:chr1:255636891-255637533	0.018024097	1.685443894	Up	Btaf1	mo_circ:chr20:50659751-50699734	0.000233189	Negative infinite	Down	Hace1
mo_circ:chr6:129864989-129871224	0.000000043	Negative infinite	Down	Vrk1	mo_circ:chr4:71542057-71579651	0.000253983	Negative infinite	Down	Prom1
mo_circ:chr5:168985430-168991261	0.0000000695	Negative infinite	Down	Camta1	mo_circ:chr11:73126466-73130502	0.000276779	Negative infinite	Down	Acap2
mo_circ:chr6:129864989-129890111	0.0000001070	Negative infinite	Down	Vrk1	mo_circ:chr13:83636128-83638054	0.000301785	Negative infinite	Down	Dcaf6
mo_circ:chr1:164025518-164064815	0.0000001870	Negative infinite	Down	Uvrug	mo_circ:chr3:23488872-23493868	0.000392513	Negative infinite	Down	Ppp6c
mo_circ:chr5:167486001-167581074	0.0000003595	Negative infinite	Down	Rere	mo_circ:chr4:140176029-140185951	0.00067477	Negative infinite	Down	Sumf1
mo_circ:chr14:84742438-84766181	0.0000037494	Negative infinite	Down	Mtmt3	mo_circ:chr11:70724569-70728535	0.000740182	Negative infinite	Down	Snx4
mo_circ:chr11:34612627-34631134	0.0000105630	Negative infinite	Down	Tic3	mo_circ:chr2:251724170-251730903	0.000740182	Negative infinite	Down	Ddab1
mo_circ:chr8:67801800-67812158	0.0000221450	Negative infinite	Down	Pias1	mo_circ:chrX:10406997-10407453	0.000740182	Negative infinite	Down	Ddx3x
mo_circ:chr6:7718824-7738462	0.0000257761	Negative infinite	Down	Thada	mo_circ:chr3:61464029-61469720	0.000812479	Negative infinite	Down	Lnp
mo_circ:chr5:72119820-72136205	0.0000332999	Negative infinite	Down	Rad23b	mo_circ:chr19:15504040-15516663	0.000980964	Negative infinite	Down	Lpeat2
mo_circ:chr4:147869323-147869704	0.0000593479	Negative infinite	Down	Pixnd1	mo_circ:chr8:117332211-117334586	0.000980964	Negative infinite	Down	Qrich1
mo_circ:chr7:73808151-73848871	0.0000660738	Negative infinite	Down	Stk3	mo_circ:chr14:28786814-28836518	0.001187469	Negative infinite	Down	Adgrl3
mo_circ:chr8:64205386-64233082	0.0000660738	Negative infinite	Down	Arlh1	mo_circ:chr19:39543248-39575438	0.001187469	Negative infinite	Down	Wwp2
mo_circ:chr19:55118679-55121209	0.0000697369	Negative infinite	Down	Zfpml	mo_circ:chr1:79807301-79810373	0.001187469	Negative infinite	Down	Ccdc61
mo_circ:chr10:89406848-89409533	0.000143221	Negative infinite	Down	Brcal	mo_circ:chr2:198276002-198284858	0.001187469	Negative infinite	Down	Otud7b
mo_circ:chr8:119447348-119465058	0.000160506	Negative infinite	Down	Lrrfp2	mo_circ:chr2:113177840-113198013	0.001307761	Negative infinite	Down	Fndc3b
mo_circ:chr1:21160905-21211619	0.000169975	Negative infinite	Down	Akap7	mo_circ:chr6:124651885-124652103	0.001307761	Negative infinite	Down	Rps6ka5
mo_circ:chr20:34646376-34647163	0.000202156	Negative infinite	Down	Cep85	mo_circ:chr2:23770708-23827760	0.001441216	Negative infinite	Down	Lhfp2
mo_circ:chr19:54803498-54815443	0.000214289	Negative infinite	Down	Banp	mo_circ:chr12:25226326-25234184	0.001589407	Negative infinite	Down	Clip2
mo_circ:chr9:11202671-11219449	0.000240966	Negative infinite	Down	Uxsl	mo_circ:chr1:273952429-273953596	0.001589407	Negative infinite	Down	Add3
mo_circ:chr5:72119820-72124022	0.000255623	Negative infinite	Down	Rad23b	mo_circ:chr2:112910392-112914410	0.001589407	Negative infinite	Down	Nceh1
mo_circ:chr15:70098761-70139170	0.000271244	Negative infinite	Down	Diaph3	mo_circ:chr8:64133480-64145423	0.001589407	Negative infinite	Down	Bbs4
mo_circ:chr4:57387152-57419089	0.000344805	Negative infinite	Down	Nrfl	mo_circ:chr12:24285582-24285875	0.001754114	Negative infinite	Down	Hip1
mo_circ:chrX:82686555-82705899	0.000389417	Negative infinite	Down	Rps6ka6	mo_circ:chr12:25207283-25209050	0.001754114	Negative infinite	Down	Clip2
mo_circ:chr18:69654505-69657373	0.000440318	Negative infinite	Down	Smad4	mo_circ:chr10:14628972-14630162	0.001937355	Negative infinite	Down	Ube2i
mo_circ:chr18:60572935-60578301	0.000468425	Negative infinite	Down	Nedd4l	mo_circ:chr8:94718121-94730732	0.001937355	Negative infinite	Down	Cyb5r4
mo_circ:chr2:128642780-128668115	0.00053063	Negative infinite	Down	Selt1	mo_circ:chr10:4213518-4233192	0.00236891	Negative infinite	Down	Snx29
mo_circ:chr14:91797457-91804795	0.000565035	Negative infinite	Down	Ikzf1	mo_circ:chr13:103360652-103362959	0.00236891	Negative infinite	Down	Eprs
mo_circ:chr6:22242071-22250518	0.000565035	Negative infinite	Down	Spast	mo_circ:chr10:67705142-67723745	0.00262279	Negative infinite	Down	Rhbdl3
mo_circ:chr4:140870957-140876764	0.000777451	Negative infinite	Down	Arl8b	mo_circ:chr15:70098761-70105489	0.00262279	Negative infinite	Down	Diaph3
mo_circ:chr19:2506536-2521388	0.000885483	Negative infinite	Down	Cdh11	mo_circ:chr2:25770099-25771957	0.00262279	Negative infinite	Down	Arhgef28
mo_circ:chr4:118870971-118878395	0.000945528	Negative infinite	Down	Gfpt1	mo_circ:chr5:59614317-59620038	0.00262279	Negative infinite	Down	Rnf38
mo_circ:chr18:77489360-77520779	0.001079345	Negative infinite	Down	Atp9b	mo_circ:chr1:219353460-219354165	0.003223716	Negative infinite	Down	Pitpnm1
mo_circ:chr16:62132750-62160831	0.001153874	Negative infinite	Down	Gtf2e2	mo_circ:chr7:120608346-120610489	0.003223716	Negative infinite	Down	Tmem184b
mo_circ:chr1:80443035-80446422	0.001234037	Negative infinite	Down	Ppp1r37	mo_circ:chrX:63552834-63620914	0.003223716	Negative infinite	Down	Apoo
mo_circ:chr3:91334376-91349258	0.001234037	Negative infinite	Down	Prr5l	mo_circ:chr13:35769419-35784163	0.00357904	Negative infinite	Down	Ptpn4

Table S1. Continued.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr7:34057078-34058440	0.001234037	Negative infinite	Down	Cdk17	mo_circ:chr1:128513529-128576607	0.00357904	Negative infinite	Down	Lrrc28
mo_circ:chr10:67828230-67846913	0.001320287	Negative infinite	Down	Psmc11	mo_circ:chr1:185263914-185264972	0.00357904	Negative infinite	Down	Pik3c2a
mo_circ:chr2:206956638-206976810	0.001320287	Negative infinite	Down	Lrig2	mo_circ:chr1:222318743-222319656	0.00357904	Negative infinite	Down	Macro1
mo_circ:chr9:11217254-11219449	0.001320287	Negative infinite	Down	Uxs1	mo_circ:chr3:175422379-175423144	0.00357904	Negative infinite	Down	Psmc7
mo_circ:chr5:172949060-172965700	0.001513107	Negative infinite	Down	Gnb1	mo_circ:chr1:42508955-42530725	0.003977472	Negative infinite	Down	Rgs17
mo_circ:chr20:8006289-8019015	0.001620826	Negative infinite	Down	Fkbp5	mo_circ:chr3:80713738-80718585	0.003977472	Negative infinite	Down	Ambra1
mo_circ:chr20:22822066-22856689	0.001862154	Negative infinite	Down	Imjd1c	mo_circ:chr1:193104517-193114307	0.004424829	Negative infinite	Down	Tnrc6a
mo_circ:chr16:71849834-71853546	0.001997255	Negative infinite	Down	Adam9	mo_circ:chr1:244757630-244757847	0.004424829	Negative infinite	Down	Smarca2
mo_circ:chr18:71141382-71149287	0.001997255	Negative infinite	Down	Dym	mo_circ:chr2:247325877-247333499	0.004424829	Negative infinite	Down	Unc5c
mo_circ:chr2:25786589-25787923	0.001997255	Negative infinite	Down	Arhgef28	mo_circ:chr3:123299120-123304722	0.004424829	Negative infinite	Down	RGD1565616
mo_circ:chr15:38130856-38137897	0.002143273	Negative infinite	Down	Zdhc20	mo_circ:chr3:150717267-150725392	0.004424829	Negative infinite	Down	Itch
mo_circ:chr15:34277381-34277914	0.002474062	Negative infinite	Down	Rnf31	mo_circ:chr5:7777226-7798747	0.004424829	Negative infinite	Down	Prex2
mo_circ:chr2:195795435-195795666	0.002474062	Negative infinite	Down	Snx27	mo_circ:chr11:24479964-24512332	0.0049278	Negative infinite	Down	App
mo_circ:chr4:66193731-66214585	0.002474062	Negative infinite	Down	Ubn2	mo_circ:chr13:89163767-89176307	0.0049278	Negative infinite	Down	Atf6
mo_circ:chr19:55895255-55896592	0.002661459	Negative infinite	Down	Sp7	mo_circ:chr19:11455327-11456247	0.0049278	Negative infinite	Down	Nudt21
mo_circ:chr13:95193009-95196402	0.002865488	Negative infinite	Down	Akt3	mo_circ:chr1:137228018-137231178	0.0049278	Negative infinite	Down	Akap13
mo_circ:chr11:34631080-34639821	0.003087828	Negative infinite	Down	Ttc3	mo_circ:chr1:222619896-222621077	0.0049278	Negative infinite	Down	RGD1308106
mo_circ:chr8:128054589-128056582	0.003087828	Negative infinite	Down	Xylb	mo_circ:chr1:281834156-281857037	0.0049278	Negative infinite	Down	Caull
mo_circ:chr9:61355085-61359768	0.003087828	Negative infinite	Down	Ankrd44	mo_circ:chr8:65745192-65754110	0.0049278	Negative infinite	Down	Uaca
mo_circ:chr18:2016346-2032491	0.003330347	Negative infinite	Down	Mib1	mo_circ:chr9:78341845-78350281	0.0049278	Negative infinite	Down	Bard1
mo_circ:chr18:5059054-5061806	0.003330347	Negative infinite	Down	Zfp521	mo_circ:chrX:114016360-114077939	0.0049278	Negative infinite	Down	Tmem164
mo_circ:chr2:183520240-183542215	0.003330347	Negative infinite	Down	Arip1	mo_circ:chr1:186006551-186009525	0.005494099	Negative infinite	Down	Sox6
mo_circ:chr10:35816390-35818308	0.003595123	Negative infinite	Down	Canx	mo_circ:chr7:13044637-13047059	0.005494099	Negative infinite	Down	Mier2
mo_circ:chr6:91938501-91961861	0.003595123	Negative infinite	Down	Sos2	mo_circ:chr2:235823630-235826673	0.006132633	Negative infinite	Down	Ostc
mo_circ:chr2:187525295-187529234	0.004200986	Negative infinite	Down	Mef2d	mo_circ:chr6:125053167-125053501	0.006132633	Negative infinite	Down	Ppp4r3a
mo_circ:chr3:136874645-136896550	0.004200986	Negative infinite	Down	Kif16b	mo_circ:chr7:12596464-12598185	0.006853715	Negative infinite	Down	Arid3a
mo_circ:chr6:23554728-23563843	0.004547545	Negative infinite	Down	Ppp1cb	mo_circ:chr7:76114791-76136444	0.006853715	Negative infinite	Down	Grhl2
mo_circ:chr11:15457479-15474826	0.004927378	Negative infinite	Down	Usp25	mo_circ:chr12:52566088-52572590	0.0076693	Negative infinite	Down	Chfr
mo_circ:chr9:20596863-20599410	0.004927378	Negative infinite	Down	Tnfrsf21	mo_circ:chr7:71326796-71331115	0.0076693	Negative infinite	Down	Ptdssl
mo_circ:chr11:31943121-31946043	0.005344092	Negative infinite	Down	Itsn1	mo_circ:chr1:104785950-104821976	0.008593287	Negative infinite	Down	Nav2
mo_circ:chr4:58093735-58097892	0.005344092	Negative infinite	Down	Copg2	mo_circ:chr1:174775382-174778064	0.008593287	Negative infinite	Down	Wee1
mo_circ:chr2:187525295-187532740	0.005801732	Negative infinite	Down	Mef2d	mo_circ:chr6:92173587-92181774	0.008593287	Negative infinite	Down	Map4k5
mo_circ:chr16:2297907-2298816	0.006304825	Negative infinite	Down	Dendd6a	mo_circ:chr12:17513488-17519957	0.009641855	Negative infinite	Down	Sun1
mo_circ:chr11:66082755-66083227	0.006858455	Negative infinite	Down	Gtf2e1	mo_circ:chr14:43831570-43834103	0.009641855	Negative infinite	Down	Rbm47
mo_circ:chr4:66172555-66200637	0.006858455	Negative infinite	Down	Ubn2	mo_circ:chr15:23840157-23853169	0.009641855	Negative infinite	Down	Samd4a
mo_circ:chr6:7623900-7698590	0.007468327	Negative infinite	Down	Thada	mo_circ:chr16:19734284-19735661	0.009641855	Negative infinite	Down	Myo9b
mo_circ:chr18:2005294-2032491	0.008140854	Negative infinite	Down	Mib1	mo_circ:chr19:34292209-34312530	0.009641855	Negative infinite	Down	Arhgap10
mo_circ:chr19:34270069-34305849	0.008140854	Negative infinite	Down	Arhgap10	mo_circ:chr1:77872644-77874388	0.009641855	Negative infinite	Down	Gltscr1
mo_circ:chr17:49867756-49871184	0.008883249	Negative infinite	Down	Cdk13	mo_circ:chr1:224963592-224963896	0.010833887	Negative infinite	Down	Nxf1
mo_circ:chr12:36952396-36970828	0.009703628	Negative infinite	Down	Ncor2	mo_circ:chr20:20403689-20411476	0.010833887	Negative infinite	Down	Ank3

Table S1. Continued.

E19 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr1:126819845-126824250	0.009703628	Negative infinite	Down	Pesk6	mo_circ:chr3:45832486-45845123	0.010833887	Negative infinite	Down	Tanc1
mo_circ:chr9:93208928-93239075	0.010611137	Negative infinite	Down	Arme9	mo_circ:chr8:79369822-79373378	0.010833887	Negative infinite	Down	Nedd4
mo_circ:chr18:16536783-16538604	0.012730091	Negative infinite	Down	Slc39a6	mo_circ:chr10:45771832-45778634	0.012188609	Negative infinite	Down	Snap47
mo_circ:chr1:175171303-175218889	0.012730091	Negative infinite	Down	Sbf2	mo_circ:chr12:37462807-37465389	0.012188609	Negative infinite	Down	Ddx55
mo_circ:chr3:43328861-43335393	0.012730091	Negative infinite	Down	Gpd2	mo_circ:chr1:128501692-128526855	0.012188609	Negative infinite	Down	Lrrc28
mo_circ:chr4:121539775-121545300	0.012730091	Negative infinite	Down	Chchd6	mo_circ:chr1:37522470-37535617	0.012188609	Negative infinite	Down	Adcy2
mo_circ:chr5:106109624-106121498	0.012730091	Negative infinite	Down	Mllt3	mo_circ:chr3:67751613-67755221	0.012188609	Negative infinite	Down	Nekap1
mo_circ:chr14:44671819-44675366	0.015331422	Negative infinite	Down	Rfc1	mo_circ:chr4:45205687-45207315	0.012188609	Negative infinite	Down	ST7
mo_circ:chr5:47861910-47871797	0.015331422	Negative infinite	Down	Casp8ap2	mo_circ:chr1:87529218-87529984	0.013724869	Negative infinite	Down	Smpd4
mo_circ:chr4:7700000-7706702	0.01684403	Negative infinite	Down	Fam126a	mo_circ:chr16:8416756-8421217	0.013724869	Negative infinite	Down	Parg
mo_circ:chr8:64141721-64145423	0.01684403	Negative infinite	Down	Bbs4	mo_circ:chr8:64635064-64637681	0.013724869	Negative infinite	Down	Myo9a
mo_circ:chr8:79528539-79543050	0.01684403	Negative infinite	Down	Prtg	mo_circ:chrX:105156405-105156903	0.013724869	Negative infinite	Down	Cenpi
mo_circ:chr3:175512077-175516165	0.018527413	Negative infinite	Down	Osbpl2	mo_circ:chr10:10849180-10852471	0.015478285	Negative infinite	Down	Mgrn1
mo_circ:chr6:105664810-105676672	0.018527413	Negative infinite	Down	Pcnx	mo_circ:chr5:157690578-157712883	0.015478285	Negative infinite	Down	Capzb
mo_circ:chr8:25620092-25629202	0.018527413	Negative infinite	Down	Dpy19l1	mo_circ:chr5:78504517-78516521	0.015478285	Negative infinite	Down	Rgs3
mo_circ:chr9:96746440-96751314	0.018527413	Negative infinite	Down	Agap1	mo_circ:chr6:96876609-96878279	0.015478285	Negative infinite	Down	Snapc1
mo_circ:chr10:91981869-91986242	0.020411537	Negative infinite	Down	Nsf	mo_circ:chr7:109118960-109123316	0.015478285	Negative infinite	Down	Zfat
mo_circ:chr15:37706285-37710041	0.020411537	Negative infinite	Down	Ift88	mo_circ:chr7:122178804-122184430	0.015478285	Negative infinite	Down	Adsl
mo_circ:chr1:166342480-166353529	0.020411537	Negative infinite	Down	Fchs2	mo_circ:chr5:119932558-119942707	0.017496631	Negative infinite	Down	Raver2
mo_circ:chr1:282151347-282155817	0.020411537	Negative infinite	Down	Eif3a	mo_circ:chr9:34266719-34272145	0.019843985	Negative infinite	Down	Arhgap10
mo_circ:chr5:113637649-113647215	0.020411537	Negative infinite	Down	Ift74	mo_circ:chr20:50659751-50676469	0.019843985	Negative infinite	Down	Hace1
mo_circ:chr7:121971241-122005110	0.020411537	Negative infinite	Down	Tnrc6b	mo_circ:chr4:65756657-65770837	0.019843985	Negative infinite	Down	Aip6v0a4
mo_circ:chr1:221065774-221067559	0.022534475	Negative infinite	Down	Ehbp11	mo_circ:chr10:1413338-1419399	0.022607718	Negative infinite	Down	Pam
mo_circ:chr10:103408040-103409119	0.02494508	Negative infinite	Down	Gpre5c	mo_circ:chr1:134837853-134848903	0.022607718	Negative infinite	Down	Chd2
mo_circ:chr10:104062205-104064474	0.02494508	Negative infinite	Down	Hn1	mo_circ:chr20:10200097-10201872	0.022607718	Negative infinite	Down	Pde9a
mo_circ:chr11:34879058-34929247	0.02494508	Negative infinite	Down	Dyrk1a	mo_circ:chr2:226954949-226974826	0.022607718	Negative infinite	Down	Pde5a
mo_circ:chr11:76771291-76783665	0.02494508	Negative infinite	Down	Ccdc50	mo_circ:chr3:21875093-21878612	0.022607718	Negative infinite	Down	Strbp
mo_circ:chr13:103356835-103362959	0.02494508	Negative infinite	Down	Eprs	mo_circ:chr4:2146459-2156447	0.022607718	Negative infinite	Down	Lmbr1
mo_circ:chrX:31823114-31833379	0.02494508	Negative infinite	Down	Figf	mo_circ:chr4:41692311-41784957	0.022607718	Negative infinite	Down	Foxp2
mo_circ:chr12:25435457-25442777	0.027706097	Negative infinite	Down	Gtf2i	mo_circ:chr5:74972093-74972271	0.022607718	Negative infinite	Down	Akap2
mo_circ:chr19:43069651-43071000	0.027706097	Negative infinite	Down	Glg1	mo_circ:chr6:75631603-75633739	0.022607718	Negative infinite	Down	Snx6
mo_circ:chr5:154919349-154929004	0.027706097	Negative infinite	Down	Kdmla	mo_circ:chr7:118173410-118179266	0.022607718	Negative infinite	Down	Rbfox2
mo_circ:chr6:103389817-103393554	0.027706097	Negative infinite	Down	Actn1	mo_circ:chr10:56620123-56620370	0.025896516	Negative infinite	Down	Acadvl
mo_circ:chr7:72800253-72802561	0.027706097	Negative infinite	Down	Mtdh	mo_circ:chr10:64829256-64831635	0.025896516	Negative infinite	Down	Phf12
mo_circ:chr11:47165426-47169764	0.030874611	Negative infinite	Down	Cep97	mo_circ:chr15:25331703-25333342	0.025896516	Negative infinite	Down	Tmem260
mo_circ:chr15:1925689-19256899	0.030874611	Negative infinite	Down	Ppp3cc	mo_circ:chr1:207085491-207088396	0.025896516	Negative infinite	Down	Dock1
mo_circ:chr3:61449370-61469720	0.030874611	Negative infinite	Down	Lnp	mo_circ:chr4:60527172-60531200	0.029803302	Negative infinite	Down	Zcche4
mo_circ:chr8:118258001-118268733	0.030874611	Negative infinite	Down	Smarrc1	mo_circ:chr18:27540212-27546424	0.029803302	Negative infinite	Down	Cdc25c
mo_circ:chr8:39224604-39228788	0.030874611	Negative infinite	Down	Stt3a	mo_circ:chr18:36266437-36271261	0.029803302	Negative infinite	Down	Prelid2



Table S1. Continued.

E21 vs. E21				E21 vs. P3					
Name	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr12:38233738-38244280	0.034499363	Negative infinite	Down	Kntc1	mo_circ:chr18:60691028-60702777	0.029803302	Negative infinite	Down	Nedd4l
mo_circ:chr14:104958186-104960143	0.034499363	Negative infinite	Down	AfpH	mo_circ:chr19:34305791-34312530	0.029803302	Negative infinite	Down	Arhgap10
mo_circ:chr18:74159563-74162358	0.034499363	Negative infinite	Down	Atp5a1	mo_circ:chr19:61438201-61441976	0.029803302	Negative infinite	Down	Nrp1
mo_circ:chr1:167239233-167240124	0.034499363	Negative infinite	Down	Nup98	mo_circ:chr1:282396507-282412514	0.029803302	Negative infinite	Down	Grk5
mo_circ:chr4:28474639-28514174	0.034499363	Negative infinite	Down	Vps50	mo_circ:chr20:10814852-10820978	0.029803302	Negative infinite	Down	Hsf2bp
mo_circ:chr5:131781284-131787748	0.034499363	Negative infinite	Down	Spata6	mo_circ:chr2:196608497-196620788	0.029803302	Negative infinite	Down	Arnt
mo_circ:chr7:121907568-121910161	0.034499363	Negative infinite	Down	Fam83f	mo_circ:chr2:219620159-219626341	0.029803302	Negative infinite	Down	Trmt13
mo_circ:chr10:110157631-110164041	0.038632183	Negative infinite	Down	Csnk1d	mo_circ:chr2:225365473-225371154	0.029803302	Negative infinite	Down	Abcd3
mo_circ:chr11:34922140-34932316	0.038632183	Negative infinite	Down	Dyrk1a	mo_circ:chr2:226954949-226963787	0.029803302	Negative infinite	Down	Pde5a
mo_circ:chr11:61667168-61667878	0.038632183	Negative infinite	Down	Zdhc23	mo_circ:chr6:3324175-3334117	0.029803302	Negative infinite	Down	Map4k3
mo_circ:chr17:75775333-75873151	0.038632183	Negative infinite	Down	Usp6nl	mo_circ:chr7:28905432-28911656	0.029803302	Negative infinite	Down	Dram1
mo_circ:chr18:53103259-53109933	0.038632183	Negative infinite	Down	Fbn2	mo_circ:chr8:50420735-50445054	0.029803302	Negative infinite	Down	Sik3
mo_circ:chr1:12857534-128576607	0.038632183	Negative infinite	Down	Lrrc28	mo_circ:chr8:84732711-84748991	0.029803302	Negative infinite	Down	Lrrc1
mo_circ:chr1:207040277-207088396	0.038632183	Negative infinite	Down	Dock1	mo_circ:chr9:111748642-111756949	0.029803302	Negative infinite	Down	Fer
mo_circ:chr20:33155096-33168389	0.038632183	Negative infinite	Down	Rosl	mo_circ:chr12:23962947-23968609	0.0344282	Negative infinite	Down	Styx11
mo_circ:chr6:22044898-22067568	0.038632183	Negative infinite	Down	Birc6	mo_circ:chr14:20967912-20971993	0.0344282	Negative infinite	Down	Mob1b
mo_circ:chr8:107766458-107783028	0.038632183	Negative infinite	Down	Armc8	mo_circ:chr16:20009431-20009965	0.0344282	Negative infinite	Down	Slc27a1
mo_circ:chr15:48615368-48618296	0.043321988	Negative infinite	Down	Fzd3	mo_circ:chr17:75579712-75600855	0.0344282	Negative infinite	Down	Celf2
mo_circ:chr17:75775333-75791010	0.043321988	Negative infinite	Down	Usp6nl	mo_circ:chr7:114534021-114540933	0.0344282	Negative infinite	Down	Ptk2
mo_circ:chr2:39446592-39455858	0.043321988	Negative infinite	Down	Ercc8	mo_circ:chr8:39220529-39221244	0.0344282	Negative infinite	Down	St3a
mo_circ:chr3:60744743-60756038	0.043321988	Negative infinite	Down	Atf2	mo_circ:chr14:15086543-15112209	0.039871707	Negative infinite	Down	Cnot6l
mo_circ:chr4:28510903-28520904	0.043321988	Negative infinite	Down	Vps50	mo_circ:chr17:34828759-34836021	0.039871707	Negative infinite	Down	Exoc2
mo_circ:chr5:147363511-147368505	0.043321988	Negative infinite	Down	Sl00ppb	mo_circ:chr1:80266113-80267275	0.039871707	Negative infinite	Down	Ercc1
mo_circ:chr7:129678610-129680736	0.043321988	Negative infinite	Down	Brd1	mo_circ:chr2:25901254-25927179	0.039871707	Negative infinite	Down	Arhgef28
mo_circ:chr8:69780138-69780985	0.043321988	Negative infinite	Down	Dis3l1	mo_circ:chr2:56591940-56607622	0.039871707	Negative infinite	Down	Egflam
mo_circ:chr8:78521649-78538216	0.043321988	Negative infinite	Down	Tcf12	mo_circ:chr5:122019303-122037709	0.039871707	Negative infinite	Down	Pde4b
mo_circ:chr10:38712831-38725063	0.048624881	Negative infinite	Down	Aif4	mo_circ:chr6:132439038-132439743	0.039871707	Negative infinite	Down	Emil1
mo_circ:chr12:18155264-18155961	0.048624881	Negative infinite	Down	Zfp68	mo_circ:chr8:122760377-122764541	0.039871707	Negative infinite	Down	Dync1li1
mo_circ:chr14:20574303-20619328	0.048624881	Negative infinite	Down	Slc4a4	mo_circ:chrX:112033981-112034696	0.039871707	Negative infinite	Down	Mid2
mo_circ:chr14:21075632-21093811	0.048624881	Negative infinite	Down	Rufy3	mo_circ:chr10:71401833-71406514	0.046324666	Negative infinite	Down	Tada2a
mo_circ:chr15:70039432-70105489	0.048624881	Negative infinite	Down	Diaph3	mo_circ:chr18:77477060-77520779	0.046324666	Negative infinite	Down	Atp9b
mo_circ:chr19:54801921-54822499	0.048624881	Negative infinite	Down	Banp	mo_circ:chr2:112818780-112822692	0.046324666	Negative infinite	Down	Ect2
mo_circ:chr1:73736838-73737496	0.048624881	Negative infinite	Down	Ttyh1	mo_circ:chr2:53819781-53820910	0.046324666	Negative infinite	Down	RGD1305938
mo_circ:chr2:202970800-202998292	0.048624881	Negative infinite	Down	Man1a2	mo_circ:chr3:147780064-147855568	0.046324666	Negative infinite	Down	Tbc1d20
mo_circ:chr3:21721366-21725405	0.048624881	Negative infinite	Down	Rabgap1	mo_circ:chr6:123864768-123865759	0.046324666	Negative infinite	Down	Eicab11
mo_circ:chr4:117036343-117049564	0.048624881	Negative infinite	Down	Sfxn5	mo_circ:chr4:65761402-65770025	0.014539291	-2.955108543	Down	Atp6v0a4
mo_circ:chr5:48607352-48636636	0.048624881	Negative infinite	Down	Rngt	mo_circ:chr7:74318804-74333519	0.046242615	-2.351675438	Down	Vps13b
mo_circ:chr6:33841292-33841582	0.048624881	Negative infinite	Down	Pum2	mo_circ:chr3:122882828-122883430	0.0442984	-2.222392421	Down	Ebf4
mo_circ:chr8:116442199-116444582	0.048624881	Negative infinite	Down	Sema3f	mo_circ:chr3:1988750-1998592	0.048565616	-2.096861539	Down	Ehmt1

Table S1. Continued.

Name	E19 vs. E21			E21 vs. P3					
	P-value	log2FoldChange	Regulation	Gene symbol	Name	P-value	log2FoldChange	Regulation	Gene symbol
mo_circ:chr9:42752591-42761308	0.048624881	Negative infinite	Down	Uggt1	mo_circ:chr1:255636891-255637533	0.009200469	-2.028644787	Down	Btaf1
mo_circ:chr9:93799182-93955335	0.048624881	Negative infinite	Down	Dis3l2	mo_circ:chr14:14620910-14624933	0.032264398	-1.722379793	Down	Fras1
mo_circ:chr9:121831708-121843361	0.000602154	-5.64385619	Down	Yes1	mo_circ:chr1:200671013-200672411	0.031095437	-1.704544116	Down	Fgfr2
mo_circ:chr9:1875552-1880538	0.000856051	-5.14068778	Down	Plcl2	mo_circ:chr10:35876013-35876397	0.024118717	-1.597115784	Down	Hnmp1
mo_circ:chr16:41116953-41128342	0.023978128	-4.058893689	Down	Neil3					
mo_circ:chr5:106171074-106171781	0.033912931	-3.906890596	Down	Mllt3					
mo_circ:chr2:127699127-127702093	0.040603138	-3.824428435	Down	Plk4					
mo_circ:chr7:80721364-80745256	0.048040419	-3.321928095	Down	Oxr1					
mo_circ:chr3:59847598-59862336	0.008143879	-3.303312417	Down	Olal					
mo_circ:chr6:22033342-22038870	0.019532284	-3.267480311	Down	Birc6					
mo_circ:chr14:71861197-71884876	0.014519727	-3.174370906	Down	Fbxl5					
mo_circ:chr12:12721643-12722477	0.040454266	-3.058893689	Down	Pms2					
mo_circ:chr10:38622808-38633058	0.027677881	-2.69632361	Down	Hspa4					
mo_circ:chr10:16724062-16730140	0.027029049	-2.64385619	Down	Crebrf					
mo_circ:chr14:71861197-71877488	0.042493471	-2.174370906	Down	Fbxl5					
mo_circ:chr15:24024429-24032402	0.030018856	-2.17340557	Down	Wdhd1					
mo_circ:chr17:54298407-54301447	0.0110203	-2.133855747	Down	Arhgap12					
mo_circ:chrX:63177769-63182385	0.021620285	-1.989352756	Down	Zfx					
mo_circ:chr1:251455609-251463748	0.021774909	-1.962788921	Down	Pten					
mo_circ:chr1:190980864-190991049	0.009263955	-1.799526932	Down	Mett19					
mo_circ:chrX:63177769-63195572	0.045580309	-1.505374236	Down	Zfx					

E, embryonic day; P, post-natal day.