

Supplementary Table S3.

Overlap between Fip1 APA targets and genes that show significant APA changes during reprogramming of MEF.

Fip1 APA P2D Genes		
Symbol	GeneID	Overlap
Cox4nb	18117	YES
Csnk1d	104318	YES
Cggbp1	106143	YES
Tial1	21843	YES
Rbx1	100043674	YES
Gnb1	14688	YES
Anxa7	11750	YES
Sf3b1	81898	YES
Sbno1	243272	YES
Strap	20901	YES
Gmfb	63985	YES
Seh1l	72124	YES
Reep5	13476	YES
Aasdhpt	67618	YES
Nolc1	70769	YES
Kpnb1	16211	YES
Lmnb1	16906	YES
Dnajc11	230935	YES
Leprotl1	68192	YES
Etf1	225363	YES
Mrpl49	18120	YES
Serf2	378702	YES
Ccnd1	12443	YES
Ddx49	234374	YES
Arfrp1	76688	YES
Tmpo	21917	YES
Rras2	66922	YES
Ssb	20823	YES
Rngtt	24018	YES
Chmp4b	75608	YES
Sys1	66460	YES
Tmem183a	57439	YES
Stt3b	68292	YES
Dlat	235339	YES
Ccnh	66671	YES
Lancl1	14768	YES
Poldip2	67811	YES
Rpl21	100040508	YES

Rad23b	19359	YES
Nudt1	17766	YES

MEF to iPS APA genes		
Symbol	GeneID	MEF vs iPS relative usage of distal polyA site
Mbnl3	171170	-2.134994591
Socs5	56468	-1.797974187
Cox4nb	18117	-1.526118453
Tmem33	67878	-1.42111911
E430028B21Rik	211948	-1.412857984
Gatad2a	234366	-1.365499062
Cggbp1	106143	-1.355426123
Btrc	12234	-1.351576148
Cyb5b	66427	-1.346102852
Thap1	73754	-1.344462592
Slc39a3	106947	-1.338814022
Gosr1	53334	-1.318257251
Mras	17532	-1.313686334
Trim37	68729	-1.295936905
Lmnb1	16906	-1.229601581
Fbxl20	72194	-1.219033163
Fubp3	320267	-1.165217542
Hivep1	110521	-1.147315142
Sbno1	243272	-1.144012196
Sephs1	109079	-1.123458822
Prpf4	70052	-1.0766181
Reep5	13476	-1.070863804
6330578E17Rik	76178	-1.043120289
Btaf1	107182	-1.040198711
Ints12	71793	-1.030516378
Arpp19	59046	-1.02955236
Napa	108124	-1.007390947
Mtmr4	170749	-0.985435578
Strap	20901	-0.974357886
Ssbp1	381760	-0.971454792
Chpt1	212862	-0.97080801
D4Erttd22e	213491	-0.940558184
Ube2i	22196	-0.932717787
Ctdsp2	52468	-0.918815278
Rbx1	56438	-0.900626361
Csnk1d	104318	-0.884823924
Bcr	110279	-0.880997117

Rnf138	56515	-0.876435109
Col5a1	12831	-0.804519114
Ccng1	12450	-0.792456537
Gsk3b	56637	-0.781136115
Fbxo28	67948	-0.773710149
Sept8	20362	-0.770759699
2700050L05Rik	214764	-0.764343849
Eif5a2	208691	-0.758300371
2810003C17Rik	108897	-0.727697377
Scyl3	240880	-0.696097856
Seh1l	72124	-0.677474297
Dnmt3a	13435	-0.642426752
Leprotl1	68192	-0.639389208
Dnajc11	230935	-0.633620972
Ccnc	51813	-0.632184064
Ubx2	67812	-0.631114911
Rfxap	170767	-0.631075499
Serpini1	20713	-0.623590092
Nutf2	68051	-0.6038508
Stox2	71069	-0.599437216
4933439F18Rik	66771	-0.593158183
Cyld	74256	-0.583940911
Map1lc3b	67443	-0.573992673
Nudt4	71207	-0.541780638
Ccdc127	67433	-0.538834478
Ccdc86	108673	-0.535287082
Kcmf1	74287	-0.53057898
Zmym5	219105	-0.527831812
Zfp294	78913	-0.509035958
Hook3	320191	-0.488406878
Sft2d2	108735	-0.484687308
Scd1	20249	-0.480418749
Gnb1	14688	-0.476878841
Atmin	234776	-0.471461792
Pitpnc1	71795	-0.461310821
Lnp	69605	-0.458210933
Ube2l3	22195	-0.444978896
Pank3	211347	-0.44082429
Marcks	17118	-0.436482486
Tmem106b	71900	-0.427721614
Dctn4	67665	-0.427666131
Wdr68	71833	-0.423263816
Map4k5	399510	-0.414929726
Tial1	21843	-0.413776647

Dclre1b	140917	-0.410466824
E2f3	13557	-0.409120233
Trps1	83925	-0.383588373
Lztf11	93730	-0.378654088
Zfand3	21769	-0.376392538
Zfp650	68795	-0.374097879
Ogfr11	70155	-0.37022103
Gcap14	72972	-0.363676855
Mcl1	17210	-0.356076216
Zrsr2	22184	-0.342129373
Eya3	14050	-0.342119673
Hsd12	72479	-0.337082614
1600012H06Rik	67912	-0.335816396
Bdh1	71911	-0.314382298
Nufip2	68564	-0.306638355
Tm9sf3	107358	-0.305764811
Anxa7	11750	-0.295126062
Kpnb1	16211	-0.287023089
Gmfb	63985	-0.263763418
Centg2	347722	-0.243413538
Sf3b1	81898	-0.217872814
Aasdhppt	67618	-0.212319366
Nup50	18141	-0.207656998
Pdzd8	107368	-0.166981824
Trip12	14897	-0.158320789
Ankle2	71782	-0.104273968
Timp2	21858	-0.098068005
Rbm28	68272	-0.077995003
Arf6	11845	-0.061277731
Nolc1	70769	-0.030669581
Fbxo42	213499	-0.029297505
Sf3a1	67465	-0.968002971
Creg1	433375	-0.95334763
Tbc1d1	57915	-0.916071438
Rnps1	19826	-0.892920557
Preb	50907	-0.875792134
Nhp2l1	20826	-0.832163555
Fbxo21	231670	-0.807151272
Them4	75778	-0.793759865
Myadm	50918	-0.780372662
Ctnnbip1	67087	-0.774908753
Idh3a	67834	-0.770253561
Pcnx	54604	-0.769218096
2410014A08Rik	109154	-0.767819821

Ddx49	234374	-0.762526024
D11Wsu99e	28081	-0.747170369
Ccnd1	12443	-0.736708208
Ccnh	66671	-0.732946766
Dixdc1	330938	-0.722075881
Lancl1	14768	-0.720451216
Rngtt	24018	-0.718852303
Serf2	378702	-0.714439795
Eif1ad	69860	-0.708946933
Npc2	67963	-0.687402733
Ssb	20823	-0.686443537
Eif2s3x	26905	-0.686441173
Tmem103	72341	-0.6711992
Hnrnpf	98758	-0.670640675
Tbcc	72726	-0.668030346
Sfrs12	218543	-0.64761231
Strbp	20744	-0.642709873
Stag1	20842	-0.639541668
Ube4b	63958	-0.637585065
Atp8a1	11980	-0.636695391
Jun	16476	-0.628667107
Gng12	14701	-0.610385317
BC037112	231128	-0.592221726
Nudcd2	52653	-0.590442774
Med28	66999	-0.581494483
Rpp14	67053	-0.558997392
Rac1	19353	-0.558253007
Zfyve27	319740	-0.550944878
Ube2q1	70093	-0.547579277
Mgea5	76055	-0.517586282
Etf1	225363	-0.498617295
Mtpn	14489	-0.49737045
Zbtb24	268294	-0.49425078
Trappc5	66682	-0.492364075
Ergic1	67458	-0.491686719
Mtmr3	74302	-0.488598002
Tlcd1	68385	-0.484371728
Cebpg	12611	-0.48043752
Coq5	52064	-0.479649295
Zfr	22763	-0.475775885
Atf1	11908	-0.471664415
Pnpla8	67452	-0.458331611
Arfrp1	76688	-0.457325048
Ppm1d	53892	-0.454209448

Erbp2ip	59079	-0.452045534
Gpr107	277463	-0.451834744
2310061C15Rik	66531	-0.448376224
Oxct1	67041	-0.446844029
Trak1	67095	-0.444178748
Dnajc8	68598	-0.442959482
Dpp8	74388	-0.440296782
Hsph1	15505	-0.419163398
Ubap1	67123	-0.415337329
Nars2	244141	-0.415100427
Atp6v1g1	66290	-0.413137559
Zmat2	66492	-0.410789101
H3f3a	15078	-0.403354298
Usp3	235441	-0.40206909
6230416J20Rik	230376	-0.400353791
Kctd5	69259	-0.399700393
2310035C23Rik	227446	-0.393604976
Txlna	109658	-0.376906825
Slc22a5	20520	-0.373913215
Hexb	15212	-0.373611894
Mllt3	70122	-0.372129742
Dst	13518	-0.370541775
Tmem183a	57439	-0.362906052
Epm2aip1	77781	-0.341680175
Srxn1	76650	-0.340577864
Zfp364	67845	-0.33999152
Dync1i2	13427	-0.337878823
Jarid1b	75605	-0.333819321
Nfib	18028	-0.333732698
Mgrn1	17237	-0.331044573
Agpat3	28169	-0.320641342
Dnaja1	15502	-0.320619123
Peli1	67245	-0.320243574
Ppp6c	67857	-0.317993275
Itm2b	16432	-0.316772915
Tpm3	59069	-0.313943831
Tmem77	67171	-0.30642695
Usp47	74996	-0.306068651
Zfp292	30046	-0.303888642
Srp9	27058	-0.297851402
Sppl3	74585	-0.297049154
Sdha	66945	-0.290770417
Stt3b	68292	-0.290268423
Gadd45gip1	102060	-0.290197142

1300018I05Rik	74157	-0.289502688
Phf21a	192285	-0.284774085
Tle3	21887	-0.283227488
Fgfr1op2	67529	-0.282963194
Txndc13	52837	-0.280323711
Rfk	54391	-0.278885
Trim35	66854	-0.276011824
Scamp2	24044	-0.273236712
Rras2	66922	-0.272132078
Dazap1	70248	-0.270258013
Det1	76375	-0.261759722
Ak3	56248	-0.260784186
Lrrc59	98238	-0.255657971
Ptp4a2	19244	-0.253929955
Riok2	67045	-0.253741779
Clip3	76686	-0.247794581
0610037P05Rik	66086	-0.247350296
Dlat	235339	-0.245387823
Macf1	11426	-0.242255094
Cpd	12874	-0.242181246
2610030H06Rik	67048	-0.239355809
Parp1	11545	-0.237229344
Vamp7	20955	-0.233017137
Msi2	76626	-0.225664095
Git2	26431	-0.22518546
Nudt1	17766	-0.220353977
Chmp4b	75608	-0.219485664
Zfp148	22661	-0.215972204
Nedd1	17997	-0.214735981
Sav1	64010	-0.21304686
Sfrs11	69207	-0.211803228
Gopc	94221	-0.210821525
Coq10b	67876	-0.207375313
Glud1	14661	-0.205627316
Ppp1cc	19047	-0.202034508
Tigd2	68140	-0.197279584
Slc35e1	270066	-0.1947988
Ppp2r2d	52432	-0.19258633
Med11	66172	-0.192089667
Rab12	19328	-0.185371915
Prpf39	328110	-0.184182097
Ikbkg	16151	-0.177605073
Rnf7	19823	-0.173926313
Zfp592	233410	-0.173840703

Hnrpll	72692	-0.170470954
Dhx33	216877	-0.169437395
Lrrfip2	71268	-0.168333617
AU014645	433702	-0.168244826
Tfip11	54723	-0.166888758
Hspa4l	18415	-0.165565849
Ttc9c	70387	-0.162781379
Sept2	18000	-0.161258855
Ythdc1	231386	-0.159720091
Prps2	110639	-0.159590549
1200003I07Rik	66869	-0.154007892
2500003M10Rik	66511	-0.149332405
Ogfod1	270086	-0.149052112
Ap3s2	11778	-0.142967841
Me1	17436	-0.141814795
Hnrnpa3	229279	-0.140193314
Ghitm	66092	-0.1396346
Mtfr1	67472	-0.136638227
Txndc1	72736	-0.13574954
Magi1	14924	-0.133753861
Capza1	12340	-0.132642207
Sec16a	227648	-0.130319426
Ncoa3	17979	-0.130166962
Alg8	381903	-0.126980571
3110050N22Rik	67306	-0.12644955
Itfg2	101142	-0.123521857
Fermt2	218952	-0.12227875
Tbc1d15	66687	-0.118937518
Nkap	67050	-0.116912
Pnrc1	108767	-0.116363734
Gtf3c2	71752	-0.114165339
Yaf2	67057	-0.113995658
Vapa	30960	-0.111511321
Ptpn2	19255	-0.11116128
Ddx6	13209	-0.109234368
Rpl21	19933	-0.108340671
Slc7a1	11987	-0.093067588
Tmpo	21917	-0.092819222
Preli1	66494	-0.091130085
Kpna6	16650	-0.087297534
Pctk1	18555	-0.085009538
Lztr1	66863	-0.079195661
Zfx	22764	-0.078802795
Mrpl3	94062	-0.077544104

Stch	110920	-0.075665464
Rab9	56382	-0.072764275
Ctbp2	13017	-0.071017064
Entpd5	12499	-0.070603429
Serinc3	26943	-0.062883341
Suds3	71954	-0.06206834
Smap1	98366	-0.061962073
Rapgef6	192786	-0.061806094
Sel1l	20338	-0.061447219
Arvcf	11877	-0.061186241
Zfp593	68040	-0.057427995
Mrpl49	18120	-0.057072297
Camsap1	227634	-0.049590663
Snrk	20623	-0.047774632
Stk38l	232533	-0.046872224
Rnf146	68031	-0.046300422
Tomm70a	28185	-0.046164936
Es2el	27886	-0.045827513
Rad23b	19359	-0.039012386
Ankmy2	217473	-0.038994012
Osbp19	100273	-0.036976649
Noc3l	57753	-0.03669295
Nicn1	66257	-0.035162887
Ufm1	67890	-0.025856719
Tmem167	66074	-0.025445372
Ttc33	67515	-0.024906738
Foxk2	68837	-0.020823232
Tceb1	67923	-0.020449565
Cs	12974	-0.019805366
Bnip3l	12177	-0.01534481
Hmgb1	15289	-0.014770779
Actr3	74117	-0.009931341
Ddx11	320209	-0.008875412
Dyrk1a	13548	-0.000320089
Zkscan6	52712	-1.358687861
Rpl7l1	66229	-0.788972877
Ctsb	13030	-0.698275253
0610037L13Rik	74098	-0.650779378
Sys1	66460	-0.621633981
Bxdc2	67832	-0.582723185
Rab11b	19326	-0.581691057
Klh20	226541	-0.535018706
Foxm1	14235	-0.455343404
Timm22	56322	-0.451522701

4930534B04Rik	75216	-0.418215146
Elmo2	140579	-0.40122708
Ywhaq	22630	-0.358775209
Ddt	13202	-0.349249684
Calml4	75600	-0.341833505
Cdipt	52858	-0.323938063
Dck	13178	-0.2910047
Iqgap2	544963	-0.29068514
Rab21	216344	-0.286802256
Slc25a39	68066	-0.244472023
Cfl1	12631	-0.238715111
Rap1b	215449	-0.230883914
Arl15	218639	-0.228926951
Psm14	59029	-0.219685596
Litaf	56722	-0.218353236
Fbxo3	57443	-0.216939716
Rap1a	109905	-0.214298964
Stx6	58244	-0.197049237
Tpm4	326618	-0.196460661
4921533L14Rik	68187	-0.196173148
Dusp1	19252	-0.185134153
Zfp157	72154	-0.180503289
Bcl2l1	12048	-0.179478928
Taok1	216965	-0.179133465
Nupl1	71844	-0.178726025
Ddx3x	13205	-0.157352677
Mthfd2	17768	-0.1569095
Phka1	18679	-0.150944369
3110003A17Rik	73112	-0.15050134
Txndc12	66073	-0.141437483
Poldip2	67811	-0.136415139
AU019823	270156	-0.119161881
0610010E21Rik	68332	-0.116625206
Xiap	11798	-0.114915956
Zdhhc5	228136	-0.113588126
Hnrnpa2b1	53379	-0.105966392
Srd5a3	57357	-0.105122493
Pacs1	107975	-0.101581365
Atp6v0c	11984	-0.100445575
Vamp3	22319	-0.098699412
Mfge8	17304	-0.08953237
Fryl	72313	-0.089369447
Lsm14a	67070	-0.084906859
Chmp5	76959	-0.07867532

Ctnnb1	12387	-0.073699561
Zfp110	65020	-0.065738684
Tcf12	21406	-0.064189312
Dtl	76843	-0.063128323
Gys1	14936	-0.059459021
Spop	20747	-0.051202742
Wee1	22390	-0.049772516
Wdr37	207615	-0.048927203
Obfc2a	109019	-0.031102382
Tada2l	217031	-0.019786423
Epn2	13855	-0.008190611
Zfp655	72611	-0.004747297
Twf1	19230	-0.00104591