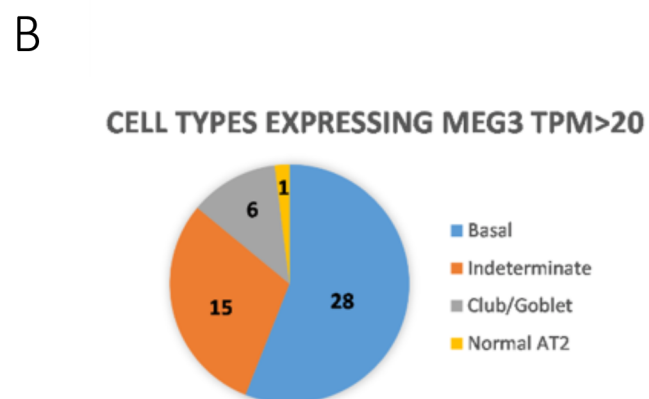
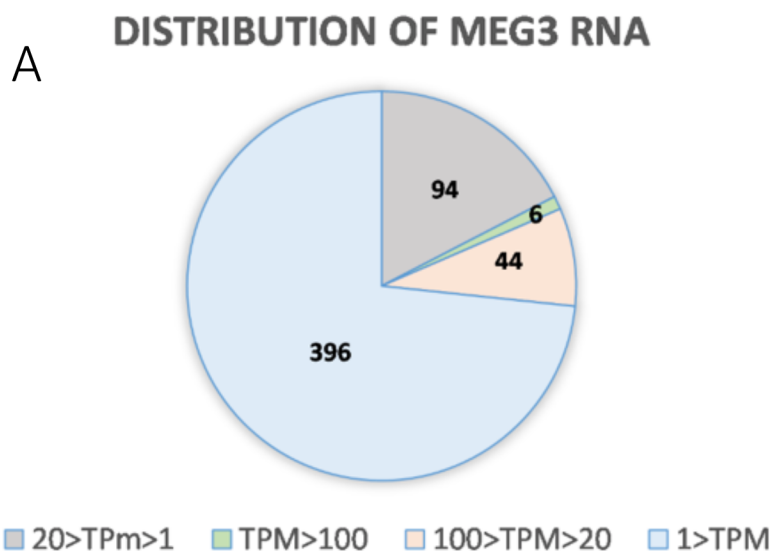
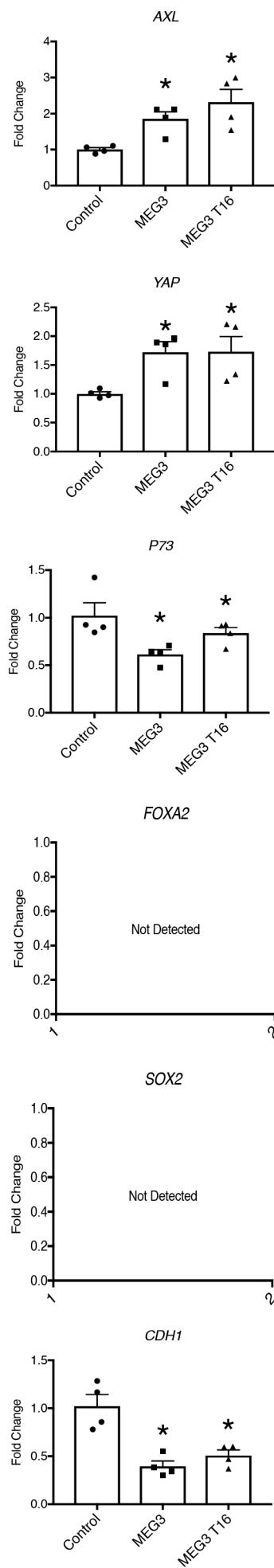
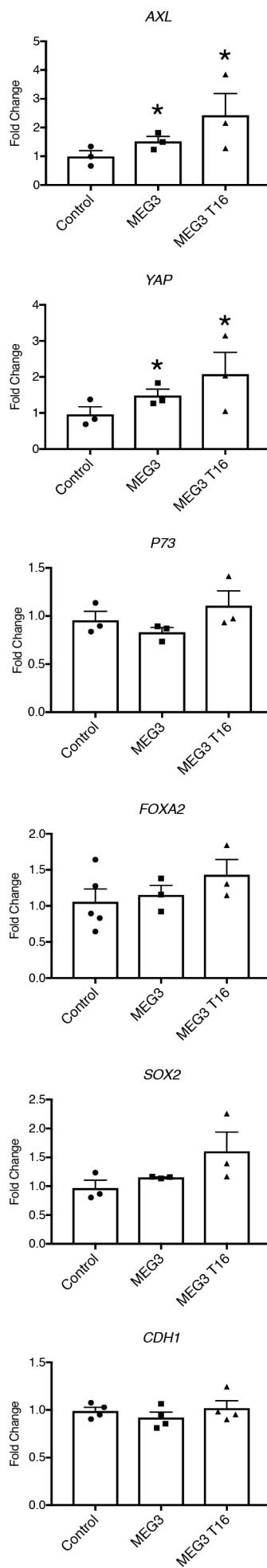




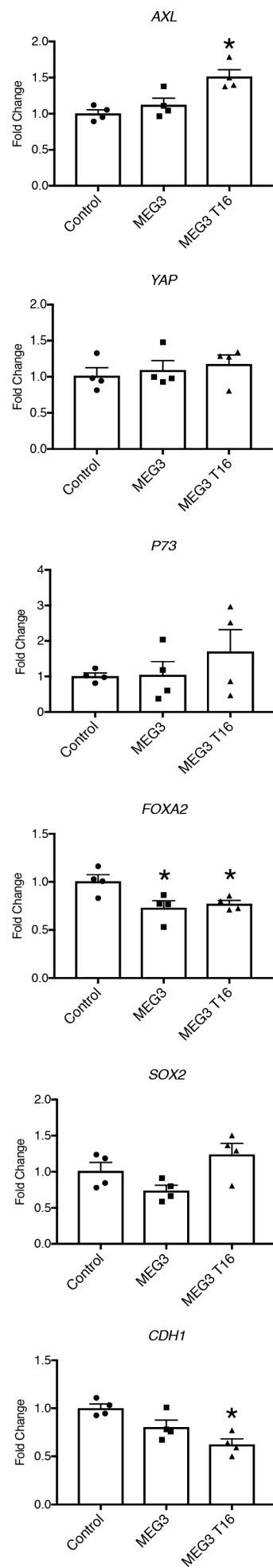
A BEAS2B



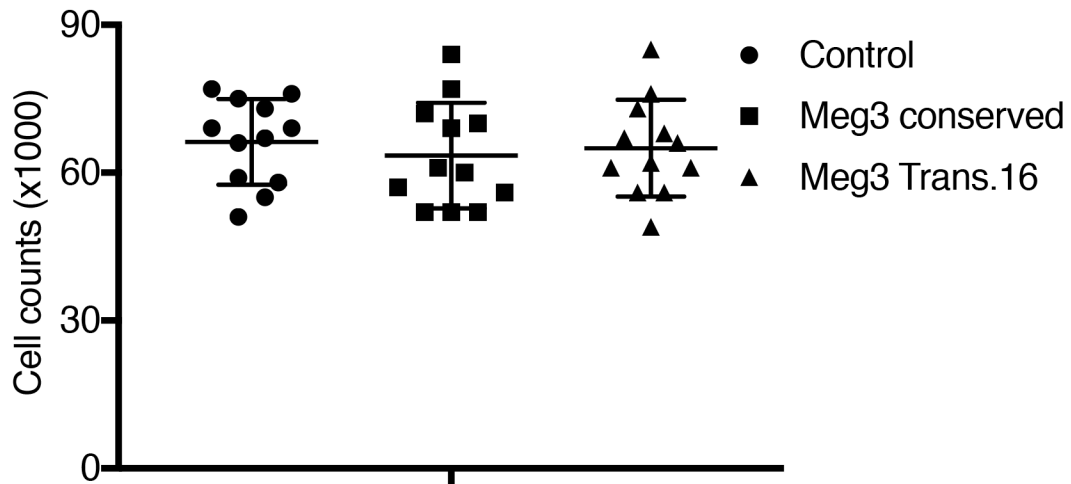
B H441



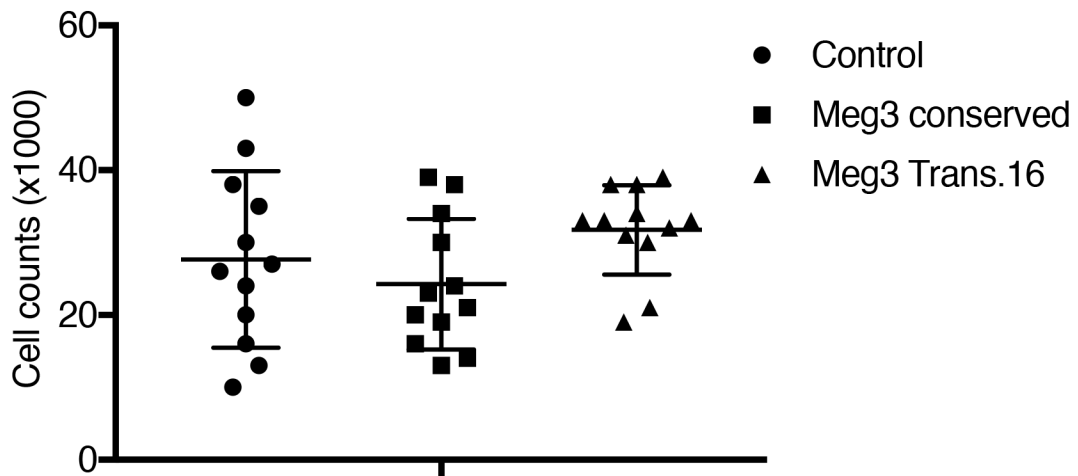
C HBEC3KT



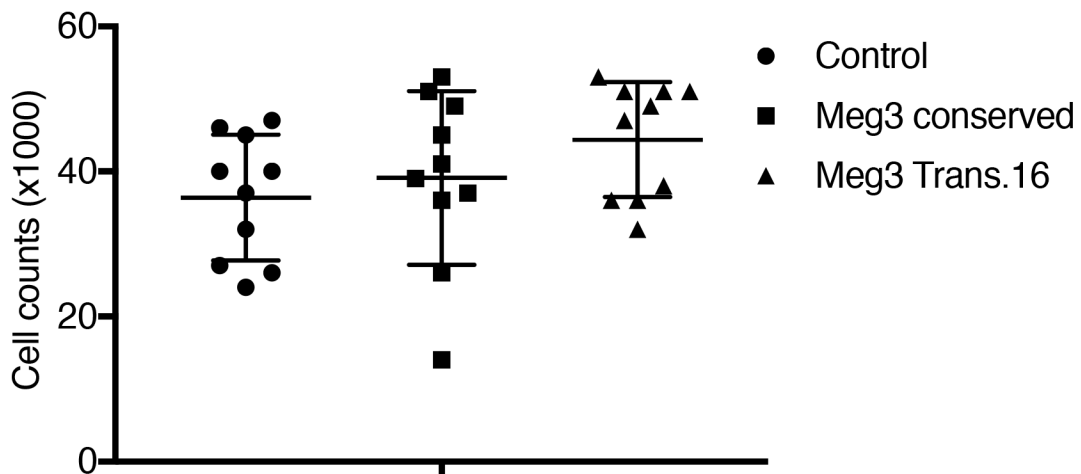
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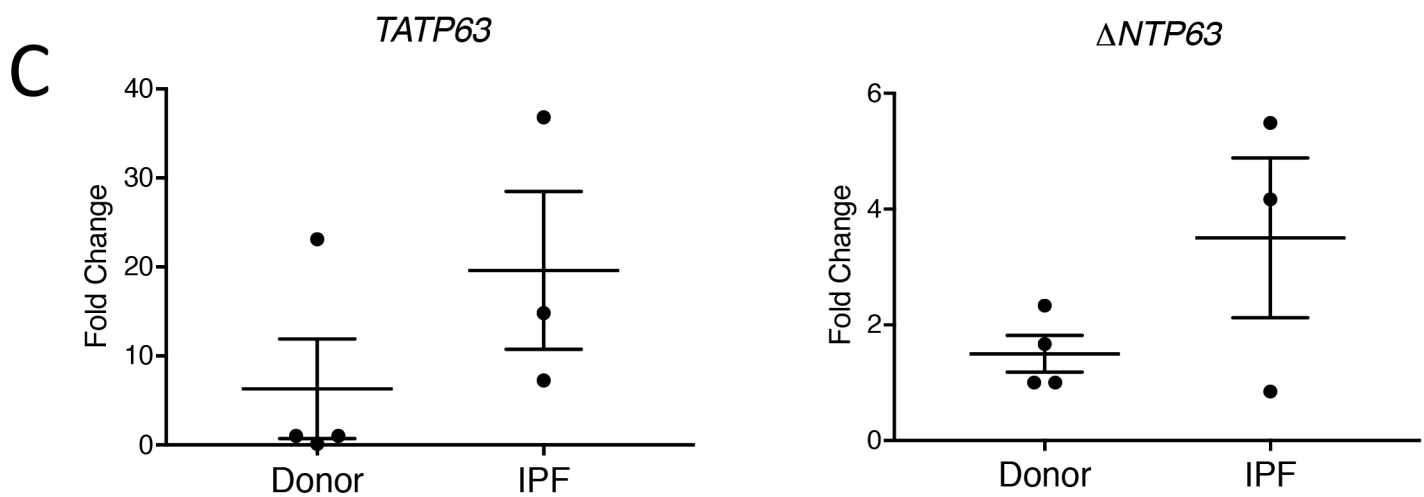
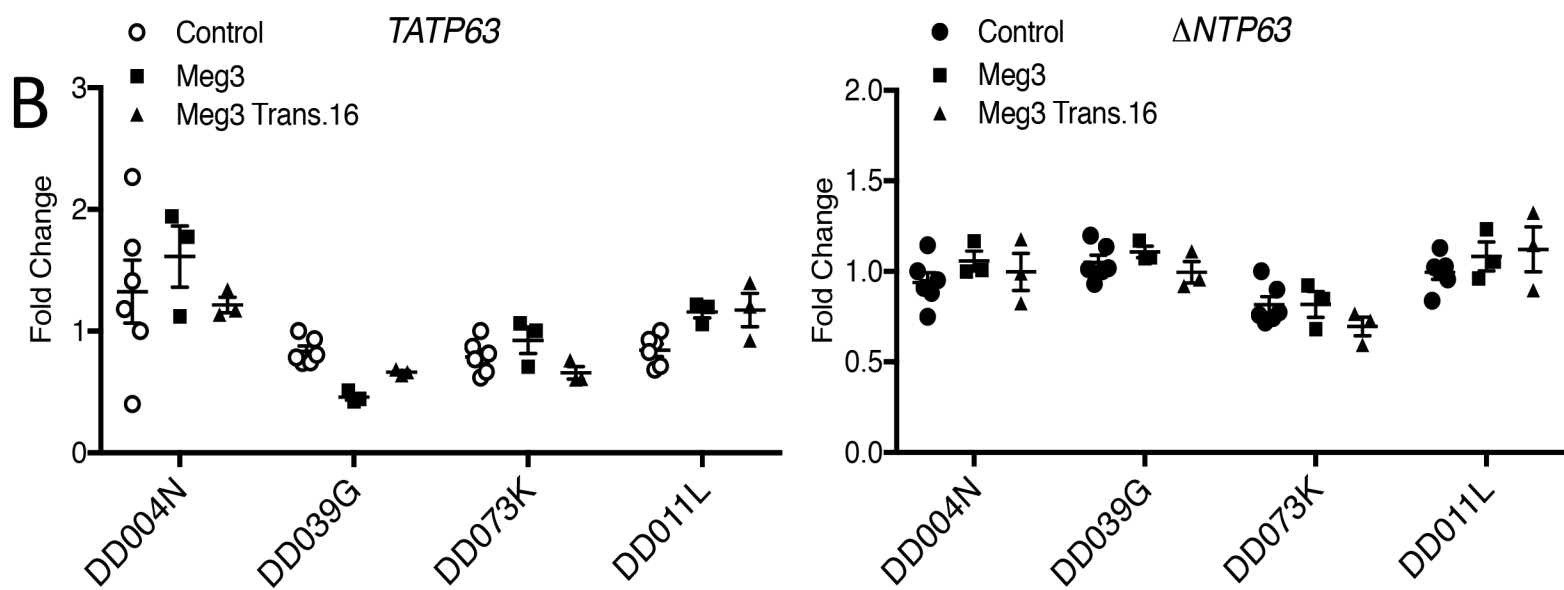
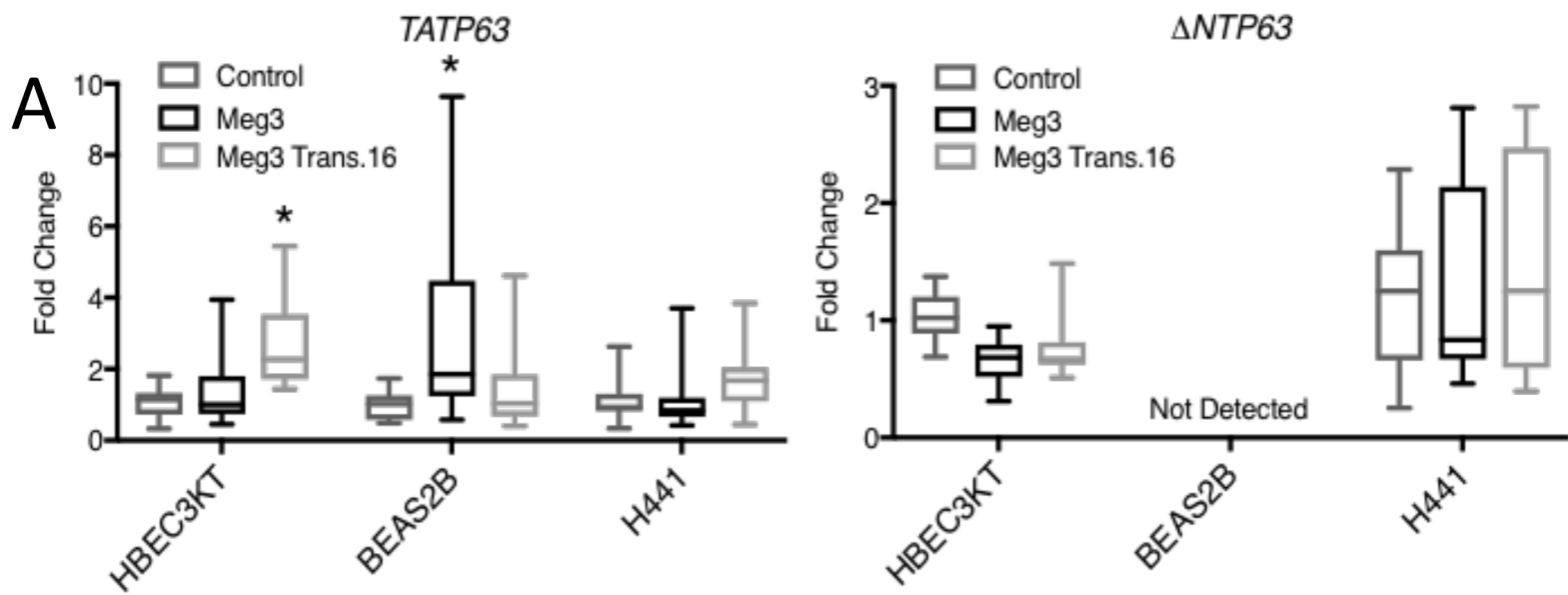


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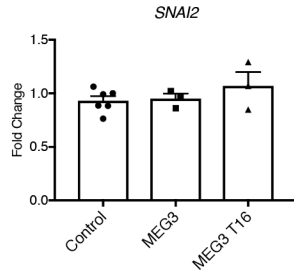


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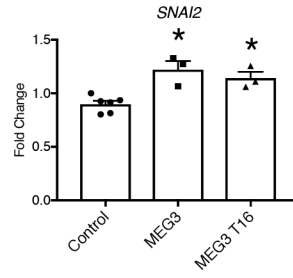




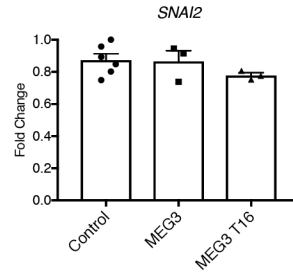
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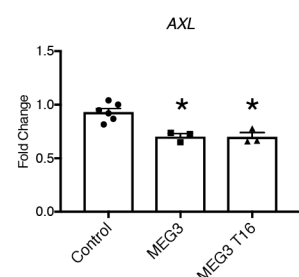
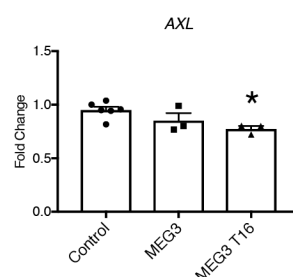
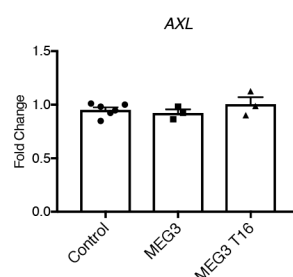
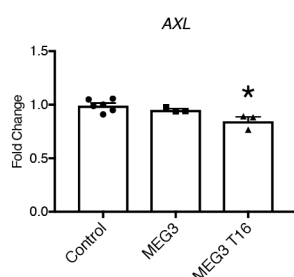
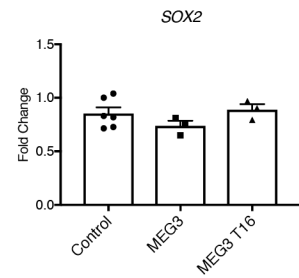
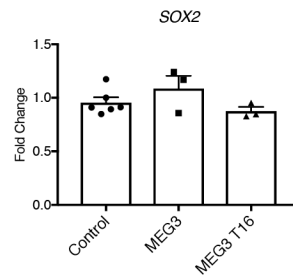
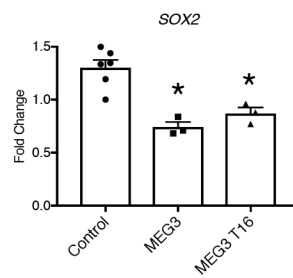
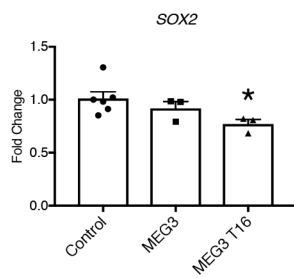
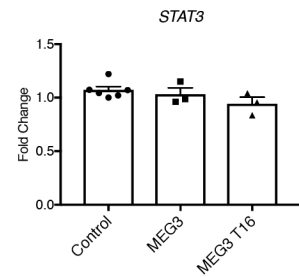
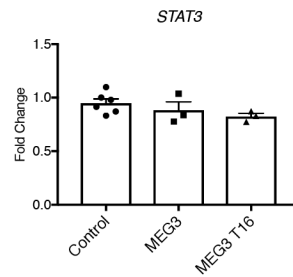
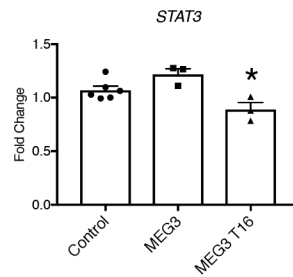
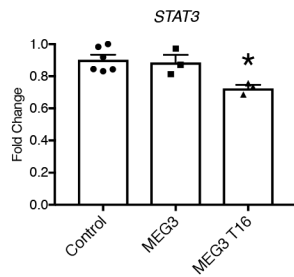
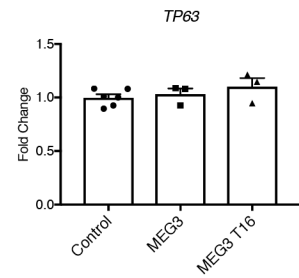
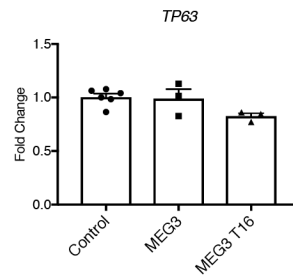
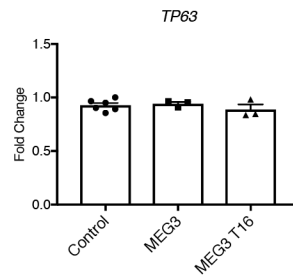
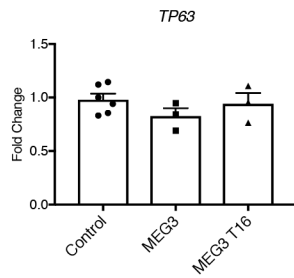
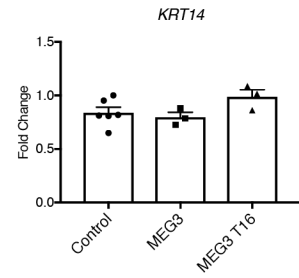
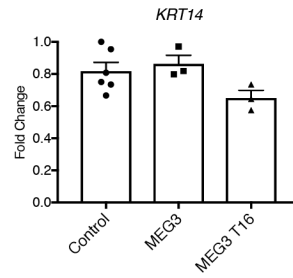
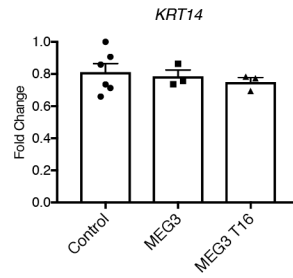
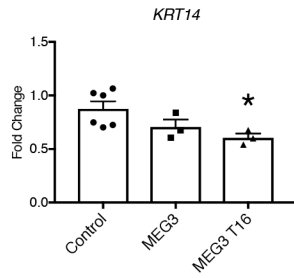
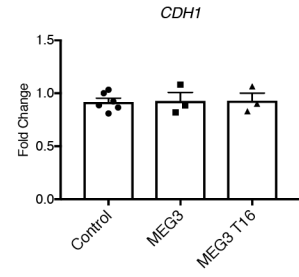
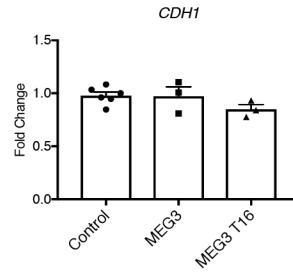
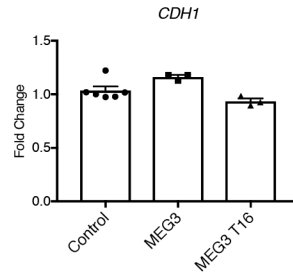
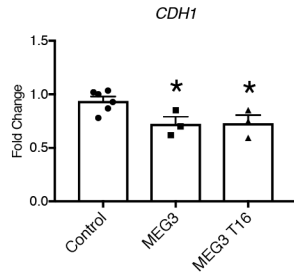
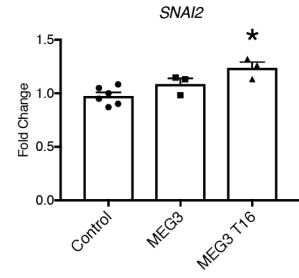
DD039G



DD073K



DD011L



Supplemental Table 1

A

Positive Correlation		Negative Correlation	
MEG3	1.000	CXCL17	-0.524
COL17A1	0.578	FTL	-0.516
ANXA8	0.538	NAPSA	-0.513
HMGA2	0.531	SFTPA1	-0.510
FRMD6	0.522	SFTA2	-0.507
PLAU	0.521	MGST1	-0.506
MIR205HG	0.520	SFTPA2	-0.501
TNS4	0.518	PEBP4	-0.494
S100A2	0.516	PGC	-0.491
SERPINB5	0.509	SFTPB	-0.489
ANXA8L2	0.506	FTH1	-0.482
KRT5	0.498	ESAM	-0.480
ITGB4	0.489	FTLP3	-0.479
KRT17	0.486	SLC34A2	-0.477
IL1RN	0.468	SFTPC	-0.474
DST	0.466	PARM1	-0.472
EREG	0.465	GKN2	-0.470
LAMC2	0.454	RP11-203F10.6	-0.469
TMPRSS4	0.449	CYB5A	-0.469
LAMB3	0.449	PIGR	-0.467
EFNB1	0.448	RP11-26H16.1	-0.467
RP11-366L20.2	0.447	RP11-613M5.2	-0.460
DSC3	0.438	GPR116	-0.458
CD109	0.437	RP13-585F24.1	-0.454
SEMA3A	0.437	SLC39A8	-0.454
ADAM8	0.434	HOPX	-0.453
TP63	0.434	SLC6A14	-0.453
AKAP12	0.432	RP11-50D9.1	-0.451
ITGA6	0.431	RPL21P39	-0.449
LGALS7	0.431	ACSL1	-0.448
LGALS7B	0.429	HSD17B6	-0.444
FST	0.425	RNASE1	-0.437
IGFBP6	0.423	LIMCH1	-0.437
MBOAT2	0.421	CLIC2	-0.436
CAPRIN2	0.417	SFTPD	-0.435
IRF6	0.416	CAT	-0.434
CAMK2N1	0.415	ALPL	-0.430
LAMA3	0.412	LPL	-0.428
PHLDA1	0.402	NPC2	-0.428
TRIM29	0.400	GPR160	-0.425
HBEGF	0.400	RP11-283C24.2	-0.424
SOX15	0.399	C4BPA	-0.423
PTAFR	0.396	SERPINA1	-0.422
SOX7	0.392	RPL21P7	-0.419
KRT14	0.389	SLPI	-0.417
TINAGL1	0.388	RP1-228H13.1	-0.413
GJB5	0.386	ROS1	-0.413
AHNAK2	0.383	PIP5K1B	-0.411
BNC1	0.382	DBI	-0.410
FHL2	0.378	RPS27	-0.408

B

Gene_id	Correlation	P_value
KRT14	1.00	2.2E-16
SNAI2	1.00	2.2E-16
TP63	1.00	2.2E-16
ITGB4	1.00	2.2E-16
AXL	1.00	2.2E-16
KRT17	1.00	2.2E-16
SOX2	0.50	0.6667
KRT5	0.50	0.6667
FOXA2	-0.50	0.6667
HOPX	-0.50	0.6667
TP73	-0.87	0.3333
ABCA3	-1.00	2.2E-16
SFTPD	-1.00	2.2E-16
NAPSA	-1.00	2.2E-16
SFTPB	-1.00	2.2E-16
SFTPC	-1.00	2.2E-16
SFTPA1	-1.00	2.2E-16
SFTPA2	-1.00	2.2E-16

Supplemental Table 2

A

Gene Name	Peak Score	Annotation	Distance to TSS
AXL	29.5	promoter-TSS (NM_001699)	-367
BAIAP2	17.4	promoter-TSS (NR_026857)	125
BCAR3	10.4	promoter-TSS (NM_001261409)	-214
C2	92	promoter-TSS (NM_001178063).5	-485
C3orf62	38.2	promoter-TSS (NM_198562)	-307
CALD1	17.4	promoter-TSS (NM_033157)	-42
CAMK2N1	29.5	promoter-TSS (NM_018584)	-889
CANT1	13.9	promoter-TSS (NM_138793)	-104
CHL1	19.1	promoter-TSS (NR_045572)	-196
DAPK1	27.8	promoter-TSS (NM_004938)	-176
DDAH1	20.8	promoter-TSS (NM_012137)	-133
DUSP4	41.7	promoter-TSS (NM_001394)	-995
ECE1	57.3	promoter-TSS (NM_001397)	-154
EDIL3	17.4	promoter-TSS (NM_005711)	-151
ETV5	22.6	promoter-TSS (NM_004454)	-360
FHL2	29.5	promoter-TSS (NM_201555)	-242
FLNA	38.2	promoter-TSS (NM_001456)	-302
FNIP2	41.7	promoter-TSS (NM_020840)	-839
FOXA2	46.9	promoter-TSS (NM_153675)	-461
FSTL1	50.3	promoter-TSS (NM_007085)	-973
FTH1	55.6	promoter-TSS (NM_002032)	-426
GCHFR	8.68	promoter-TSS (NM_005258)	63
GCLC	8.68	promoter-TSS (NM_001498)	7
GJB3	20.8	promoter-TSS (NM_024009)	58
GLS2	36.5	promoter-TSS (NM_001280797)	-109
GUCY1A3	45.1	promoter-TSS (NM_000856)	-152
HBEGF	41.7	promoter-TSS (NM_001945)	-221
HDAC9	34.7	promoter-TSS (NM_001204144)	-512
HIST1H4I	31.3	promoter-TSS (NM_003495)	-704
HIST2H2AA4	97.2	promoter-TSS (NM_003516)	-400
IRF6	31.3	promoter-TSS (NM_006147)	-931
ITGB4	19.1	promoter-TSS (NM_001005619)	-970
JUP	31.3	promoter-TSS (NM_002230)	-253
KLC3	17.4	promoter-TSS (NM_177417)	-359
KLF10	26	promoter-TSS (NM_005655)	-657
KRT15	39.9	promoter-TSS (NM_002275)	-372
KRT19	34.7	promoter-TSS (NM_002276)	-461
LETM2	34.7	promoter-TSS (NM_001199660)	79
LPL	22.6	promoter-TSS (NM_000237)	-16
LRRC20	39.9	promoter-TSS (NM_207119)	-199
LTA4H	26	promoter-TSS (NM_000895)	-347
LTBP1	17.4	promoter-TSS (NM_206943)	-396
MAP2	10.4	promoter-TSS (NM_001039538)	82
MEGF9	22.6	promoter-TSS (NM_001080497)	-152
MGST1	33	promoter-TSS (NM_020300)	-230
MICAL3	36.5	promoter-TSS (NM_015241)	-205
MXRA7	13.9	promoter-TSS (NM_001008529)	-255
NCMAP	50.3	promoter-TSS (NR_109781)	698
NGFRAP1	12.2	promoter-TSS (NM_014380)	220
NRK	20.8	promoter-TSS (NM_198465)	-786
PALLD	17.4	promoter-TSS (NM_001166108)	-420
PIM1	34.7	promoter-TSS (NM_002648)	-476
PLEC	59	promoter-TSS (NM_201378)	-849
PPAP2C	17.4	promoter-TSS (NM_003712)	-596
PPP1R14C	39.9	promoter-TSS (NM_030949)	-444
RORB	33	promoter-TSS (NM_006914)	-6
SAMD5	24.3	promoter-TSS (NM_001030060)	-778
SERPINB9	38.2	promoter-TSS (NM_004155)	-376
SERPINB9	12.2	promoter-TSS (NM_004155)	-25
SLAIN1	24.3	promoter-TSS (NM_001242868)	-499
SLC29A1	55.6	promoter-TSS (NM_001078177)	-280
SLC29A1	48.6	promoter-TSS (NM_004955)	-280
SLC7A11-AS1	10.4	promoter-TSS (NR_038380)	-261
SORBS3	50.3	promoter-TSS (NM_005775)	-549
TINAGL1	43.4	promoter-TSS (NM_022164)	-48
TLDC1	31.3	promoter-TSS (NM_020947)	50
TMEM180	43.4	promoter-TSS (NM_024789)	-179
TXNDC17	59	promoter-TSS (NM_032731)	-323
UBE2Q2	10.4	promoter-TSS (NM_001145335)	-74
WIF1	17.4	promoter-TSS (NM_007191)	-485
ZBTB20	62.5	promoter-TSS (NM_001164342)	-503
ZBTB20	15.6	promoter-TSS (NM_015642)	-627
ZNF83	10.4	promoter-TSS (NM_001277946)	-597

B

Gene Name	Peak Score	Annotation	Distance to TSS
AXL	29.5	promoter-TSS (NM_001699)	-367
CDH1	19.1	promoter-TSS (NM_004360)	-181
FOXA1	27.8	promoter-TSS (NM_004496)	-141
FOXA2	46.9	promoter-TSS (NM_153675)	-461
FOXA4	64.2	promoter-TSS (NM_213596)	-94
KRT15	39.9	promoter-TSS (NM_002275)	-372
KRT19	34.7	promoter-TSS (NM_002276)	-461
KRT7	123.3	promoter-TSS (NM_005556)	-142
SNAI1	46.9	promoter-TSS (NM_005985)	-930
SNAI2	41.7	promoter-TSS (NM_003068)	3
SOX2	15.6	promoter-TSS (NM_003106)	-523
STAT3	33	promoter-TSS (NM_139276)	-27
TP73	64.2	promoter-TSS (NM_001126241)	37
HEY1	31.3	promoter-TSS (NM_012258)	-929

Supplemental Table 3: *MEG3* PLISH probes.

Probe name	Start Site	Probe Sequence
huMEG3 1	209	ACTTACGTCGTTATGtagtgccctcgtgaggtgta
huMEG3 2	1455	ACTTACGTCGTTATGttcccacatgcagacactga
huMEG3 3	779	ACTTACGTCGTTATGtctatgccagatcctgcctg
huMEG3 4	290	ACTTACGTCGTTATGtcttcacaccttgccatcct
huMEG3 5	209	gatccaggaaaccgtgctccTTATACGTCGAGTTGA
huMEG3 6	1455	aggtaggtgaaggagcccacTTATACGTCGAGTTGA
huMEG3 7	779	aacatttgctgatcacctccTTATACGTCGAGTTGA
huMEG3 8	290	tggctggtcagttccggtccTTATACGTCGAGTTGA

Supplemental Table 4: Antibodies used

Antibody	Ordering information	I.F. Dilution	W.B. Dilution
KRT5	Biologend	1:200	
ABCA3	Seven Hills Bioreagents WMAB 17G524	1:200	
TP63	Biocare CM163A	1:200	
TTF1	Seven Hills Bioreagents 1231	1:1000	
CD68	ABCAM AB955	1:200	
TP63	Biocare CM163A	1:200	1:1000
TP63- α	Cell Signaling 4892S		1:1000
Δ NTP63	Biologend 619002		1:1000
TA-TP63	Biocare 618901		1:1000
β ACTIN			1:10,000

Supplemental Table 5: Taqman qPCR primers used

Target	Ordering information
<i>18S</i>	4352930E
<i>MEG3</i>	Hs00292028_m1
<i>TP63</i>	Hs00978343_m1
<i>TATP63</i>	Hs00978349_m1
Δ <i>NTP63</i>	Hs00978339_m1
<i>KRT14</i>	Hs00265033_m1
<i>KRT5</i>	Hs00361185_m1
<i>TP73</i>	Hs01056231_m1
<i>HES1</i>	Hs00172878_m1
<i>HEY1</i>	Hs01114113_m1
<i>NRARP</i>	Hs04183811_s1
<i>SOX2</i>	Hs00602736_s1
<i>FOXA2</i>	Hs00936490_m1
<i>SNAI2</i>	Hs00161904_m1
<i>AXL</i>	Hs01064444_m1
<i>STAT3</i>	Hs00374280_m1
<i>SPDEF</i>	Hs00171942_m1
<i>CDH1</i>	Hs01023894_m1
<i>YAP1</i>	Hs00902712_g1