SUPPLEMENTAL METHODS

Construction of stably-expressing *SPRIGHTLY* melanocytes

Melanocytes were seeded in a six-well plate, 5 x 10^5 cells per well. After 16-20 h, the culture medium was removed, and 0.5 ml of pre-warmed medium containing 8 µg/ml polybrene (Sigma) was added. Next, 0.5 ml of lenti-*SPRIGHTLY* or lenti-control vector was added to each well and mixed gently. The cells were returned to the incubator for another 8 h and fresh growth medium added. After 3 to 4 days of culture, cells were examined under a fluorescence microscope to determine the transduction efficiency. Transgene-containing cells were selected with puromycin (1 µg/ml) and the medium changed every 4 to 5 days. After several passages in selecting medium, stable expression of *SPRIGHTLY* was confirmed by qRT-PCR. Engineered melanocytes were termed “SPRIGHTLY-EE” and the control cells “Vector Only”.

Real-time quantitative reverse transcription-PCR (qPCR)

Quantitative PCR was carried out by using TaqMan mRNA assays or SYBR Green mRNA assays and a 7500 Real-Time PCR System (Applied Biosytems/Life Technologies) in accordance with the manufacturer's protocols.

Proteome array analysis

The Proteome Profiler™ Array Human Apoptosis Array Kit and Human Angiogenesis Array Kit (R&D Systems, Minneapolis, MN) were used according to manufactures recommendation.

RNA-seq and data analysis

The raw reads (csfasta files) and quality scores (qual files) were obtained using SOLiD v3.5 instrument software. All the reads were aligned to 1) genomic reference, 2) junction reference, and 3) filter reference by BioScope (v1.3) Whole Transcriptome Pipeline (Life Technologies,

Carlsbad, California). The junction reference library was generated based on the RefSeq transcripts. The filter reference was provided by LifeTech and contained polyA, polyC, polyG, polyT, ribosomal RNAs, tRNAs, LINE, SINE, LTR and satellite repeats, rRNA, scRNA and snRNAs, as well as adaptor, barcode, and primer sequences. The criteria used for defining the alignment were the minimum mapping quality greater than 10 and only primary alignments were considered. Reads mapped to filter reference were filtered out from the final alignment file.

The raw reads (fastq files) from Illumina HiSeq1500 were aligned to the reference genome using TopHat version 1.4.1 (Trapnell et al., 2009) with RefSeq annotations and the "—no-novel-juncs" option. Ambiguous reads that mapped to more than one region in the genome and reads with MAPQ score less than 10 were removed.

The UCSC human genome version 19 (hg19) and corresponding RefSeq annotations were used for reference and mRNA transcript quantification. The bed coordinates of the lncRNAs from the Dinger Lab were applied for lncRNA transcript quantification. Transcript quantification was performed using Partek Genomics Suite (version 6.4, Partek Inc, St. Louis MI), and the raw read counts and normalized read counts (RPKM: reads per kilobase per million mapped reads, Mortazavi et al., 2008) were obtained.

The raw count information for all the mRNA and lncRNA transcripts was first filtered. The transcripts which did not present read count in all the samples were filtered out from further analysis. The remaining transcripts were analyzed by the BioConductor DESeq package (http://www.ncbi.nlm.nih.gov/pubmed/20979621) to detect the differential expression between SPRIGHTLY Knock-down and wild-type control or SPRIGHTLY-EE and vector control. Transcripts with detected in at least one sample (RPKM>1), fold change over 2 and p-value less than 0.05 were considered as significant differential expression.

RNA-FISH analysis

RNA FISH analysis was done according to Khaitan et al. (2011).

Invasion Assays

Invasion assays were performed as per Khaitan et al. (2011). Cell migration was counted using Aperio software with data expressed as the percent (%) invasion through the membrane relative to migration through the control sample. All samples were performed in triplicate.

Colony Formation (Cell Transformation) Assay

Colony formation was examined using the CytoSelect^{TM} 96-well Cell Transformation Assay kit (Cell Biolabs, Inc. Cat# CBA-135-T). Briefly, Agar Matrix Solution was mixed with DMEM w/FBS to form a Base Agar Matrix Layer, then applied and allowed to solidify in individual wells of a 96-well plate. Cells were then acquired by trypsinization, quantitated, and resuspended at four dilutions in culture medium (equal to 20000, 15000, 10000, and 5000 cells per well) then mixed with Agar Matrix Solution and added to wells to solidify on top of the Base Agar Matrix Layer. Once solidified, culture media was then applied on top on the Cell Suspension/Agar Matrix Layer and the plate was incubated at 37^{o}C/5% CO_2 for 7 days. Following incubation, the samples were dissolved using Matrix Solubilization Solution, mixed with MTT Solution and Detergent Solution, incubated for 4 hours in the dark at room temperature, and finally measured at 570 nm using a SpectraMax M5 96-well plate reader (Molecular Devices). All cell samples and concentrations were performed in triplicate, including a “No Cells” negative control.

Immunofluorescence with laser-scanning confocal microscopy

SPRIGHTLY-EE and Melanocyte Vector only cells were grown on chamber slides for three to four days, and slides were then stained for 1 h at room temperature with primary antibodies

directed against human Ki-67 (Abcam) at 1:200 dilution or anti-DPPIV (Abcam) at 1:250 dilution. Cells were washed four to five times in PBS and incubated with Alexa Fluor 546-conjugated secondary antibody for 1 h at room temperature in the dark. Cell nuclei were stained with DAPI (4',6-diamidino-2-phenylindole) and washed twice in PBS. Cells were visualized by Nikon A1R VAAS Confocal Microscope.

Chromogenic labelling of cells

SPRIGHTLY-EE and Melanocyte Vector only cells were attached to autoclaved positive charged slides. Slides were washed with TBS-T buffer, subsequently placed in 6.0 pH citrate buffer for heat induced epitope retrieval and this was performed using the Biocare Decloaker instrument. Slides were stained with Leica Novacastra antibodies NCL-L-Ki67-MM1 (dilution of 1:200), and RTU-MelanA (diluted 1:4) for .5 hour at room temperature. Slides were incubated with Ventana's OmniMap Ms for 16 minutes and Ventana's ChromoMap DAB kit was used manually for 8 minutes for chromogenic detection. Slides where counterstained with hematoxylin (diluted 1:30) for 1 minute at room temperature. Slides were dehydrated and cover-slipped, then scanned using the Aperio ScanScope XT.

In vivo analysis in mice

Five week-old female Fox Chase SCID® mice were purchased from Charles River. Melanocytes (5 X 10(6)/mouse) were injected subcutaneously into the mice, and tumor size was monitored for four weeks. Tumor volume was calculated as volume = width x width x length/2.

SUPPLEMENTAL REFERENCES

Khaitan D, Dinger ME, Mazar J, Crawford J, Smith MA, Mattick JS, et al. The melanoma-upregulated long noncoding RNA SPRY4-IT1 modulates apoptosis and invasion. Cancer Res 2011;71:3852-62.

Mortazavi A, Williams BA, McCue K, Schaeffer L, Wold B. Mapping and quantifying mammalian transcriptomes by RNA-Seq. Nat Meth 2008;5:621-28.

Trapnell C, Pachter L, Salzberg SL. TopHat: discovering splice junctions with RNA-Seq. Bioinformatics 2009;25:1105-11.

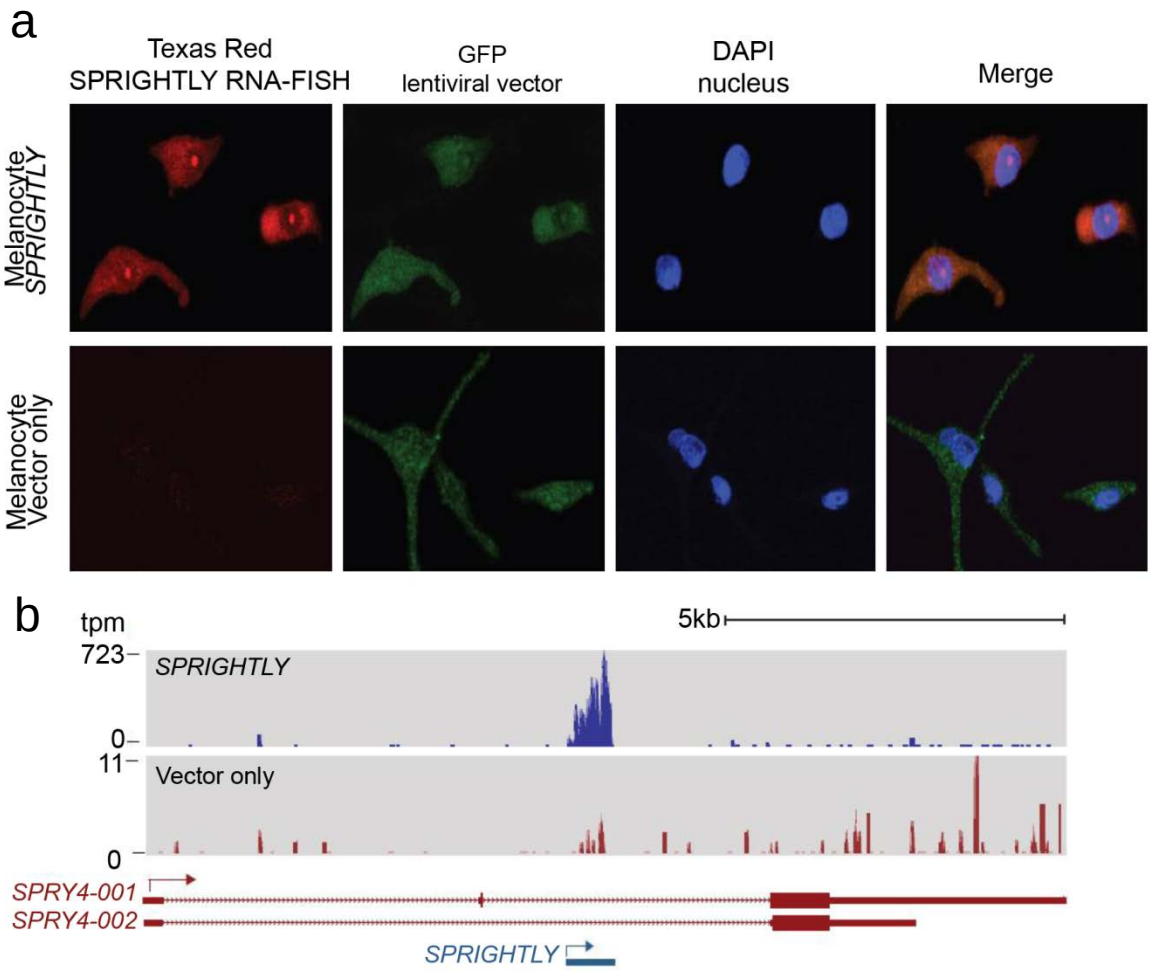
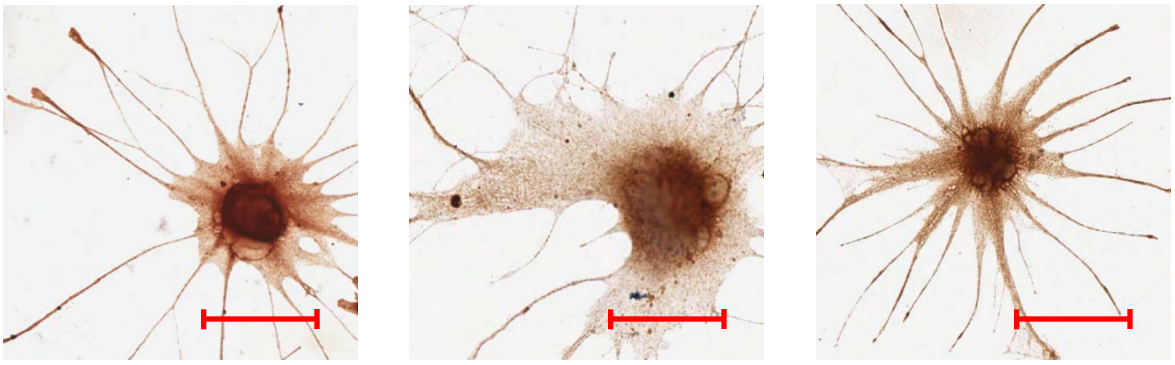


Figure S1. Confirmation of the ectopic expression of *SPRIGHTLY* in melanocytes. (a) RNA-FISH verification of the ectopic expression of *SPRIGHTLY* in SPRIGHTLY-EE melanocytes. *SPRIGHTLY* is stained red; nuclei are stained blue (DAPI), and lentiviral vector transfected cells are green (GFP). The orange color in the merge of SPRIGHTLY-EE cells indicates *SPRIGHTLY* expression in the cytoplasm. (b) Visualization of mapped sequencing tags from total RNA from SPRIGHTLY-EE and Vector Only cells confirming the ectopic expression of *SPRIGHTLY* in SPRIGHTLY-EE cells.

SPRIGHTLY-EE cells: Melan-A staining



Melanocyte VO cells: Melan-A staining

Figure S2. MELAN A pigmentation staining. Both SPRIGHTLY-EE and vector only parental cells were stained with MELAN A staining to detect changes in pigmentation. We did not observe any changes in the pigmentation. Scale bar = 10 um

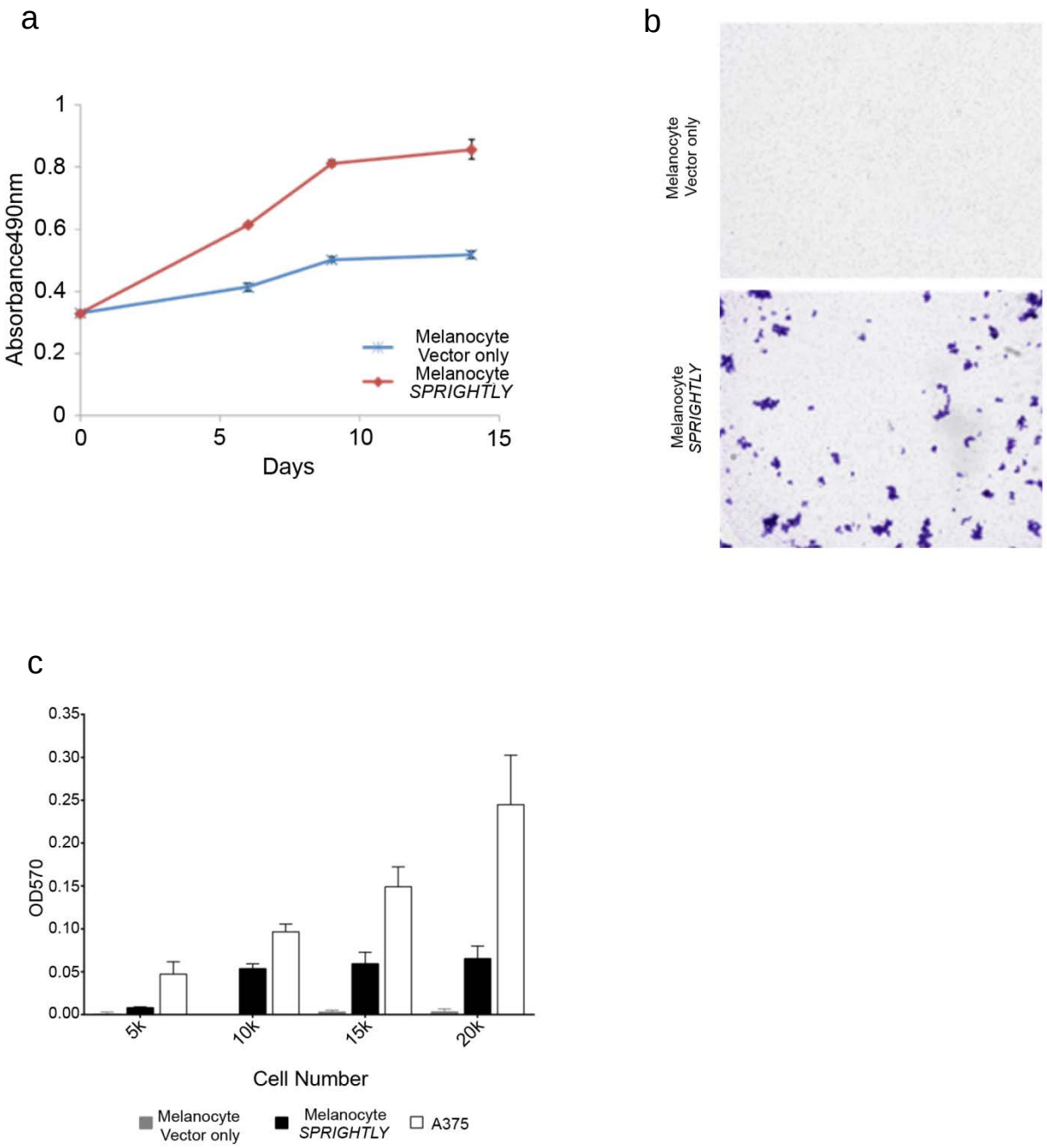
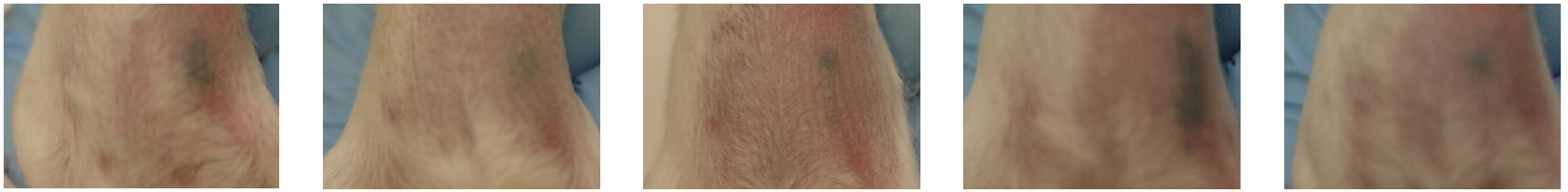


Figure S3. SPRIGHTLY-EE cells show high growth rate, invasion and colony formation compared to Vector Only cells. (a) *SPRIGHTLY* transfected melanocytes show a higher growth rate than melanocytes transfected with control vector. (b) Invasion assays show that ectopic expression of *SPRIGHTLY* in melanocytes leads to cellular transformation from non-invasive to invasive. (c) anchorage-independent colony formation is increased in SPRIGHTLY-EE cells compared to Melanocyte Vector only cells.

Day 84 (12weeks)

Control



SPRIGHTLY-EE

Control

SPRIGHTLY-EE

Figure S4. SPRIGHTLY-EE and vector only parental cells grown in SCID mice

Sub-cutaneous introduction of Melanocyte "Vector only" versus SPRIGHTLY-EE cells into the hind of SCID mice. Mice were monitored over the course of 12 weeks (84 days). Though no significant differences in tumor size were detected, several SPRIGHTLY-EE mice showed an unexpected migration of cells from the initial site of introduction, suggestive of invasive characteristics not seen in the parental line.

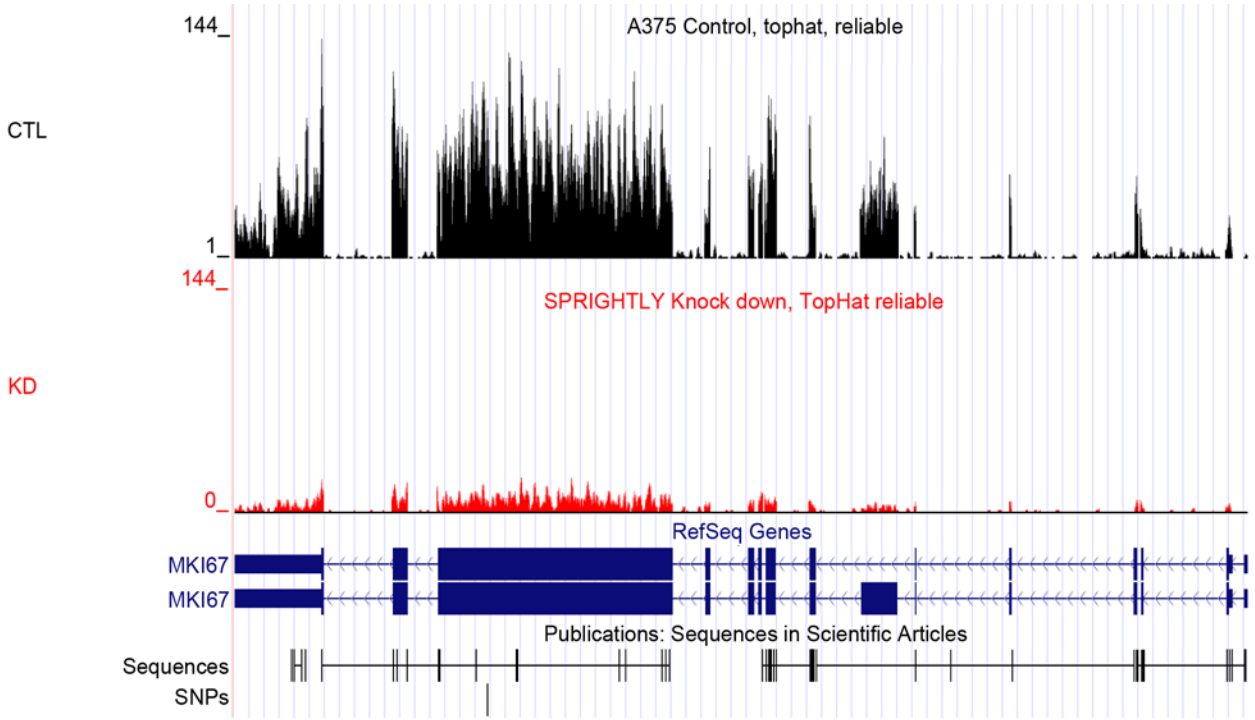


Figure S5. *SPRIGHTLY* knockdown in melanoma cells (A375) downregulates Ki67. Ki67 is heavily downregulated in *SPRIGHTLY* knockdown cells. CTL – control and KD - *SPRIGHTLY* knockdown.

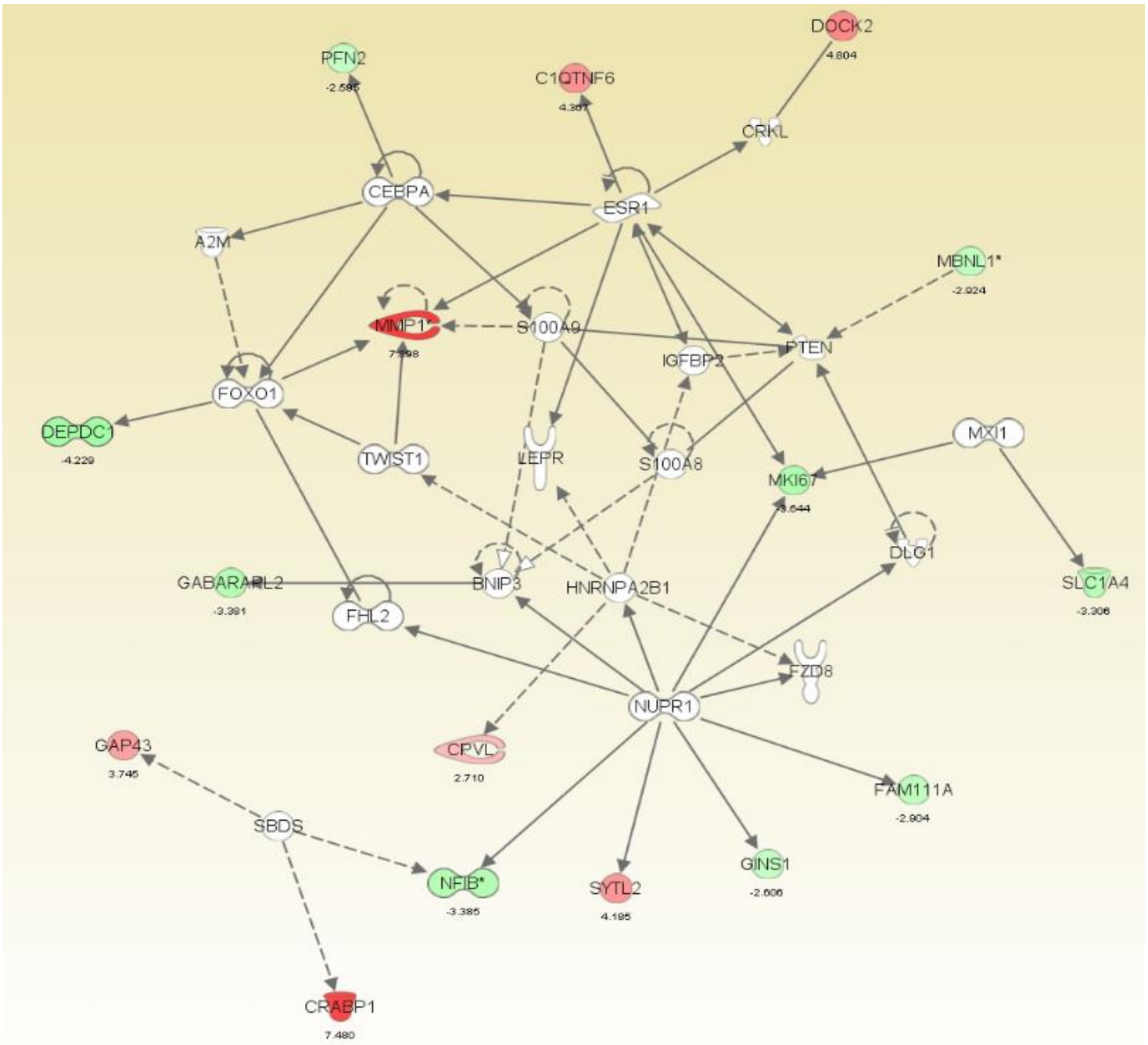


Figure S6. SPRIGHTLY-mediated gene regulatory pathways. Expanded network built from RNA-seq data. Downregulated and upregulated putative SPRIGHTLY target genes are indicated by green and red, respectively. MKi-67 is downregulated as reported in Figure 5a.

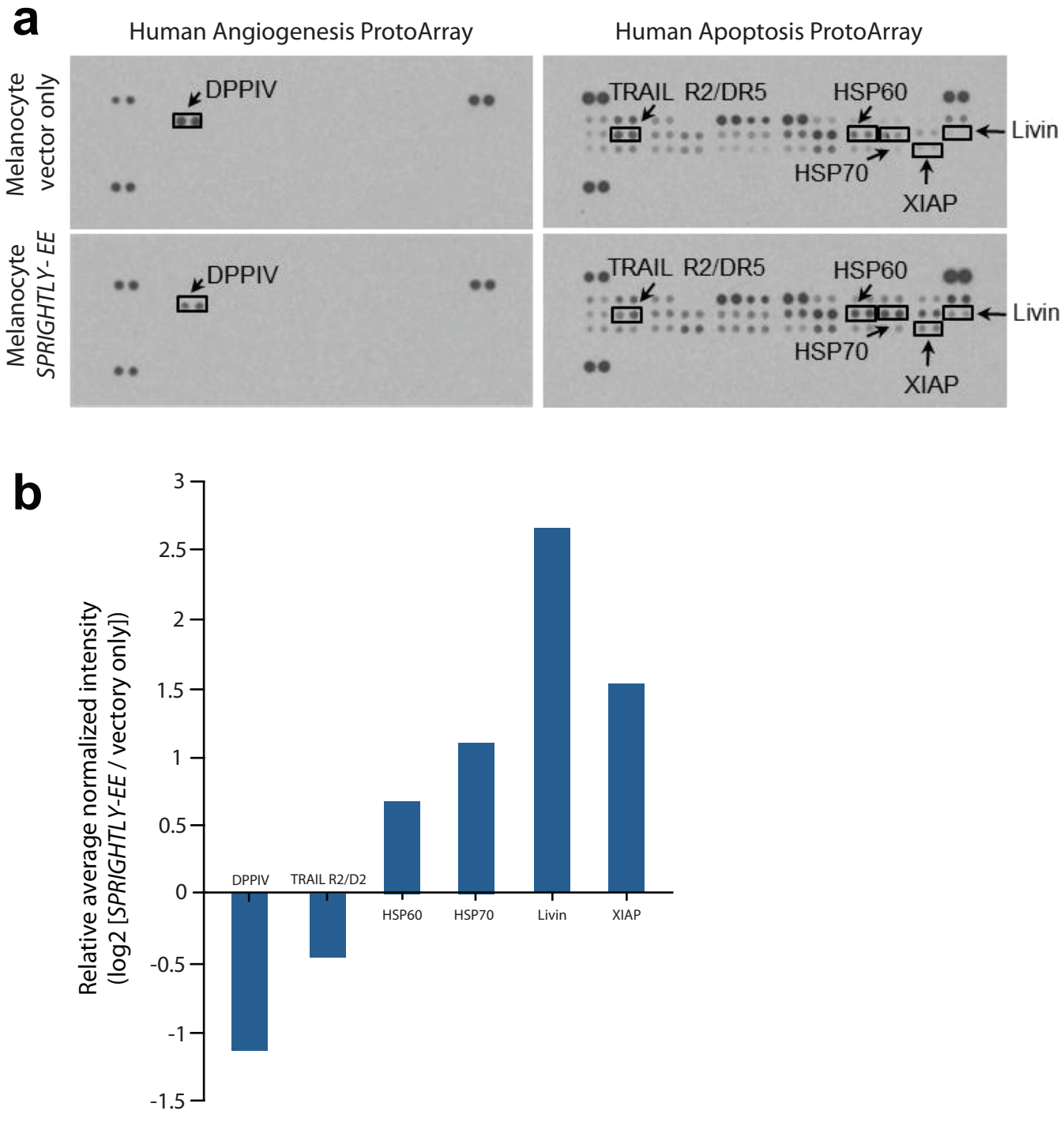


Figure S7. Protein array analysis shows differentially expressed proteins in SPRIGHTLY expressing melanocytes compared to controls. (a) Scanned western blot images of the angiogenesis and apoptosis protein array sets. (b) Quantified data of differentially expressed proteins detected in (a).

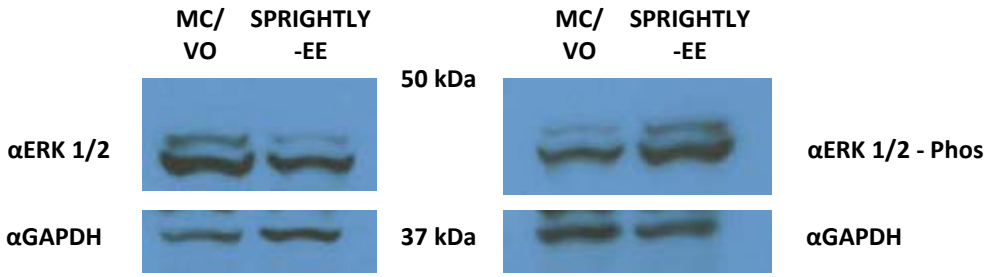
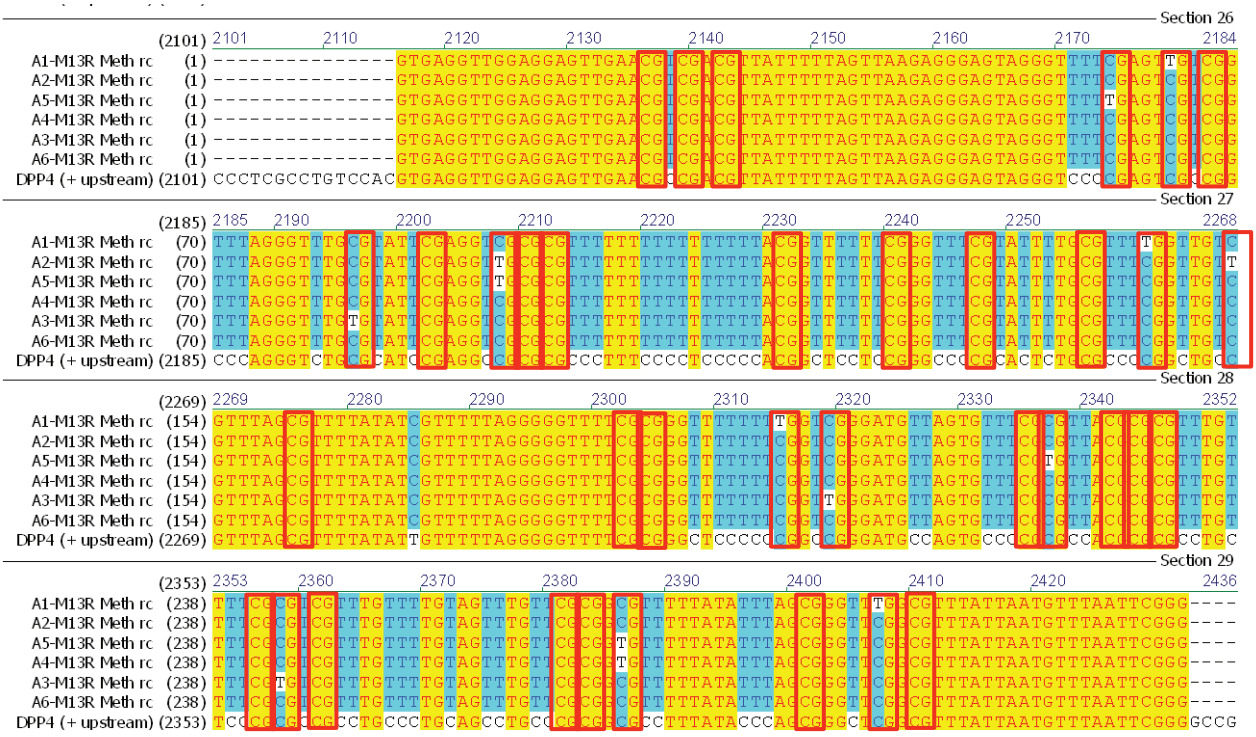


Figure S8. ERK 1/2 Phosphorylation in SPRIGHTLY-EE cells
Western blot analysis of ERK 1/2 vs ERK 1/2 –phosphate indicates an increase in phosphorylation in SPRIGHTLY-EE cells compared to Melanocyte "Vector only" cells. GAPDH was used as a load control.

a



b

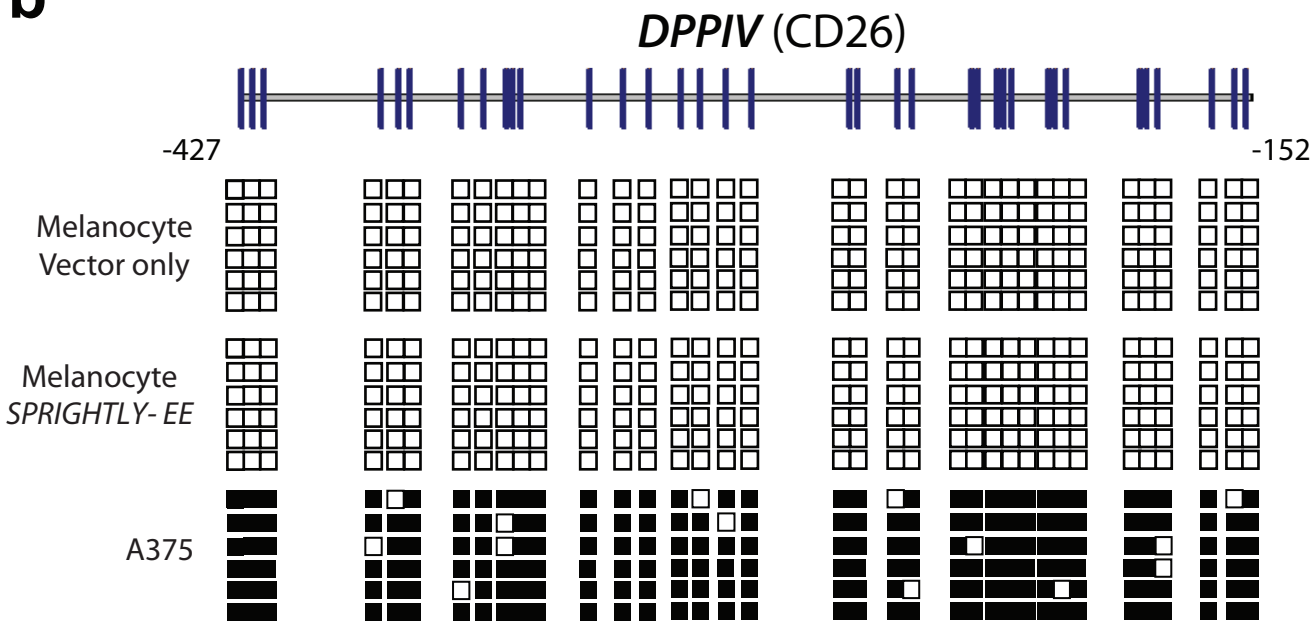


Figure S9. DPPIV methylation levels in melanocyte vector only cells, SPRIGHTLY-EE cells, and melanoma cells (A375). (a) Bisulfite sequencing of the DPPIV promoter in six biological replicates in A375 cells. Red outlines depict CpGs. (b) Methylation levels across the DPPIV gene in melanocyte vector only cells, SPRIGHTLY-EE cells, and melanoma cells (A375).

Dataset S1. RNA-Seq transcriptomic profiling of *SPRIGHTLY*-EE and Vector Only melanocytes. A total of 740 genes were found to be significantly ($p<0.05$) differentially expressed.

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY*-EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY*-EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY*-EE/VO (RPKM)	p-value	FDR
AB019563	AB019563	+	294	5334	17564	783.61	2,502.75	-3.19	0.026903	1
AB209021	AB209021	+	5267	63452	19930	520.35	158.52	3.28	0.023154	1
ACA47	ACA47	+	187	5176	1349	1,195.62	302.21	3.96	0.013334	1
AF052101	AF052101	-	1212	0	108	0.00	3.73	-Inf	0.017598	1
AF056450	AF056450	-	160	78	0	20.92	0.00	Inf	0.048596	1
AF071106	AF071106	+	285	157	0	23.76	0.00	Inf	0.002718	1
AF085880	AF085880	+	600	0	174	0.01	12.12	-902.80	0.00184	1
AF085983	AF085983	-	515	3	120	0.25	9.76	-38.80	0.047711	1
AF116666	AF116666	-	1317	141	4	4.64	0.14	32.94	0.03099	1
AF218023	AF218023	+	2212	276	21	5.40	0.40	13.45	0.018909	1
AF304301	AF304301	+	260	231	0	38.33	0.00	Inf	0.000252	0.451157
AF386504	AF386504	+	745	152	7	8.81	0.38	23.12	0.041482	1
AF400487	AF400487	+	4471	20	266	0.20	2.49	-12.67	0.023645	1
AJ227892	AJ227892	+	742	103	0	6.00	0.00	Inf	0.018709	1
AJ276888	AJ276888	+	364	97	1	11.51	0.15	75.85	0.044244	1
AJ420430	AJ420430	+	1195	138	1	4.98	0.04	122.19	0.011632	1
AK000749	AK000749	+	2110	188	5	3.84	0.10	38.27	0.012123	1
AK001099	AK001099	-	2371	0	87	0.00	1.54	-Inf	0.038064	1
AK001150	AK001150	-	2089	55	447	1.14	8.96	-7.88	0.019861	1
AK002085	AK002085	-	2308	0	270	0.01	4.89	-929.23	0.000102	0.284068
AK021634	AK021634	-	3393	18	233	0.23	2.88	-12.55	0.033653	1
AK021641	AK021641	-	2296	0	81	0.01	1.48	-160.98	0.047683	1
AK022110	AK022110	+	1805	1	191	0.03	4.44	-135.77	0.002739	1
AK022789	AK022789	-	2351	97	1	1.78	0.02	100.01	0.044244	1
AK022998	AK022998	+	2665	141	4	2.28	0.07	33.34	0.03099	1
AK024224	AK024224	-	1882	15	331	0.35	7.38	-21.12	0.004961	1
AK024556	AK024556	-	687	4357	15	273.94	0.91	299.48	1.01E-13	6.16E-09
AK025704	AK025704	+	2502	3	169	0.05	2.83	-60.22	0.012933	1
AK025781	AK025781	-	2261	41	305	0.79	5.64	-7.17	0.04944	1
AK026654	AK026654	+	2243	4	141	0.08	2.63	-32.40	0.034984	1
AK054868	AK054868	+	1400	6	148	0.18	4.42	-24.26	0.043594	1
AK055377	AK055377	+	2933	0	92	0.00	1.31	-Inf	0.031601	1
AK055564	AK055564	+	2735	83	0	1.30	0.00	Inf	0.040023	1
AK055856	AK055856	-	3331	246	24	3.19	0.30	10.79	0.037634	1
AK056521	AK056521	-	2999	6	285	0.09	3.98	-45.04	0.002158	1
AK056989	AK056989	+	1965	0	112	0.00	2.38	-Inf	0.015239	1
AK057084	AK057084	+	2875	4	137	0.06	2.00	-33.06	0.038715	1
AK057695	AK057695	+	2233	0	84	0.01	1.58	-221.83	0.042591	1
AK057713	AK057713	+	1789	47	354	1.14	8.28	-7.26	0.036919	1
AK057721	AK057721	-	2433	27	262	0.48	4.52	-9.38	0.041465	1
AK057887	AK057887	+	1580	1	141	0.04	3.74	-95.48	0.012193	1
AK074309	AK074309	+	2121	1	99	0.02	1.96	-96.02	0.04596	1
AK090875	AK090875	-	2269	34	314	0.65	5.79	-8.97	0.031334	1
AK090979	AK090979	-	2182	0	138	0.00	2.65	-Inf	0.006117	1
AK091325	AK091325	-	2333	10	204	0.18	3.67	-20.83	0.024193	1
AK092333	AK092333	-	3305	4	184	0.05	2.33	-46.30	0.011986	1
AK095044	AK095044	-	3127	108	0	1.49	0.00	Inf	0.015532	1
AK095515	AK095515	-	3831	120	3	1.35	0.04	37.08	0.04276	1
AK096412	AK096412	+	2698	143	6	2.29	0.09	24.78	0.043642	1
AK097550	AK097550	+	1880	0	81	0.00	1.80	-Inf	0.047683	1
AK123088	AK123088	-	2809	1	117	0.01	1.74	-122.75	0.025826	1
AK123571	AK123571	-	2796	26	373	0.40	5.58	-13.84	0.008432	1
AK123803	AK123803	-	2410	0	135	0.00	2.34	-Inf	0.006783	1
AK123881	AK123881	+	2498	7	171	0.12	2.87	-23.70	0.030694	1
AK123915	AK123915	-	2905	43	356	0.64	5.14	-7.98	0.030143	1
AK124143	AK124143	+	2919	100	641	1.48	9.20	-6.22	0.018639	1
AK125471	AK125471	+	3838	0	196	0.01	2.14	-409.38	0.000913	1
AK125525	AK125525	-	3207	5	291	0.07	3.80	-53.04	0.001413	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
AK126194	AK126194	+	4401	23	236	0.23	2.24	-9.79	0.046726	1
AK126629	AK126629	+	4233	153	8	1.56	0.08	20.60	0.046817	1
AK128884	AK128884	+	577	1	129	0.07	9.37	-125.12	0.017698	1
AK129624	AK129624	+	2192	2306	418	45.44	7.98	5.69	0.004192	1
AK225987	AK225987	+	431	49	436	4.91	42.38	-8.63	0.0169	1
AK289392	AK289392	-	1452	629	126	18.71	3.62	5.16	0.032192	1
AK289697	AK289697	+	2334	231	18	4.27	0.32	13.16	0.030293	1
AK289831	AK289831	+	3013	3	217	0.05	3.02	-64.18	0.003805	1
AK289838	AK289838	-	1715	6	163	0.15	3.98	-26.35	0.030904	1
AK290222	AK290222	+	2636	20	245	0.32	3.90	-12.10	0.032757	1
AK290347	AK290347	+	3660	1	105	0.01	1.20	-107.58	0.03788	1
AK290480	AK290480	+	607	448	18	31.89	1.23	25.96	0.001011	1
AK290688	AK290688	+	2660	304	12	4.94	0.20	25.18	0.004206	1
AK290841	AK290841	+	2132	0	96	0.00	1.88	-Inf	0.027259	1
AK290933	AK290933	+	2273	143	4	2.72	0.07	36.86	0.029416	1
AK290947	AK290947	-	918	1448	441	68.13	20.13	3.39	0.049655	1
AK290968	AK290968	-	968	424	55	18.90	2.40	7.87	0.02109	1
AK291083	AK291083	+	974	0	97	0.02	4.19	-258.49	0.026274	1
AK291204	AK291204	+	1564	103	612	2.86	16.40	-5.74	0.024866	1
AK291345	AK291345	-	3108	0	87	0.00	1.17	-Inf	0.038064	1
AK291449	AK291449	+	1532	258	6	7.28	0.17	42.51	0.003145	1
AK291473	AK291473	+	3655	251	1	2.97	0.01	317.81	0.000414	0.616032
AK291688	AK291688	-	3733	160	2	1.86	0.02	103.69	0.009811	1
AK291932	AK291932	+	1988	269	9	5.85	0.20	29.95	0.004854	1
AK291939	AK291939	+	1027	239	19	10.04	0.76	13.21	0.028879	1
AK291958	AK291958	+	1198	144	7	5.19	0.24	21.51	0.049808	1
AK292113	AK292113	+	1181	192	0	7.03	0.01	1080.89	0.000852	0.998976
AK292265	AK292265	-	1645	208	3	5.47	0.08	69.10	0.003998	1
AK292346	AK292346	+	2534	481	84	8.21	1.38	5.93	0.03401	1
AK292382	AK292382	+	1626	204	11	5.41	0.29	18.71	0.023973	1
AK292591	AK292591	+	2100	1	101	0.01	2.02	-142.83	0.043085	1
AK292604	AK292604	-	3094	1827	452	25.51	6.12	4.16	0.019424	1
AK292728	AK292728	+	1187	223	1465	8.13	51.71	-6.36	0.004443	1
AK292797	AK292797	+	1945	5	188	0.10	4.05	-38.77	0.014089	1
AK292857	AK292857	-	3976	434	67	4.71	0.71	6.68	0.030235	1
AK292946	AK292946	-	2810	151	8	2.32	0.12	19.19	0.048927	1
AK292959	AK292959	-	2860	299	12	4.52	0.18	24.99	0.004602	1
AK293009	AK293009	+	4478	383	1370	3.70	12.81	-3.47	0.046684	1
AK293024	AK293024	+	1232	106	0	3.71	0.00	Inf	0.016729	1
AK307104	AK307104	+	1672	0	91	0.01	2.27	-261.38	0.032795	1
AK307415	AK307415	+	2506	1	245	0.02	4.09	-165.25	0.000607	0.804385
AK307427	AK307427	+	1553	44	371	1.23	10.01	-8.11	0.026723	1
AK307450	AK307450	-	3525	190	0	2.33	0.00	Inf	0.000909	1
AK307456	AK307456	+	1324	324	1	10.55	0.05	227.41	6.20E-05	0.198858
AK307533	AK307533	-	892	1393	412	67.45	19.37	3.48	0.046166	1
AK307566	AK307566	-	1948	148	2	3.28	0.04	93.26	0.013881	1
AK307574	AK307574	+	2532	150	0	2.57	0.00	Inf	0.003457	1
AK307593	AK307593	+	2363	6	143	0.10	2.53	-24.39	0.048919	1
AK307725	AK307725	+	1455	303	12	9.01	0.34	26.62	0.004282	1
AK307904	AK307904	-	1303	126	1	4.18	0.03	123.45	0.017083	1
AK307961	AK307961	-	1921	219	1	4.94	0.02	290.83	0.001012	1
AK308050	AK308050	+	1852	223	13	5.20	0.30	17.15	0.021225	1
AK308124	AK308124	-	1513	144	4	4.11	0.11	36.25	0.02866	1
AK308290	AK308290	-	1654	4	129	0.10	3.26	-32.07	0.047449	1
AK308309	AK308309	-	1244	86	0	2.98	0.00	Inf	0.03565	1
AK308312	AK308312	-	2900	0	81	0.00	1.17	-Inf	0.047683	1
AK308346	AK308346	+	991	95	0	4.12	0.00	Inf	0.025283	1
AK308354	AK308354	+	1468	0	101	0.00	2.88	-Inf	0.022692	1
AK308400	AK308400	+	1790	123	2	2.96	0.05	54.43	0.029002	1
AK308664	AK308664	-	801	110	2	5.91	0.11	51.67	0.042838	1
AK308688	AK308688	+	1875	154	0	3.54	0.00	Inf	0.003012	1
AK308728	AK308728	+	2411	10	463	0.18	8.04	-43.68	0.00024	0.451157

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
AK308814	AK308814	+	1548	94	1	2.61	0.04	74.09	0.048906	1
AK309338	AK309338	+	1269	709	46	24.15	1.53	15.78	0.000767	0.938792
AK309491	AK309491	-	2101	876	67	18.02	1.34	13.43	0.000708	0.899419
AK309640	AK309640	+	966	103	0	4.59	0.00	Inf	0.018709	1
AK309703	AK309703	+	2759	131	2	2.06	0.03	61.61	0.022865	1
AK309800	AK309800	-	932	122	0	5.63	0.00	Inf	0.0093	1
AK309920	AK309920	+	1262	0	126	0.00	4.20	-Inf	0.009276	1
AK309971	AK309971	+	1063	108	2	4.39	0.10	46.14	0.045504	1
AK309994	AK309994	+	1043	1	107	0.05	4.30	-80.26	0.035525	1
AK310000	AK310000	+	955	447	50	20.23	2.19	9.24	0.013221	1
AK310216	AK310216	+	1891	154	3	3.53	0.06	60.63	0.016726	1
AK310434	AK310434	-	1004	2	129	0.08	5.38	-66.48	0.02745	1
AK310505	AK310505	+	1069	0	89	0.00	3.50	-Inf	0.035327	1
AK310596	AK310596	-	2605	219	10	3.63	0.16	23.14	0.015529	1
AK310599	AK310599	-	977	161	1	7.11	0.03	247.99	0.00566	1
AK310724	AK310724	-	984	178	9	7.82	0.40	19.71	0.031297	1
AK311190	AK311190	+	2965	9	351	0.13	4.96	-37.83	0.001266	1
AK311334	AK311334	+	1016	47	329	2.00	13.57	-6.77	0.048547	1
AK311386	AK311386	+	1564	223	4	6.15	0.11	54.43	0.003923	1
AK311433	AK311433	-	1175	1	163	0.04	5.81	-133.74	0.006247	1
AK311488	AK311488	+	1888	8	256	0.18	5.68	-31.16	0.006205	1
AK311550	AK311550	+	927	135	0	6.28	0.00	Inf	0.00584	1
AK311709	AK311709	+	914	168	0	7.96	0.00	Inf	0.001874	1
AK311761	AK311761	+	477	219	0	19.86	0.03	667.14	0.000364	0.554525
AK311844	AK311844	+	547	154	956	12.19	73.20	-6.00	0.010592	1
AK311849	AK311849	-	455	665	78	63.09	7.18	8.78	0.006108	1
AK311862	AK311862	+	495	0	120	0.02	10.17	-430.27	0.011459	1
AK311935	AK311935	-	430	1059	250	106.38	24.36	4.37	0.027511	1
AK312052	AK312052	+	418	734	103	75.83	10.31	7.35	0.00868	1
AK312124	AK312124	+	427	1119	69	113.20	6.77	16.72	0.000144	0.325314
AK312127	AK312127	-	443	170	9	16.55	0.85	19.37	0.037065	1
AK312241	AK312241	-	605	155	0	11.09	0.00	Inf	0.002911	1
AK312261	AK312261	-	1029	91	0	3.80	0.02	242.67	0.029436	1
AK312391	AK312391	+	1986	385	5	8.38	0.11	76.74	0.000163	0.354235
AK312485	AK312485	-	1514	1584	301	45.18	8.34	5.42	0.007783	1
AK312553	AK312553	+	617	87	0	6.12	0.00	Inf	0.034306	1
AK312572	AK312572	+	1533	693	57	19.54	1.55	12.62	0.001793	1
AK312650	AK312650	+	824	325	10	17.02	0.52	33.01	0.002021	1
AK312829	AK312829	-	2494	0	84	0.00	1.42	-Inf	0.042591	1
AK312874	AK312874	-	2260	287	38	5.48	0.71	7.74	0.04675	1
AK313078	AK313078	+	1455	198	7	5.87	0.21	28.44	0.014721	1
AK313411	AK313411	+	1036	176	1	7.35	0.03	262.23	0.00358	1
AK313426	AK313426	+	1453	187	0	5.56	0.00	Inf	0.001002	1
AK313620	AK313620	+	1908	183	14	4.14	0.31	13.48	0.049467	1
AK313905	AK313905	+	771	617	128	34.57	6.95	4.97	0.036386	1
AK313957	AK313957	+	1133	363	54	13.84	2.00	6.91	0.038308	1
AK313991	AK313991	-	2879	124	2	1.86	0.02	74.77	0.02815	1
AK314090	AK314090	+	3824	4	172	0.04	1.89	-43.03	0.016103	1
AK314142	AK314142	-	445	1049	43	101.82	4.05	25.15	3.35E-05	0.136141
AK314236	AK314236	+	2409	230	0	4.13	0.00	Inf	0.00026	0.451157
AK314243	AK314243	+	3998	0	98	0.00	1.02	-Inf	0.025326	1
AK314337	AK314337	-	2896	279	33	4.17	0.47	8.79	0.040373	1
AK314343	AK314343	-	1558	201	8	5.57	0.22	25.27	0.016474	1
AK314552	AK314552	-	1634	228	3	6.04	0.07	90.16	0.002401	1
AK314577	AK314577	+	540	124	3	9.91	0.27	36.77	0.03824	1
AK314635	AK314635	+	2214	0	121	0.00	2.29	-Inf	0.011061	1
AK315096	AK315096	+	1507	230	15	6.60	0.41	16.14	0.023244	1
AK315098	AK315098	+	1799	0	106	0.00	2.47	-Inf	0.018918	1
AK315103	AK315103	+	3824	11	174	0.12	1.90	-15.65	0.049038	1
AK315211	AK315211	+	2718	138	3	2.19	0.05	46.72	0.025931	1
AK315465	AK315465	+	2210	441	1	8.62	0.02	454.62	4.19E-06	0.036482
AK315469	AK315469	+	1329	70	534	2.29	16.82	-7.35	0.016259	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
AK315666	AK315666	-	194	384	30	85.52	6.37	13.42	0.008321	1
AK316611	AK316611	-	865	1287	151	64.26	7.31	8.79	0.001477	1
AL110132	AL110132	-	4163	140	2	1.45	0.02	81.40	0.017537	1
AL117623	AL117623	-	1443	3	175	0.08	5.07	-61.81	0.011064	1
AL137257	AL137257	+	4516	538	1869	5.15	17.34	-3.37	0.041856	1
AL137522	AL137522	-	2908	0	89	0.00	1.28	-Inf	0.035327	1
AL389956	AL389956	-	1663	1	123	0.03	3.10	-119.30	0.021365	1
AL390130	AL390130	+	3458	18	223	0.22	2.70	-12.02	0.039595	1
AL512699	AL512699	-	1936	148	4	3.31	0.09	37.51	0.02583	1
AL832747	AL832747	-	2098	83	633	1.71	12.65	-7.38	0.011603	1
AL834285	AL834285	+	2471	189	963	3.31	16.32	-4.93	0.020345	1
AY206700	AY206700	+	164	4	393	0.96	100.37	-104.64	0.000118	0.308029
AY208842	AY208842	-	872	82	0	4.05	0.00	Inf	0.041602	1
AY562999	AY562999	+	391	78	0	8.63	0.00	Inf	0.048596	1
AY952890	AY952890	-	655	176	1	11.60	0.05	216.71	0.00358	1
BC001224	BC001224	+	1674	193	7	4.98	0.17	28.61	0.016451	1
BC004287	BC004287	-	3156	56	372	0.77	4.94	-6.44	0.043687	1
BC011670	BC011670	+	921	155	0	7.27	0.01	952.70	0.002911	1
BC014066	BC014066	+	515	1080	88	90.58	7.16	12.65	0.000501	0.693944
BC014135	BC014135	-	2150	214	11	4.30	0.21	20.06	0.019698	1
BC017047	BC017047	-	159	3065	981	832.56	258.50	3.22	0.039745	1
BC017971	BC017971	+	988	124	4	5.43	0.16	33.20	0.048399	1
BC018658	BC018658	+	1166	117	0	4.34	0.00	Inf	0.011154	1
BC020582	BC020582	+	3293	21	341	0.28	4.34	-15.74	0.008399	1
BC034271	BC034271	+	2101	100	0	2.06	0.00	Inf	0.020936	1
BC034627	BC034627	+	775	98	1	5.47	0.06	85.20	0.042794	1
BC035145	BC035145	-	5423	6	191	0.05	1.48	-32.24	0.016396	1
BC035309	BC035309	-	1212	87	0	3.11	0.00	Inf	0.034306	1
BC037167	BC037167	+	1088	0	181	0.00	6.98	-Inf	0.001469	1
BC037585	BC037585	+	1601	293	16	7.92	0.42	18.93	0.008745	1
BC043178	BC043178	-	1468	2	269	0.05	7.68	-151.62	0.000647	0.839792
BC051735	BC051735	+	1723	2	190	0.04	4.63	-105.54	0.004987	1
BC061915	BC061915	+	290	1	1192	0.12	172.21	-1462.99	9.13E-11	2.78E-06
BC062785	BC062785	+	190	1245	4001	283.08	882.22	-3.12	0.039786	1
BC063441	BC063441	-	1469	167	5	4.92	0.16	31.67	0.020171	1
BC105975	BC105975	-	1063	138	1	5.62	0.04	136.10	0.011632	1
BC107040	BC107040	-	449	41	366	3.94	34.15	-8.66	0.024378	1
BC112349	BC112349	-	1846	18	314	0.41	7.12	-17.21	0.009284	1
BC128391	BC128391	+	2412	162	7	2.90	0.12	23.86	0.033036	1
BC129981	BC129981	-	2447	1	122	0.01	2.08	-169.19	0.022049	1
BC136547	BC136547	-	1802	533	31	12.78	0.73	17.46	0.001429	1
BC136679	BC136679	+	3207	408	19	5.49	0.25	21.88	0.002067	1
BC137070	BC137070	+	3475	15	226	0.19	2.72	-14.61	0.028742	1
BC137128	BC137128	+	4520	71	590	0.68	5.47	-8.10	0.010504	1
BC137129	BC137129	+	4516	72	586	0.69	5.44	-7.91	0.011294	1
BC140099	BC140099	+	839	0	111	0.01	5.54	-749.82	0.015796	1
BC141838	BC141838	+	3306	401	43	5.23	0.54	9.66	0.015331	1
BC142953	BC142953	+	3684	61	761	0.72	8.65	-12.03	0.001608	1
BC142963	BC142963	-	2716	416	69	6.61	1.06	6.26	0.038299	1
BC142998	BC142998	+	1661	4	164	0.09	4.14	-44.21	0.019638	1
BC146662	BC146662	+	3306	401	43	5.23	0.54	9.66	0.015331	1
BC146779	BC146779	-	5940	5	152	0.04	1.07	-29.47	0.033041	1
BC146790	BC146790	-	6445	9	238	0.06	1.55	-27.07	0.010651	1
BC146801	BC146801	-	4440	4	151	0.04	1.42	-33.84	0.027185	1
BC150253	BC150253	+	5923	75	488	0.55	3.45	-6.33	0.028729	1
BC150296	BC150296	-	4735	6	197	0.06	1.75	-30.13	0.014337	1
BC151217	BC151217	+	6019	5	144	0.03	1.00	-29.37	0.040042	1
BC157118	BC157118	-	4869	21	228	0.18	1.96	-10.70	0.045972	1
BC160042	BC160042	+	2454	288	24	5.07	0.41	12.32	0.020053	1
BC160043	BC160043	-	2193	168	1	3.32	0.02	161.75	0.004566	1
BC160143	BC160143	-	769	89	0	4.99	0.00	Inf	0.031774	1
BX537506	BX537506	-	4010	17	258	0.19	2.70	-14.48	0.020452	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
BX537723	BX537723	-	4970	13	186	0.11	1.57	-13.94	0.048056	1
BX640629	BX640629	+	4272	56	386	0.56	3.79	-6.73	0.03795	1
BX647881	BX647881	-	1888	2	111	0.05	2.46	-53.83	0.046302	1
BX648054	BX648054	+	1719	13651	49136	343.00	1,197.47	-3.49	0.016479	1
BX648591	BX648591	+	1933	44	359	0.98	7.79	-7.92	0.030548	1
BX648621	BX648621	+	1384	137	2	4.27	0.05	82.45	0.019153	1
BX649145	BX649145	-	2823	6	163	0.09	2.42	-26.35	0.030904	1
CR590510	CR590510	+	1627	541	117	14.35	3.03	4.74	0.048444	1
CR590583	CR590583	-	1108	583	82	22.71	3.11	7.31	0.013714	1
CR594593	CR594593	+	529	417	1549	34.05	122.68	-3.60	0.037353	1
CR595375	CR595375	+	1829	257	10	6.07	0.22	27.48	0.00733	1
CR596839	CR596839	+	1618	601	129	16.04	3.33	4.82	0.041303	1
CR597676	CR597676	-	1547	1	354	0.03	9.57	-285.62	3.93E-05	0.14992
CR598503	CR598503	+	1594	0	80	0.00	2.09	-Inf	0.049518	1
CR601361	CR601361	-	1136	16	200	0.61	7.36	-12.00	0.049219	1
CR601441	CR601441	+	997	555	112	24.06	4.71	5.11	0.039247	1
CR601532	CR601532	+	1891	2	120	0.05	2.66	-58.19	0.035616	1
CR601669	CR601669	-	588	233	8	17.15	0.59	29.30	0.008362	1
CR602716	CR602716	-	1542	35	484	0.98	13.16	-13.47	0.004359	1
CR603195	CR603195	+	1619	18	450	0.49	11.63	-23.60	0.001238	1
CR603325	CR603325	-	579	0	91	0.00	6.55	-Inf	0.032795	1
CR603492	CR603492	-	891	1	115	0.05	5.41	-111.54	0.027519	1
CR604798	CR604798	+	658	0	91	0.00	5.81	-Inf	0.032795	1
CR609959	CR609959	+	753	121	0	6.96	0.03	258.20	0.009643	1
CR610863	CR610863	+	1455	235	24	6.98	0.68	10.29	0.044461	1
CR611300	CR611300	+	760	0	109	0.02	6.01	-257.76	0.016974	1
CR611332	CR611332	+	2122	23	324	0.47	6.40	-13.66	0.012887	1
CR612665	CR612665	+	415	111	2	11.60	0.25	46.95	0.041565	1
CR613504	CR613504	-	2640	145	0	2.38	0.00	Inf	0.004111	1
CR615526	CR615526	-	1248	0	271	0.01	9.08	-735.95	9.97E-05	0.284068
CR616040	CR616040	+	1508	278	21	7.96	0.58	13.65	0.018329	1
CR617021	CR617021	-	1132	30	267	1.16	9.89	-8.56	0.046145	1
CR620814	CR620814	+	736	119	1	7.01	0.05	127.98	0.021431	1
CR621085	CR621085	+	1547	162	8	4.54	0.20	22.18	0.03841	1
CR621148	CR621148	-	1841	0	121	0.00	2.75	-Inf	0.011061	1
CR624032	CR624032	+	865	78	448	3.89	21.70	-5.57	0.044309	1
CR624199	CR624199	+	1492	12	254	0.36	7.14	-19.91	0.012371	1
CR624876	CR624876	-	907	335	12	15.97	0.54	29.43	0.002428	1
CR626202	CR626202	+	940	108	2	4.97	0.07	69.44	0.045504	1
D10518	D10518	+	248	165	0	28.70	0.00	Inf	0.002073	1
D28382	D28382	-	194	5	142	1.18	30.76	-26.14	0.042019	1
DQ351291	DQ351291	-	1830	61	386	1.45	8.85	-6.12	0.045443	1
DQ407611	DQ407611	-	456	136	3	12.85	0.25	51.88	0.027404	1
EF532594	EF532594	-	1551	128	0	3.57	0.00	Inf	0.007493	1
EF576990	EF576990	+	912	323	0	15.28	0.01	1642.87	1.87E-05	0.094778
EU176179	EU176179	-	2349	268	31	4.92	0.56	8.84	0.042009	1
EU176361	EU176361	+	2759	83	0	1.29	0.00	Inf	0.040023	1
EU176445	EU176445	-	2158	555	66	11.11	1.28	8.71	0.009529	1
EU176637	EU176637	-	680	292	35	18.57	2.15	8.64	0.037823	1
EU176713	EU176713	+	1217	79	0	2.80	0.01	207.70	0.04674	1
EU176719	EU176719	-	1409	199	14	6.09	0.42	14.42	0.036815	1
EU176729	EU176729	-	1608	8	159	0.22	4.15	-18.63	0.046196	1
EU188666	EU188666	+	528	237	6	19.39	0.49	39.94	0.004991	1
EU188668	EU188668	+	566	191	12	14.59	0.90	16.14	0.034777	1
EU287939	EU287939	+	1449	133	0	3.96	0.00	Inf	0.006269	1
EU293605	EU293605	+	2173	103	0	2.05	0.00	Inf	0.018709	1
EU434648	EU434648	-	1903	185	11	4.20	0.24	17.76	0.034921	1
EU446763	EU446763	-	1611	414	22	11.09	0.56	19.68	0.002688	1
EU446857	EU446857	-	1610	80	0	2.14	0.01	194.01	0.044958	1
EU446993	EU446993	+	1351	109	0	3.47	0.00	Inf	0.014967	1
EU831591	EU831591	-	2266	0	109	0.00	2.02	-Inf	0.016974	1
EU831940	EU831940	+	882	500	37	24.48	1.76	13.93	0.003408	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
EU832289	EU832289	+	434	150	0	14.96	0.04	370.10	0.003457	1
hsa-mir-3654	hsa-mir-3654	-	56	271	30	209.03	22.44	9.31	0.038099	1
L13806	L13806	-	562	365	2	28.03	0.18	153.95	5.28E-05	0.182757
L39924	L39924	-	267	198	13	32.03	2.04	15.70	0.033887	1
M12377	M12377	+	285	194	8	29.46	1.15	25.69	0.019148	1
NM_000123	ERCC5	+	4085	1	128	0.01	1.31	-91.83	0.018261	1
NM_000124	ERCC6	-	7006	57	446	0.35	2.67	-7.59	0.021823	1
NM_000268	NF2	+	6029	303	30	2.17	0.21	10.45	0.024549	1
NM_000661	RPL9	-	749	152	0	8.77	0.01	766.42	0.003226	1
NM_000737	CGB	-	879	78	0	3.83	0.00	Inf	0.048596	1
NM_000985	RPL17	-	963	148	6	6.62	0.26	25.52	0.038749	1
NM_000994	RPL32	-	1651	98	680	2.57	17.25	-6.72	0.013336	1
NM_001001392	CD44	+	3969	137	834	1.49	8.81	-5.92	0.014052	1
NM_001001890	RUNX1	-	7274	104	541	0.62	3.11	-5.03	0.042423	1
NM_001004722	NCK2	+	1795	0	90	0.00	2.10	-Inf	0.034037	1
NM_001006616	TSPAN17	+	2547	1	100	0.01	1.64	-114.81	0.044498	1
NM_001007239	METTL13	+	2939	0	105	0.01	1.50	-220.43	0.019617	1
NM_001008800	CCT3	-	1993	1,379	299	29.88	6.29	4.75	0.015259	1
NM_001009186	CCT6A	+	2529	487	98	8.32	1.63	5.10	0.046947	1
NM_001009554	MFAP3L	-	5827	17	250	0.12	1.80	-14.65	0.023313	1
NM_001009999	KDM1A	+	3107	587	84	8.15	1.13	7.19	0.014202	1
NM_001010862	SPIN3	-	4459	5	167	0.05	1.57	-30.85	0.023103	1
NM_001012321	RPSA	+	1095	308	9	12.15	0.33	36.29	0.002273	1
NM_001013251	SLC3A2	+	1932	2,007	547	44.86	11.87	3.78	0.026447	1
NM_001013642	TRNP1	+	1949	68	483	1.51	10.38	-6.89	0.023625	1
NM_001013732	C6orf138	-	2850	3	198	0.04	2.91	-69.72	0.006133	1
NM_001014796	DDR2	+	3244	67	426	0.90	5.50	-6.14	0.038205	1
NM_001017370	NHLRC3	+	3348	0	162	0.00	2.03	-Inf	0.002725	1
NM_001018009	SH3BP5	-	2706	0	120	0.00	1.85	-Inf	0.011459	1
NM_001018038	VPS13A	+	10176	388	15	1.65	0.06	26.48	0.001621	1
NM_001024074	HNMT	+	739	100	0	5.87	0.00	Inf	0.020936	1
NM_001024213	S100A13	-	551	120	0	9.42	0.00	Inf	0.01	1
NM_001024218	GPHN	+	4203	214	6	2.20	0.06	34.20	0.008359	1
NM_001024382	HMBS	+	1411	109	2	3.33	0.07	47.95	0.04415	1
NM_001024736	CD276	+	3401	10	217	0.13	2.67	-21.01	0.018767	1
NM_001024843	TNRC6B	+	15959	49	943	0.13	2.48	-18.77	0.000172	0.362359
NM_001025077	CELF2	+	9239	198	931	0.92	4.22	-4.57	0.027532	1
NM_001030287	ATF3	+	1898	98	0	2.23	0.00	Inf	0.022572	1
NM_001031719	DHRS12	-	1324	87	0	2.82	0.00	Inf	0.034306	1
NM_001032280	TFAP2A	-	3808	69	639	0.78	7.03	-8.97	0.006438	1
NM_001033059	AMD1	+	3103	99	551	1.37	7.43	-5.42	0.034824	1
NM_001033556	PPM1B	+	1497	106	0	3.05	0.00	Inf	0.016729	1
NM_001033853	RPL3	-	1191	1,170	334	42.44	11.75	3.61	0.04695	1
NM_001034025	ERP29	+	1333	0	135	0.01	4.25	-783.34	0.006783	1
NM_001034996	RPL14	+	917	416	59	19.59	2.72	7.21	0.026891	1
NM_001037277	GGPS1	+	2744	2	136	0.03	2.07	-81.76	0.02245	1
NM_001037495	DYNLL1	+	736	7	234	0.44	13.33	-30.33	0.007942	1
NM_001038628	B3GALNT1	-	3641	207	6	2.45	0.07	37.72	0.0098	1
NM_001039538	MAP2	+	5844	12	194	0.09	1.39	-16.03	0.037374	1
NM_001039589	DPH2	+	1813	88	0	2.10	0.01	283.85	0.033015	1
NM_001040058	SPP1	+	1625	503	4	13.36	0.10	134.70	1.12E-05	0.06182
NM_001040200	CLDND1	-	1874	0	127	0.01	2.83	-297.45	0.008957	1
NM_001040875	GDAP1	+	3724	142	6	1.65	0.07	23.79	0.044694	1
NM_001042481	FRMD6	+	5035	14	214	0.12	1.78	-14.78	0.03206	1
NM_001042486	DLGAP4	+	3009	100	0	1.44	0.00	Inf	0.020936	1
NM_001042601	TTC14	+	4787	3	147	0.02	1.29	-52.08	0.023092	1
NM_001071	TYMS	+	1583	563	75	15.35	2.00	7.69	0.012649	1
NM_001078176	SLC29A1	+	2128	68	465	1.38	9.15	-6.63	0.027753	1
NM_001079518	MED24	-	3698	489	68	5.71	0.77	7.41	0.018785	1
NM_001079559	HNRNPUL2	-	5147	66	433	0.55	3.52	-6.38	0.034635	1
NM_001080125	CASP8	+	2935	2	167	0.03	2.38	-84.18	0.009366	1
NM_001083585	RABEP1	+	5303	25	299	0.20	2.36	-11.51	0.021555	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
NM_001093767	FAM195B	-	925	267	23	12.47	1.03	12.12	0.025484	1
NM_001098621	C14orf109	+	1277	353	21	11.96	0.69	17.29	0.005845	1
NM_001101653	COMMD9	-	2848	0	80	0.00	1.18	-Inf	0.049518	1
NM_001104925	PCMTD2	+	3831	0	92	0.00	1.00	-Inf	0.031601	1
NM_001105568	KIF13A	-	5858	104	547	0.77	3.91	-5.10	0.040622	1
NM_001113513	ARHGEF7	+	4946	13	184	0.11	1.56	-13.59	0.04985	1
NM_001113547	LIMA1	-	3622	88	674	1.05	7.79	-7.41	0.010111	1
NM_001122607	RUNX1	-	2722	221	8	3.50	0.12	29.89	0.010762	1
NM_001122770	ZBTB37	+	2300	0	85	0.00	1.56	-Inf	0.041023	1
NM_001122824	TACC1	+	6572	222	2,261	1.46	14.41	-9.87	0.0003	0.469304
NM_001122964	SMEK2	-	4458	38	434	0.37	4.08	-11.02	0.00945	1
NM_001127371	CDCA7L	-	2770	217	21	3.38	0.32	10.53	0.048092	1
NM_001127458	CRLS1	+	3652	227	23	2.68	0.26	10.34	0.047072	1
NM_001128226	DIS3	-	7554	5	260	0.03	1.44	-54.09	0.002758	1
NM_001128616	ARHGEF3	-	4055	235	13	2.50	0.13	18.81	0.016994	1
NM_001129889	DCT	-	2397	581	101	10.46	1.76	5.94	0.0247	1
NM_001130060	ATF7	-	6625	30	362	0.20	2.29	-11.72	0.013246	1
NM_001130689	HMGB2	-	1454	189	11	5.62	0.32	17.48	0.032253	1
NM_001130690	PDE10A	-	8189	17	205	0.09	1.05	-11.56	0.049124	1
NM_001130725	PSMB5	-	941	967	252	44.39	11.24	3.95	0.041643	1
NM_001134296	AP3M2	+	3670	4	359	0.04	4.10	-95.87	0.000234	0.451157
NM_001134367	SLC6A6	+	6504	203	1,028	1.35	6.62	-4.91	0.01909	1
NM_001134420	CDC7	+	3313	157	8	2.04	0.10	20.14	0.04287	1
NM_001134422	CDV3	+	4197	38	329	0.39	3.28	-8.47	0.032253	1
NM_001134759	CRYZ	-	1976	1	102	0.01	2.16	-181.35	0.041718	1
NM_001135055	TKT	-	2952	151	4	2.21	0.06	35.28	0.023898	1
NM_001135240	C1orf226	+	984	82	0	3.62	0.00	Inf	0.041602	1
NM_001135643	DCTN4	-	3908	106	608	1.17	6.52	-5.58	0.027654	1
NM_001135651	EIF2AK2	-	2696	7	187	0.11	2.91	-26.51	0.021654	1
NM_001135745	ALS2	-	2892	348	13	5.19	0.19	26.77	0.002288	1
NM_001135821	FDPS	+	1481	323	32	9.42	0.90	10.43	0.021267	1
NM_001135919	SLC46A3	-	2800	205	17	3.16	0.26	12.28	0.043331	1
NM_001136051	LRIG3	-	3661	335	39	3.96	0.44	8.93	0.027097	1
NM_001136115	FBXO28	+	5253	71	443	0.58	3.54	-6.09	0.037357	1
NM_001136123	FAM178A	+	4122	262	11	2.75	0.11	25.15	0.007809	1
NM_001136195	TNPO2	-	5092	278	1,133	2.36	9.32	-3.95	0.03545	1
NM_001136543	LYSMD1	-	1840	16	264	0.39	6.00	-15.56	0.016746	1
NM_001141945	ACTA2	-	1758	5	196	0.11	4.68	-41.85	0.011694	1
NM_001142279	RNASEH2B	+	1669	3	130	0.08	3.27	-40.26	0.036406	1
NM_001142624	RAB34	-	1290	157	6	5.26	0.21	25.23	0.031307	1
NM_001143676	SGK1	-	3201	596	59	8.05	0.77	10.41	0.004767	1
NM_001143966	TBC1D7	-	1058	442	48	18.04	1.91	9.44	0.012623	1
NM_001144030	NAT10	+	3826	0	402	0.00	4.40	-Inf	3.55E-06	0.036042
NM_001144928	NKIRAS2	+	2303	1	104	0.02	1.89	-102.18	0.039117	1
NM_001145335	UBE2Q2	+	2979	4	135	0.05	1.90	-34.83	0.040732	1
NM_001145391	OXSM	+	1278	157	9	5.30	0.30	17.41	0.048856	1
NM_001145646	APH1B	+	4070	22	241	0.24	2.48	-10.46	0.040467	1
NM_001146105	PARP9	-	3056	118	1	1.67	0.01	111.44	0.022141	1
NM_001146258	PIP4K2C	+	2930	318	42	4.68	0.60	7.78	0.038488	1
NM_001146260	PIP4K2C	+	3075	7	194	0.10	2.64	-25.16	0.01861	1
NM_001146314	ABHD14B	-	2243	107	665	2.07	12.43	-6.01	0.019128	1
NM_001160230	ADARB1	+	3468	120	1	1.49	0.01	149.03	0.020746	1
NM_001161012	ARMC10	+	2347	99	1	1.82	0.03	68.37	0.041392	1
NM_001161766	AHCY	-	2371	302	34	5.49	0.60	9.11	0.031484	1
NM_001163436	TBCK	-	3362	12	313	0.16	3.90	-24.38	0.004346	1
NM_001163673	WDR81	+	3184	95	1	1.30	0.01	161.78	0.047298	1
NM_001164342	ZBTB20	-	3311	189	15	2.47	0.19	13.20	0.048479	1
NM_001164674	SUMF1	-	2086	2	131	0.04	2.63	-64.26	0.025914	1
NM_001164720	CC2D2A	+	1525	193	0	5.47	0.00	Inf	0.000825	0.986307
NM_001165937	STARD3	+	2834	295	16	4.49	0.24	18.88	0.008457	1
NM_001165946	IDE	-	4480	1	160	0.01	1.49	-288.93	0.006836	1
NM_001166057	PEPD	-	1818	58	442	1.39	10.18	-7.34	0.023631	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
NM_001166292	PTCH2	-	4298	15,032	3,730	151.07	36.36	4.16	0.008007	1
NM_001166426	WDR13	+	2460	9	222	0.16	3.79	-24.04	0.014626	1
NM_001166599	FAM122B	-	4267	23	247	0.23	2.42	-10.42	0.03967	1
NM_001167672	LPP	+	17747	195	1,238	0.47	2.92	-6.17	0.006536	1
NM_001167930	IL1RAP	+	2007	151	0	3.24	0.00	Inf	0.003339	1
NM_001167941	WDR76	+	3917	102	1	1.13	0.01	116.08	0.037466	1
NM_001172416	KCNJ13	-	3373	472	60	6.05	0.75	8.06	0.016106	1
NM_001172417	KCNJ13	-	3376	34	385	0.43	4.78	-11.08	0.013025	1
NM_001172478	RRM2B	-	4776	57	440	0.51	3.86	-7.52	0.023136	1
NM_001172631	TECPR2	+	4397	506	96	4.97	0.92	5.40	0.038477	1
NM_001174117	DMXL2	-	8688	14	208	0.07	1.00	-14.53	0.03566	1
NM_001177702	IFT27	-	684	107	0	6.78	0.00	Inf	0.016119	1
NM_001178040	STX3	+	6361	26	257	0.17	1.69	-9.70	0.041808	1
NM_001178046	MX1	+	2666	227	0	3.68	0.00	Inf	0.000285	0.456779
NM_001184701	UGDH	-	3026	305	36	4.35	0.50	8.74	0.033718	1
NM_001184720	GYG1	+	1971	539	66	11.81	1.41	8.39	0.01101	1
NM_001184783	VDAC2	+	1945	7	158	0.15	3.40	-23.19	0.040847	1
NM_001184823	VDAC2	+	1429	155	5	4.68	0.16	29.88	0.027082	1
NM_001184892	FLAD1	+	1876	0	95	0.00	2.13	-Inf	0.028282	1
NM_001184898	PHF8	-	3562	104	0	1.26	0.00	Inf	0.018023	1
NM_001190329	ATP5G3	-	3293	7	264	0.09	3.35	-35.72	0.004268	1
NM_001190440	NCOR1	-	9286	73	508	0.34	2.29	-6.73	0.022645	1
NM_001190796	NCK1	+	1701	27	272	0.69	6.70	-9.73	0.036074	1
NM_001191002	GSTO1	+	905	570	31	27.20	1.45	18.72	0.000931	1
NM_001191022	CTCF	+	2980	6	163	0.09	2.29	-26.25	0.030904	1
NM_001191036	C8orf83	-	3618	68	448	0.81	5.19	-6.43	0.032345	1
NM_001193513	SLC30A6	+	4965	578	82	5.02	0.69	7.27	0.014285	1
NM_001193515	SLC30A6	+	4758	1	134	0.01	1.18	-163.76	0.015143	1
NM_001198807	C9orf30	+	1879	1	97	0.01	2.17	-155.73	0.049032	1
NM_001198846	RBM14-RBM4	+	923	0	131	0.00	5.94	-Inf	0.007791	1
NM_001199119	TRIM39-RPP21	+	1567	84	0	2.33	0.01	351.70	0.038506	1
NM_001199196	ARMC6	+	2488	317	43	5.51	0.73	7.55	0.040743	1
NM_001199535	TGIF2-C20ORF24	+	1090	344	45	13.61	1.72	7.91	0.032512	1
NM_001199802	RPL11	+	631	772	119	52.83	7.89	6.70	0.010644	1
NM_001201404	WASF2	-	5156	425	53	3.56	0.43	8.23	0.019143	1
NM_001202485	HSPE1-MOBKL3	+	4279	196	11	1.98	0.11	17.75	0.028075	1
NM_001204139	MBD1	-	3069	146	3	2.05	0.05	43.38	0.02081	1
NM_001204255	SCARB2	-	4338	361	1,395	3.59	13.47	-3.75	0.035287	1
NM_001204298	ZNF664	+	4272	128	666	1.29	6.53	-5.06	0.031569	1
NM_001221	CAMK2D	-	5872	33	331	0.24	2.36	-9.77	0.023883	1
NM_001226	CASP6	-	1661	97	1	2.52	0.03	72.31	0.044244	1
NM_001431	EPB41L2	-	4456	235	24	2.28	0.23	9.99	0.044461	1
NM_001548	IFIT1	+	1860	286	10	6.64	0.23	29.49	0.004194	1
NM_001786	CDK1	+	1913	429	43	9.69	0.95	10.23	0.011163	1
NM_002038	IFI6	-	836	844	88	43.60	4.40	9.91	0.002381	1
NM_002072	GNAQ	-	2196	191	879	3.76	16.77	-4.46	0.03155	1
NM_002130	HMGCS1	-	3451	460	84	5.76	1.02	5.65	0.040607	1
NM_002371	MAL	+	1056	349	1,316	14.29	52.19	-3.65	0.040284	1
NM_002380	MATN2	+	4108	205	11	2.16	0.11	19.48	0.023506	1
NM_002462	MX1	+	2966	448	0	6.52	0.00	Inf	9.06E-07	0.013814
NM_002480	PPP1R12A	-	5726	9	188	0.07	1.37	-19.53	0.029014	1
NM_002525	NRD1	-	4024	906	180	9.72	1.87	5.19	0.018811	1
NM_002535	OAS2	+	3647	114	0	1.35	0.00	Inf	0.012448	1
NM_002836	PTPRA	+	3620	556	63	6.64	0.73	9.11	0.008298	1
NM_003017	SRSF3	+	3144	411	8	5.65	0.10	54.31	0.000266	0.451157
NM_003043	SLC6A6	+	6508	201	1,033	1.33	6.65	-4.99	0.018047	1
NM_003075	SMARCC2	-	5588	175	762	1.35	5.72	-4.23	0.043966	1
NM_003220	TFAP2A	-	3300	155	781	2.03	9.91	-4.89	0.02781	1
NM_003258	TK1	-	1595	278	23	7.53	0.60	12.46	0.021567	1
NM_003495	HIST1H4I	+	370	473	47	55.22	5.32	10.38	0.0086	1
NM_003511	HIST1H2AL	+	470	712	21	65.43	1.87	34.96	5.40E-05	0.182757
NM_003514	HIST1H2AM	-	487	565	82	50.09	7.05	7.10	0.015891	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
NM_003518	HIST1H2BG	-	445	1,100	257	106.77	24.19	4.41	0.025493	1
NM_003521	HIST1H2BM	+	446	385	33	37.29	3.10	12.03	0.010186	1
NM_003523	HIST1H2BE	+	435	330	26	32.77	2.50	13.09	0.012743	1
NM_003524	HIST1H2BH	+	425	748	107	76.02	10.55	7.21	0.008895	1
NM_003525	HIST1H2BI	+	437	319	9	31.53	0.86	36.54	0.001843	1
NM_003527	HIST1H2BO	+	467	465	45	43.01	4.04	10.65	0.00839	1
NM_003530	HIST1H3D	-	864	1,188	159	59.39	7.69	7.73	0.002931	1
NM_003531	HIST1H3C	+	459	1,321	59	124.31	5.38	23.08	2.02E-05	0.094778
NM_003532	HIST1H3E	+	462	612	127	57.22	11.52	4.97	0.036826	1
NM_003533	HIST1H3I	-	477	558	119	50.53	10.45	4.83	0.044868	1
NM_003534	HIST1H3G	-	467	508	3	46.99	0.27	174.59	5.68E-06	0.043291
NM_003535	HIST1H3J	-	478	641	51	57.92	4.47	12.96	0.00202	1
NM_003536	HIST1H3H	+	473	981	52	89.58	4.61	19.45	0.000121	0.308029
NM_003537	HIST1H3B	-	472	2,065	46	188.97	4.08	46.28	1.14E-07	0.002312
NM_003539	HIST1H4D	-	367	1,364	292	160.53	33.33	4.82	0.014721	1
NM_003542	HIST1H4C	+	390	1,189	322	131.68	34.59	3.81	0.038896	1
NM_003546	HIST1H4L	-	364	433	34	51.38	3.91	13.13	0.006026	1
NM_003634	NIPSNAP1	-	2236	423	21	8.18	0.39	21.00	0.002116	1
NM_003641	IFITM1	+	717	591	22	35.60	1.29	27.70	0.000261	0.451157
NM_003733	OASL	-	1820	80	0	1.90	0.00	Inf	0.044958	1
NM_003991	EDNRB	-	2530	529	1,805	9.02	29.89	-3.31	0.045638	1
NM_004111	FEN1	+	2249	462	72	8.87	1.34	6.62	0.027663	1
NM_004316	ASCL1	+	2484	0	161	0.00	2.72	-Inf	0.002817	1
NM_004336	BUB1	-	3502	197	17	2.43	0.20	11.95	0.049758	1
NM_004390	CTSH	-	1485	880	85	25.60	2.40	10.67	0.001637	1
NM_004526	MCM2	+	3434	849	170	10.67	2.07	5.15	0.021089	1
NM_004587	RRBP1	-	3715	26	248	0.30	2.80	-9.37	0.047503	1
NM_004736	XPR1	+	8496	21	557	0.10	2.75	-26.35	0.000451	0.654789
NM_004899	BRE	+	1890	349	45	7.97	0.99	8.06	0.030696	1
NM_005030	PLK1	+	2169	214	11	4.26	0.21	20.26	0.019698	1
NM_005101	ISG15	+	666	234	0	15.18	0.00	Inf	0.00023	0.451157
NM_005112	WDR1	-	2723	269	1,087	4.27	16.72	-3.92	0.03794	1
NM_005120	MED12	+	6969	11	221	0.07	1.33	-19.49	0.019933	1
NM_005319	HIST1H1C	-	732	1,448	441	85.44	25.24	3.39	0.049655	1
NM_005321	HIST1H1E	+	785	2,246	478	123.58	25.51	4.84	0.008766	1
NM_005322	HIST1H1B	-	790	941	18	51.45	0.95	53.90	2.75E-06	0.033594
NM_005346	HSPA1B	+	2520	19	220	0.33	3.66	-11.23	0.044983	1
NM_005505	SCARB1	-	2742	66	461	1.04	7.04	-6.74	0.026804	1
NM_005692	ABCF2	-	2250	221	7	4.24	0.12	33.92	0.008879	1
NM_005733	KIF20A	+	3471	584	57	7.27	0.69	10.57	0.004817	1
NM_005773	ZNF256	-	2210	164	9	3.21	0.17	18.79	0.042096	1
NM_005798	TRIM13	+	6755	55	381	0.35	2.36	-6.71	0.038424	1
NM_005891	ACAT2	+	1551	434	74	12.09	1.99	6.08	0.03801	1
NM_005915	MCM6	-	3751	921	102	10.61	1.14	9.31	0.00241	1
NM_005916	MCM7	-	2821	600	132	9.19	1.97	4.67	0.044178	1
NM_006036	PREPL	-	6890	6	176	0.04	1.07	-29.92	0.022992	1
NM_006231	POLE	-	7840	564	107	3.11	0.57	5.43	0.032659	1
NM_006287	TFPI	-	3915	11	201	0.12	2.15	-17.24	0.029164	1
NM_006624	ZMYND11	+	4317	51	570	0.51	5.53	-10.94	0.004941	1
NM_006736	DNAJB2	+	3125	3	158	0.04	2.12	-56.24	0.017257	1
NM_006739	MCM5	+	2546	400	61	6.79	1.00	6.76	0.034	1
NM_006820	IFI44L	+	5874	196	13	1.44	0.09	15.54	0.035188	1
NM_006845	KIF2C	+	2880	384	30	5.76	0.44	13.20	0.008321	1
NM_006903	PPA2	-	1586	282	27	7.68	0.71	10.84	0.027103	1
NM_006930	SKP1	-	2699	189	5	3.02	0.07	40.95	0.011835	1
NM_007008	RTN4	-	1779	601	64	14.60	1.52	9.62	0.005785	1
NM_007310	COMT	+	2035	5	215	0.10	4.42	-45.35	0.00755	1
NM_007315	STAT1	-	4308	2,713	878	27.20	8.54	3.18	0.043696	1
NM_007323	ZFYVE9	+	2625	166	0	2.74	0.01	366.92	0.002004	1
NM_012081	ELL2	-	6046	9	203	0.06	1.41	-21.88	0.02141	1
NM_012095	AP3M1	-	5127	46	410	0.39	3.35	-8.61	0.019222	1
NM_012342	BAMBI	+	1724	978	233	24.50	5.66	4.33	0.030924	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
NM_013412	RABL2A	+	2170	0	82	0.00	1.58	-Inf	0.045919	1
NM_013986	EWSR1	+	2678	329	47	5.31	0.73	7.29	0.042086	1
NM_014232	VAMP2	-	2155	183	847	3.67	16.47	-4.49	0.032412	1
NM_014865	NCAPD2	+	4806	947	259	8.51	2.26	3.77	0.04936	1
NM_014945	ABLIM3	+	4335	6	274	0.06	2.65	-44.29	0.002712	1
NM_014962	BTBD3	+	4857	752	175	6.69	1.51	4.42	0.038918	1
NM_015168	ZC3H4	-	6116	13	220	0.09	1.51	-16.41	0.025884	1
NM_015243	VPS13B	+	2822	122	0	1.86	0.00	Inf	0.0093	1
NM_015341	NCAPH	+	4495	349	20	3.35	0.19	17.99	0.005593	1
NM_015373	CBY1	+	1131	0	86	0.00	3.18	-Inf	0.039515	1
NM_015513	CRELD1	+	2696	1	206	0.01	3.20	-278.22	0.001783	1
NM_015516	TSKU	+	2710	23	258	0.37	3.99	-10.88	0.033701	1
NM_015543	RAB1A	-	2415	46	323	0.83	5.60	-6.74	0.049807	1
NM_015551	SUSD5	-	5005	135	639	1.17	5.35	-4.59	0.043228	1
NM_015726	DCAF8	-	3883	502	96	5.58	1.03	5.42	0.039705	1
NM_015859	GTF2A1	-	1736	2	134	0.04	3.23	-75.77	0.023774	1
NM_016014	FAM108B1	-	1613	144	3	3.84	0.08	45.44	0.021984	1
NM_016227	C1orf9	+	5466	213	10	1.68	0.07	22.49	0.017516	1
NM_016426	GTSE1	+	3112	234	3	3.25	0.04	80.42	0.002065	1
NM_016448	DTL	+	4412	357	19	3.50	0.18	19.37	0.004437	1
NM_016816	OAS1	+	1663	171	2	4.43	0.05	92.05	0.007166	1
NM_016817	OAS2	+	3539	260	14	3.17	0.16	19.78	0.012191	1
NM_017458	MVP	+	2925	55	564	0.81	8.08	-9.92	0.006464	1
NM_017572	MKNK2	-	1758	228	0	5.59	0.00	Inf	0.000276	0.455062
NM_017760	NCAPG2	-	3932	372	49	4.09	0.52	7.83	0.028327	1
NM_017867	C4orf27	-	1216	123	4	4.37	0.14	31.70	0.049693	1
NM_017912	HERC6	+	3889	279	23	3.10	0.25	12.31	0.021244	1
NM_017991	KIAA1310	-	5285	3	169	0.03	1.34	-47.46	0.012933	1
NM_018030	OSBPL1A	-	3315	206	16	2.69	0.21	12.95	0.039093	1
NM_018045	BSDC1	-	2858	15	210	0.22	3.08	-13.98	0.037913	1
NM_018101	CDCA8	+	2303	211	11	3.96	0.20	19.78	0.020891	1
NM_018248	NEIL3	+	2402	208	4	3.74	0.07	53.61	0.00566	1
NM_018304	PRR11	+	6473	334	41	2.23	0.27	8.40	0.030317	1
NM_018307	RHOT1	+	3089	8	250	0.12	3.39	-28.76	0.006998	1
NM_018379	FAM63A	-	2840	2	160	0.03	2.36	-83.16	0.011383	1
NM_018410	HJURP	-	3050	291	20	4.13	0.27	15.02	0.013682	1
NM_018446	GLT8D1	-	2095	2	167	0.04	3.34	-90.88	0.009366	1
NM_018454	NUSAP1	+	2417	141	1	2.52	0.01	175.67	0.010576	1
NM_018492	PBK	-	1854	342	24	7.97	0.54	14.69	0.009107	1
NM_018672	ABCA5	-	9249	26	261	0.12	1.18	-9.91	0.039506	1
NM_018717	MAML3	-	7088	27	290	0.16	1.71	-10.42	0.028114	1
NM_020375	C12orf5	+	8225	298	1,531	1.56	7.80	-4.98	0.01122	1
NM_020424	LYRM1	+	1560	132	4	3.66	0.12	30.91	0.039216	1
NM_020463	SMEK2	-	4203	305	24	3.13	0.24	13.06	0.0156	1
NM_020690	ANKHD1-EIF4EBP3	+	8349	0	260	0.00	1.30	-Inf	0.000136	0.318501
NM_021018	HIST1H3F	-	466	1,122	46	104.00	4.14	25.15	2.57E-05	0.11192
NM_021029	RPL36A	+	881	189	13	9.28	0.64	14.49	0.040159	1
NM_021052	HIST1H2AE	+	564	1,156	231	88.53	17.16	5.16	0.013907	1
NM_021058	HIST1H2BJ	-	481	676	81	60.67	7.05	8.60	0.006288	1
NM_021062	HIST1H2BB	-	431	376	12	37.68	1.17	32.31	0.001199	1
NM_021063	HIST1H2BD	+	523	812	183	67.05	14.68	4.57	0.03225	1
NM_021064	HIST1H2AG	+	498	1,289	86	111.80	7.23	15.45	0.000131	0.318501
NM_021065	HIST1H2AD	-	460	304	13	28.55	1.23	23.27	0.004896	1
NM_021066	HIST1H2AJ	-	439	286	19	28.14	1.81	15.52	0.013475	1
NM_022098	XPNPEP3	+	8009	189	852	1.02	4.45	-4.37	0.034873	1
NM_022166	XYLT1	-	9336	141	763	0.65	3.42	-5.25	0.023196	1
NM_022872	IFI6	-	848	560	67	28.53	3.31	8.63	0.0095	1
NM_022873	IFI6	-	860	429	51	21.54	2.50	8.63	0.016767	1
NM_024540	MRPL24	-	886	0	109	0.00	5.15	-Inf	0.016974	1
NM_024567	HMBOX1	+	3233	231	14	3.08	0.19	16.57	0.02052	1
NM_025141	TM2D3	-	1329	7	156	0.22	4.90	-22.06	0.04269	1
NM_025142	TAOK1	+	11637	64	535	0.24	1.93	-8.14	0.012725	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
NM_030800	C15orf44	-	2521	62	390	1.06	6.48	-6.14	0.045246	1
NM_030931	DEFB126	+	413	49	436	5.12	44.23	-8.63	0.0169	1
NM_031263	HNRNPK	-	2943	731	74	10.73	1.05	10.17	0.00306	1
NM_031966	CCNB1	+	2091	490	43	10.12	0.86	11.75	0.005686	1
NM_032172	USP42	+	5120	3	133	0.03	1.09	-43.00	0.033581	1
NM_032750	ABHD14B	-	2437	898	215	15.91	3.70	4.30	0.034527	1
NM_032905	RBM17	+	3335	115	1	1.49	0.01	208.07	0.024418	1
NM_033177	GPANK1	-	2769	104	1	1.62	0.01	128.47	0.035063	1
NM_033301	RPL8	-	920	895	212	42.01	9.65	4.35	0.033519	1
NM_033420	C19orf6	-	2608	183	4	3.02	0.07	43.11	0.010549	1
NM_053067	UBQLN1	-	4084	108	677	1.15	6.94	-6.05	0.018107	1
NM_053275	RPLP0	-	1264	1,024	186	34.98	6.16	5.68	0.011678	1
NM_054022	GOSR2	+	1469	172	0	5.06	0.00	Inf	0.00164	1
NM_080668	CDCA5	-	2576	278	30	4.66	0.49	9.55	0.034589	1
NM_130798	SNAP23	+	2148	7	238	0.15	4.64	-31.48	0.007305	1
NM_138287	DTX3L	+	5767	193	15	1.45	0.11	13.15	0.045099	1
NM_138569	C6orf142	+	1815	11	291	0.26	6.72	-25.66	0.005463	1
NM_138570	SLC38A10	-	3062	48	366	0.67	5.00	-7.43	0.033841	1
NM_138717	PPT2	+	1833	134	932	3.15	21.30	-6.75	0.007479	1
NM_138740	C1orf43	-	1742	745	168	18.47	4.05	4.57	0.03592	1
NM_138761	BAX	+	810	212	11	11.28	0.57	19.89	0.020486	1
NM_138957	MAPK1	-	1497	202	16	5.84	0.45	12.92	0.041947	1
NM_139048	HLTF	-	4514	162	10	1.55	0.09	16.93	0.04956	1
NM_139207	NAP1L1	-	4451	434	62	4.21	0.58	7.21	0.025239	1
NM_139278	LGI3	-	3266	802	5,442	10.61	69.80	-6.58	0.00094	1
NM_145655	GCNT2	+	4200	398	1	4.09	0.01	376.99	1.08E-05	0.06182
NM_145810	CDCA7	+	2573	391	58	6.57	0.95	6.94	0.03333	1
NM_147777	SNX15	+	1681	177	4	4.54	0.11	43.11	0.012276	1
NM_148172	PEMT	-	993	1	98	0.04	4.14	-96.10	0.04747	1
NM_148887	MRPL10	-	1847	362	54	8.47	1.23	6.90	0.038717	1
NM_148918	SHMT1	-	2402	229	10	4.12	0.17	24.37	0.01272	1
NM_152231	FBXO34	+	2831	0	128	0.00	1.89	-Inf	0.008649	1
NM_152238	SNX7	+	1612	117	3	3.15	0.07	43.21	0.046507	1
NM_152240	ZMAT3	-	9113	2,021	6,256	9.58	28.76	-3.00	0.041195	1
NM_152695	ZNF449	+	4059	9	178	0.10	1.84	-19.18	0.035581	1
NM_152850	PIGO	-	2465	35	411	0.61	6.98	-11.51	0.010177	1
NM_153023	SPATA13	+	6693	3	202	0.02	1.26	-69.85	0.005542	1
NM_153322	PMP22	-	1669	519	2,253	13.42	56.56	-4.21	0.015457	1
NM_170695	TGIF1	+	2061	0	80	0.01	1.63	-185.57	0.049518	1
NM_172211	CSF1	+	2079	80	0	1.66	0.00	Inf	0.044958	1
NM_173217	ST6GAL1	+	3947	41	335	0.45	3.56	-7.95	0.034848	1
NM_173607	FAM177A1	+	2926	68	475	1.00	6.81	-6.81	0.025374	1
NM_175737	KLB	+	6079	172	9	1.22	0.06	19.70	0.035528	1
NM_175932	PSMD13	+	1763	221	18	5.40	0.43	12.67	0.035836	1
NM_176867	PPA2	-	1175	97	0	3.57	0.00	Inf	0.02344	1
NM_176869	PPA2	-	1673	3	169	0.08	4.23	-50.33	0.012933	1
NM_178001	PPP2R4	+	2846	588	91	8.93	1.35	6.63	0.017605	1
NM_178157	FUT8	+	1369	184	11	5.80	0.34	16.91	0.035623	1
NM_178234	TUSC3	+	3819	237	20	2.68	0.22	12.22	0.032363	1
NM_178584	10-Sep	-	3185	4	140	0.06	1.84	-31.90	0.035881	1
NM_178818	CMTM4	-	3414	1	149	0.01	1.83	-142.43	0.00954	1
NM_181504	PIK3R1	+	5647	340	6	2.60	0.04	63.49	0.000566	0.766465
NM_181578	RFC5	+	2468	222	7	3.89	0.12	32.79	0.008688	1
NM_181597	UPP1	+	1838	173	9	4.07	0.20	20.51	0.034784	1
NM_182763	MCL1	-	3837	43	355	0.48	3.87	-8.00	0.030485	1
NM_182923	KLC1	+	2382	220	5	4.00	0.09	44.76	0.005677	1
NM_194282	LIN54	-	6127	5	198	0.04	1.36	-36.02	0.011164	1
NM_198155	C21orf33	+	1574	311	33	8.54	0.89	9.59	0.026447	1
NM_198183	UBE2L6	-	1269	169	11	5.74	0.38	15.27	0.048062	1
NM_198218	ING1	+	2170	174	12	3.47	0.23	14.80	0.048376	1
NM_198427	BCAN	+	2858	380	1,410	5.74	20.67	-3.60	0.040288	1
NM_198700	CELF1	-	4647	585	60	5.44	0.54	10.05	0.005538	1

Transcript	Gene	Strand	Transcript Length	*SPRIGHTLY* - EE (Reads)	Melanocyte Vector Only (Reads)	*SPRIGHTLY* - EE (RPKM)	Melanocyte Vector Only (RPKM)	*SPRIGHTLY* - EE/VO (RPKM)	p-value	FDR
NM_198892	BMP2K	+	3806	34	377	0.39	4.14	-10.71	0.014357	1
NM_199043	C14orf102	-	3465	224	8	2.79	0.09	29.77	0.010102	1
NM_199189	MATR3	+	5604	448	80	3.45	0.60	5.76	0.040173	1
NM_201627	TRIM41	+	2680	0	98	0.00	1.53	-Inf	0.025326	1
NM_203305	FAM102A	-	3643	15	241	0.18	2.77	-15.39	0.022212	1
NM_203350	ZRANB2	-	3070	3	138	0.04	1.89	-42.97	0.029364	1
NM_206855	QKI	+	16362	289	1,212	0.76	3.10	-4.07	0.030168	1
NM_206889	DIP2A	+	3045	201	17	2.86	0.23	12.36	0.046431	1
NM_212474	FN1	-	7896	30	432	0.16	2.29	-14.03	0.005488	1
NM_213651	SLC25A24	-	3325	11	323	0.14	4.07	-29.31	0.00309	1
NR_002588	SNORA4	+	137	57,134	16,697	18,013.00	5,105.72	3.53	0.016385	1
NR_003013	SCARNA16	+	187	10,354	2,698	2,391.58	604.42	3.96	0.010951	1
NR_003272	PSPC1	-	1673	357	0	9.22	0.01	949.80	7.81E-06	0.052903
NR_003672	SNHG7	-	2159	144	4	2.87	0.07	38.51	0.02866	1
NR_003934	LOC729156	-	2426	149	4	2.65	0.06	40.89	0.025169	1
NR_023319	ADPGK	-	2273	2	113	0.04	2.08	-57.69	0.043672	1
NR_024203	ECD	-	1826	288	25	6.81	0.58	11.84	0.021612	1
NR_024534	ALG3	-	1496	38	297	1.11	8.31	-7.49	0.047416	1
NR_024543	SNHG7	-	853	0	129	0.02	6.34	-312.78	0.008353	1
NR_024547	TMEM11	-	1688	315	27	8.06	0.68	11.88	0.016974	1
NR_024565	ZNF271	+	5134	18	229	0.15	1.87	-12.50	0.035912	1
NR_024600	DIABLO	-	2215	4	149	0.07	2.81	-39.57	0.028588	1
NR_026593	TMX2	+	1792	463	89	11.16	2.09	5.34	0.045342	1
NR_026712	RPL13AP5	+	658	5	270	0.30	17.22	-57.96	0.002218	1
NR_026885	LOC100270804	+	2017	290	27	6.21	0.56	11.07	0.02418	1
NR_026928	CG030	-	4890	2	118	0.02	1.01	-57.22	0.037748	1
NR_027299	XPC	-	3596	3	121	0.03	1.41	-44.72	0.046434	1
NR_027855	CLK1	-	1842	212	5	4.97	0.12	40.40	0.006849	1
NR_027862	HAT1	+	1594	157	6	4.26	0.16	26.89	0.031307	1
NR_027867	PDCD6IP	+	5283	58	493	0.48	3.91	-8.22	0.014505	1
NR_033489	ABHD16A	-	1895	139	0	3.16	0.00	Inf	0.005071	1
NR_033870	DKFZp686O1327	+	4745	16	246	0.15	2.17	-14.91	0.022602	1
NR_034059	PSMD1	+	3155	27	272	0.37	3.61	-9.81	0.036074	1
NR_036465	TMEM126B	+	911	0	82	0.00	3.79	-Inf	0.045919	1
NR_037577	TMEM222	+	1702	284	15	7.22	0.36	20.00	0.009047	1
NR_037804	NPHP3-ACAD11	-	7788	373	37	2.07	0.20	10.51	0.015248	1
NR_037909	ARHGAP19-SLIT1	-	1916	131	0	2.94	0.01	446.78	0.006731	1
NR_037921	MAVS	+	11598	125	609	0.46	2.20	-4.74	0.042638	1
NR_037951	C1QTNF3-AMACR	-	3612	0	97	0.01	1.13	-219.98	0.026274	1
S75896	S75896	+	167	0	278	0.00	69.81	-Inf	8.21E-05	0.250215
S81524	S81524	-	41	0	113	0.05	115.63	-2191.28	0.014702	1
U01925	U01925	-	348	194	7	24.08	0.84	28.57	0.016089	1
U50531	U50531	-	4885	2	118	0.02	1.01	-57.22	0.037748	1
U79272	U79272	+	1282	0	102	0.00	3.33	-Inf	0.021878	1
uc001hqe.1	uc001hqe.1	-	3331	246	24	3.19	0.30	10.79	0.037634	1
uc001odz.1	uc001odz.1	+	1279	104	549	3.53	17.99	-5.10	0.04004	1
uc001pdy.1	uc001pdy.1	-	1015	2385	599	101.48	24.74	4.10	0.016915	1
uc001sln.1	uc001sln.1	+	4078	6	276	0.06	2.84	-44.78	0.002601	1
uc002fcw.1	uc002fcw.1	-	2465	3	206	0.05	3.50	-66.60	0.005011	1
uc002hil.1	uc002hil.1	+	3024	0	134	0.00	1.86	-Inf	0.007021	1
uc002jtl.1	uc002jtl.1	+	187	5176	1349	1,195.62	302.21	3.96	0.013334	1
uc002qwc.1	uc002qwc.1	-	1124	108	0	4.16	0.00	Inf	0.015532	1
uc002wlw.1	uc002wlw.1	+	2667	139	4	2.25	0.07	33.35	0.03265	1
uc003goe.1	uc003goe.1	+	2843	2	110	0.03	1.62	-50.74	0.047677	1
uc003mmk.1	uc003mmk.1	+	1809	288	20	6.88	0.46	14.80	0.014343	1
uc003myw.1	uc003myw.1	+	1090	0	175	0.00	6.73	-Inf	0.001782	1
uc003ojk.1	uc003ojk.1	-	1470	2	262	0.05	7.48	-151.61	0.00077	0.938792
uc003pyw.1	uc003pyw.1	-	2435	27	258	0.47	4.44	-9.38	0.043846	1
uc003uhq.1	uc003uhq.1	-	3218	2	112	0.03	1.45	-49.71	0.044967	1
uc004cos.1	uc004cos.1	+	2509	1329210	347556	22,882.90	5,803.16	3.94	0.008987	1
X02491	X02491	+	349	143	4	17.68	0.50	35.05	0.029416	1
X02875	X02875	+	685	137	5	8.62	0.29	29.58	0.042318	1