

Supplementary Information

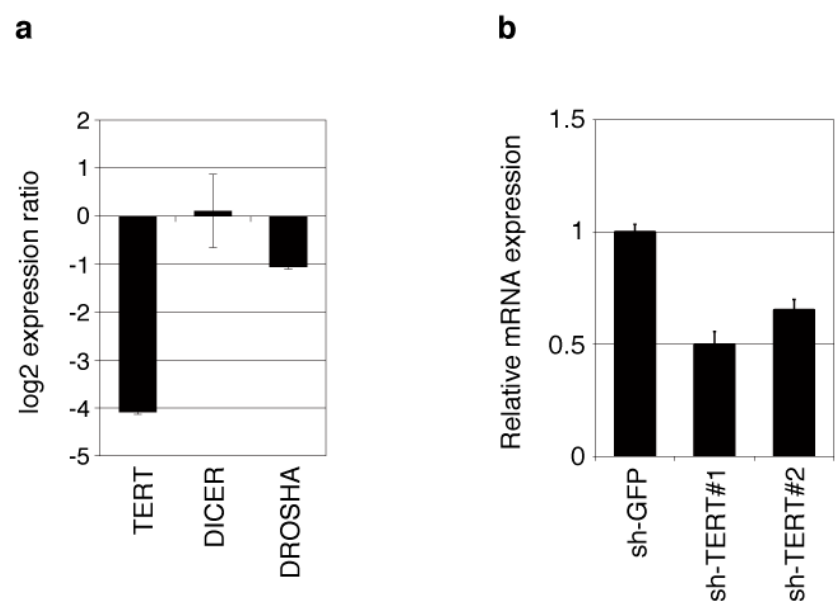


Figure S1. Suppression of telomerase reverse transcriptase (TERT). (a) RT-qPCR of *TERT*, *DICER* and *DROSHA* mRNAs in THP-1 cells treated with a gene-specific siRNA for TERT or a control siRNA. The relative amount of target mRNAs was normalized to endogenous *GAPDH* mRNA, and log2 expression ratio for the control siRNA was calculated using $2^{-\Delta\Delta C_t}$ method. Values represent means $\pm$ SD for three independent experiments and (b) RT-qPCR of *TERT* mRNA in HeLa cells infected with *TERT*-specific shRNAs or a control shRNA. The relative amount of *TERT* mRNAs was normalized to endogenous *GAPDH* mRNA, and the mean expression levels of normalized sh-GFP referred to 1. Values represent means $\pm$ SD for three independent experiments.

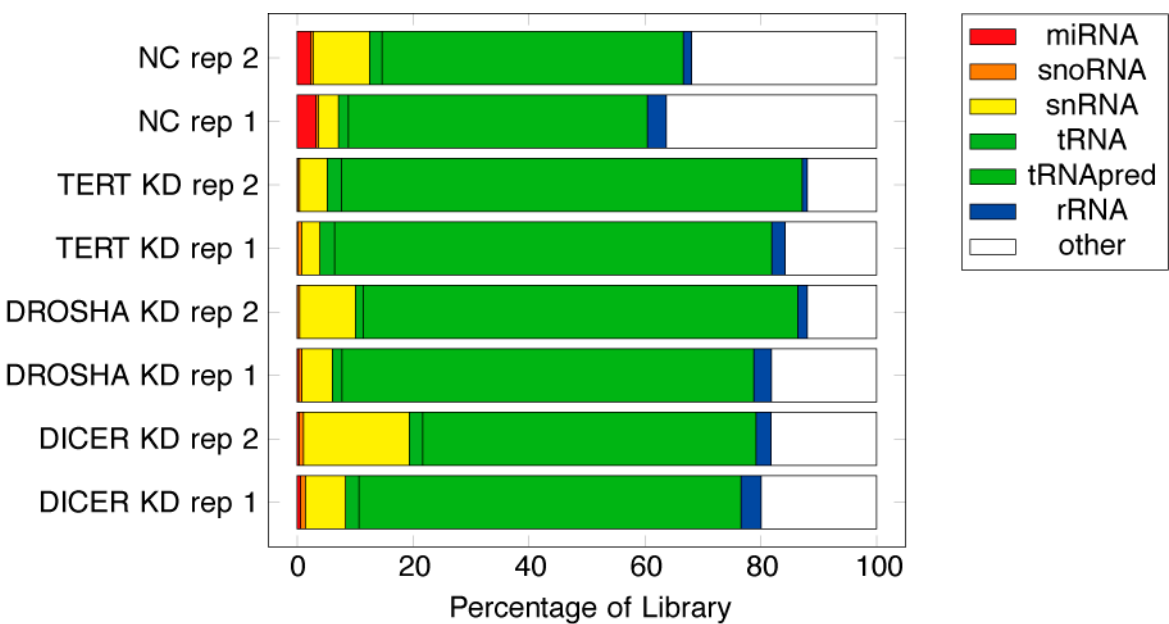


Figure S2. Global annotation of 5'-capped RNAs from THP-1. Reads were assigned unambiguously to categories if their mapping coordinates overlapped the corresponding GENCODE v4 annotation coordinates.

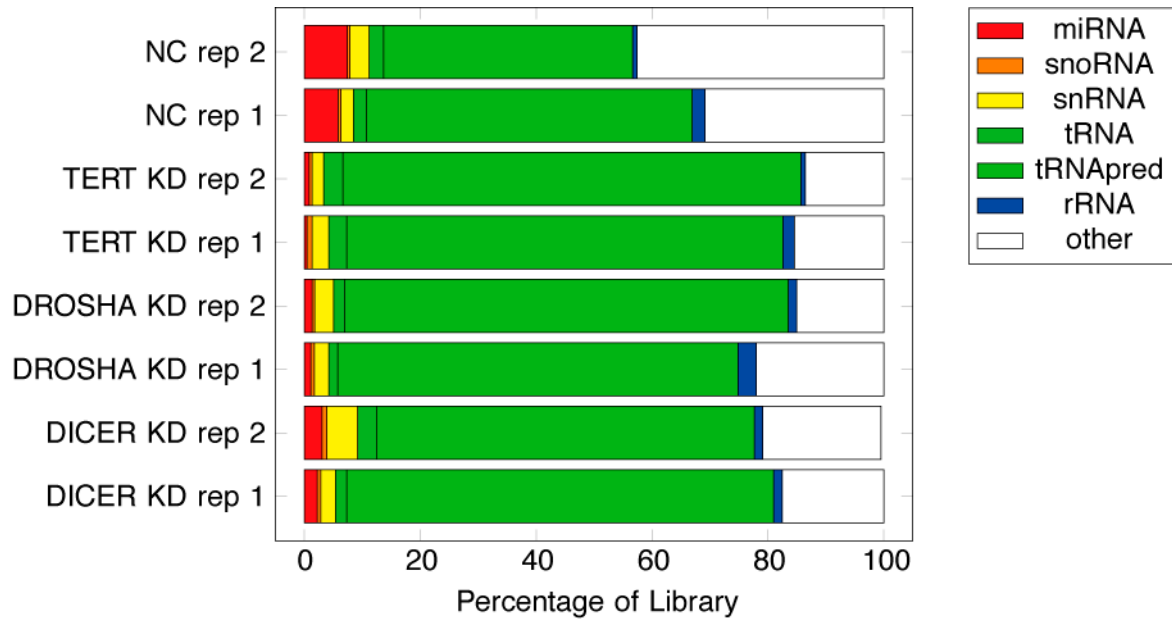


Figure S3. Global annotation of 5'-mono-phosphorylated RNAs from THP-1. Reads were assigned unambiguously to categories if their mapping coordinates overlapped the corresponding GENCODE v4 annotation coordinates.

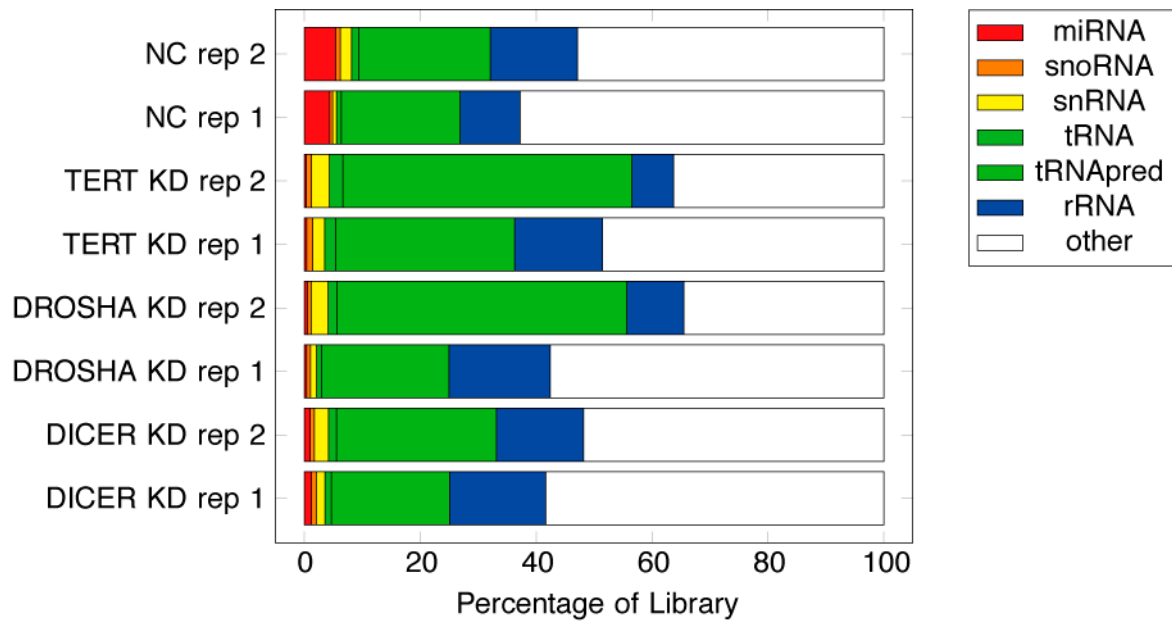


Figure S4. Global annotation of 5'-hydroxylated RNAs from THP-1. Reads were assigned unambiguously to categories if their mapping coordinates overlapped the corresponding GENCODE v4 annotation coordinates.

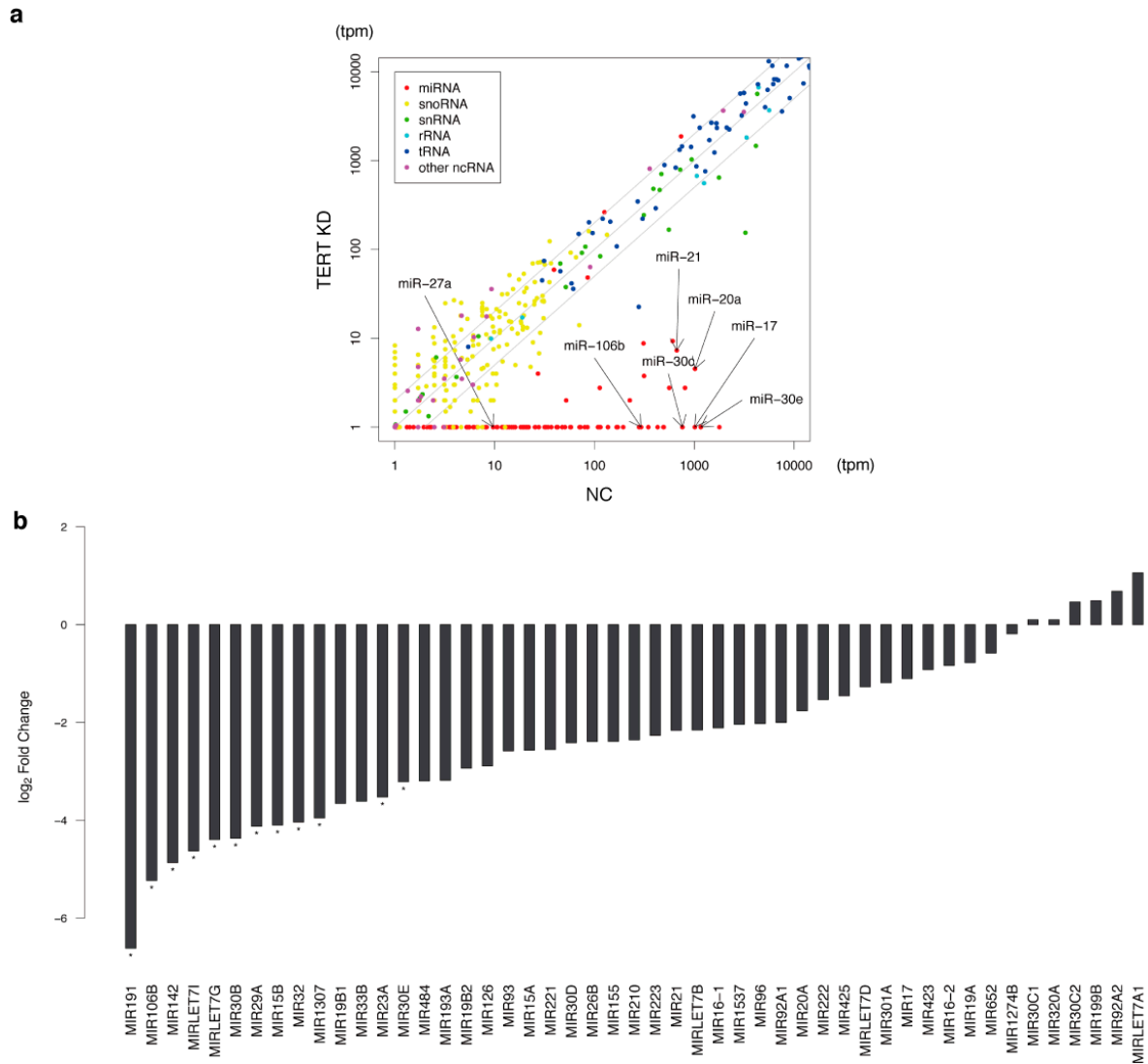


Figure S5. Mature miRNAs are regulated by TERT. **(a)** Effect of TERT suppression on short 5'-mono-phosphorylated RNAs in THP-1 broad screen. The suppression of TERT resulted in the strong down-regulation of miRNAs, regardless of their steady-state expression levels. The raw counts for each mapped read were converted into tags per million (tpm) $[(\text{raw counts})/(\text{total mapped read counts in the sample}) \times 1,000,000]$ and **(b)** Fold changes in miRNA expression measured by sequencing in THP-1 broad screen. Asterisks represent $p < 0.05$.

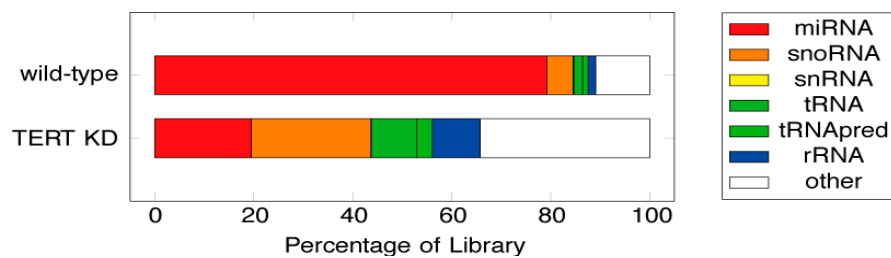


Figure S6. Global annotation of THP-1 libraries. Reads were assigned unambiguously to categories if their mapping coordinates overlapped the corresponding GENCODE v4 annotation coordinates.

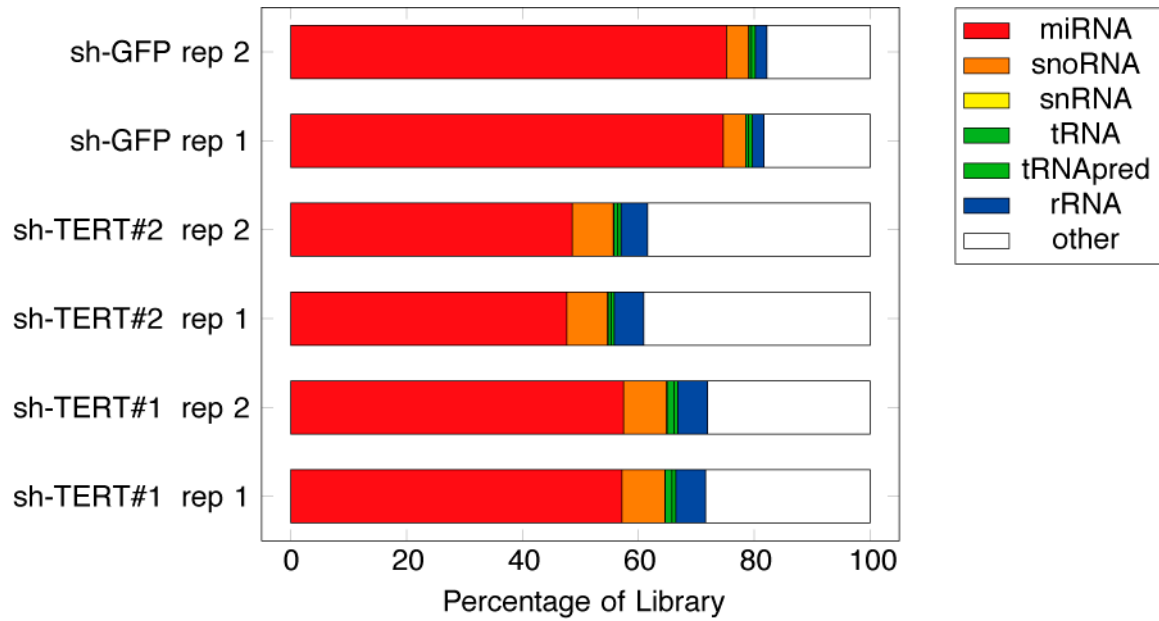


Figure S7. Global annotation of HeLa libraries. Reads were assigned unambiguously to categories if their mapping coordinates overlapped the corresponding GENCODE v4 annotation coordinates.

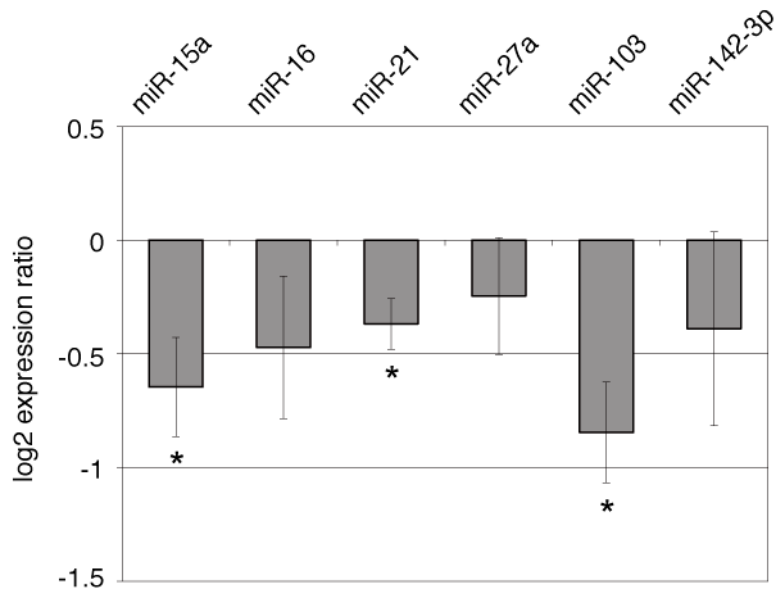


Figure S8. Down-regulation of miRNAs upon TERT suppression in THP-1. RT-qPCR analysis of mature miRNA levels in TERT-suppressed THP-1 cells. The relative amounts of the indicated miRNAs were normalized to endogenous *RNU1A*, and log₂ expression ratio for control siRNA was calculated using $2^{-\Delta\Delta C_t}$ method. Values represent means $\pm$ SD for three independent experiments. Asterisks represent $p < 0.05$ compared with control siRNA.

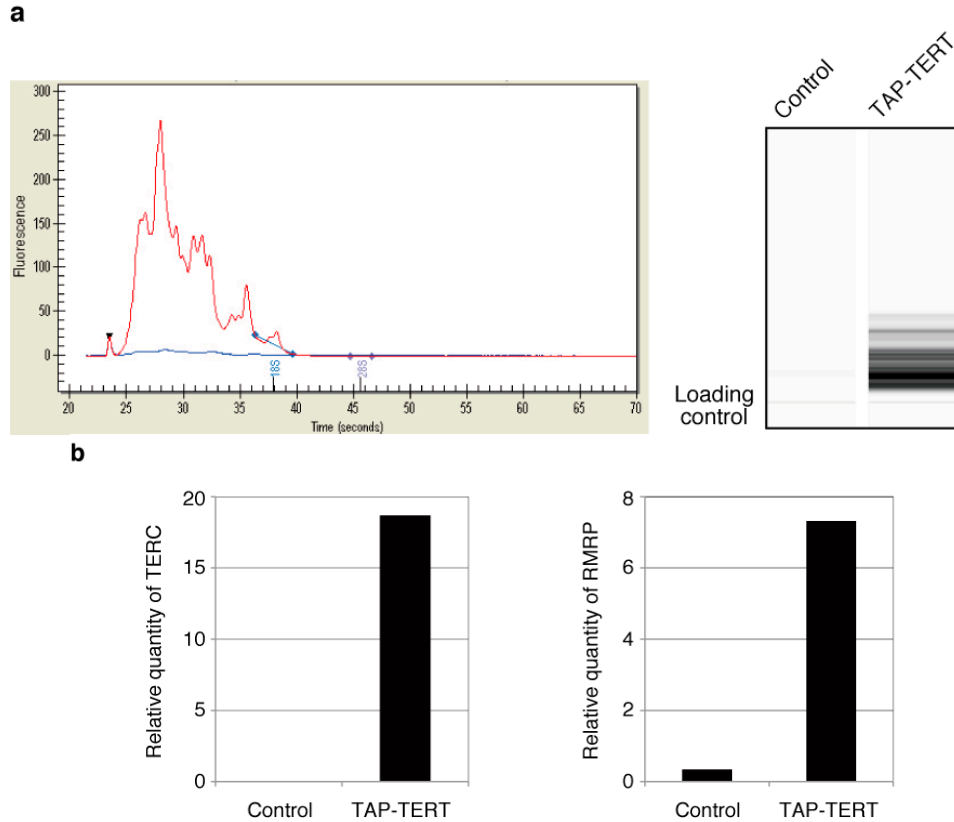


Figure S9. Isolation of RNA species associated with TERT. **(a)** RNAs were isolated from HeLa-S3 cells overexpressing TAP0TERT or control vectors using TAP purification. Purified RNAs were analyzed by Experion. **Left** panel shows an electrogram of the RNA species extracted from TAP-TERT immune complex (red) and control sample (blue); **Right** panel is the gel image of the same RNAs and **(b)** RT-qPCR of *TERC* (**left**) and *RMRP* (**right**) using the RNAs analyzed in **(a)**.

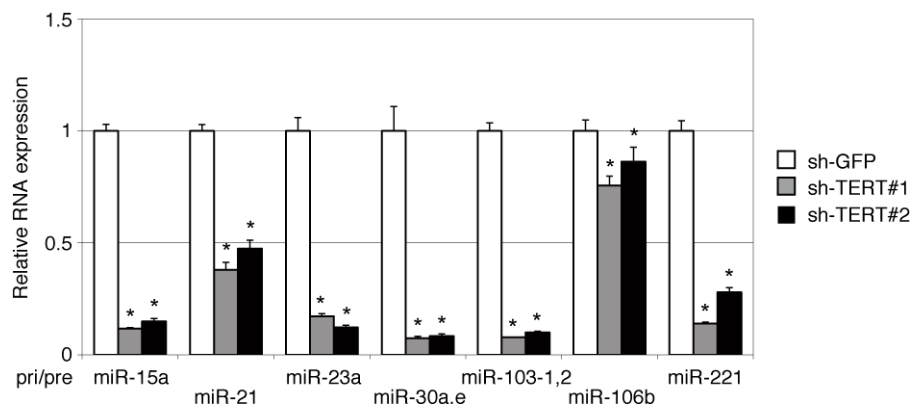


Figure S10. Down-regulation of miRNA precursors upon TERT suppression. The expression levels of miRNA precursors under suppression of TERT in HeLa cells measured by RT-qPCR. Each primer amplifies both primary and precursor forms of the indicated miRNAs. The relative amount of the individual miRNA precursors was normalized to *U6*, and the mean expression levels in sh-GFP referred to 1. Values represent means $\pm$ SD for three independent experiments. Asterisks represent $p < 0.05$ compared with sh-GFP.

Table S1. Basic library statistics.

Sample	Number of Reads	Mapped Reads (>90%)
THP1 DICER KD rep1 capped RNA	667,567	176,189
THP1 DICER KD rep1 mono. RNA	2,151,950	713,054
THP1 DICER KD rep1 hydrox. RNA	3,633,972	1,204,755
THP1 DICER KD rep2 capped RNA	1,110,078	285,181
THP1 DICER KD rep2 mono. RNA	1,313,868	392,489
THP1 DICER KD rep2 hydrox. RNA	2,874,823	913,391
THP1 DROSHA KD rep1 capped RNA	670,657	190,235
THP1 DROSHA KD rep1 mono. RNA	1,711,549	619,366
THP1 DROSHA KD rep1 hydrox. RNA	3,773,414	1,323,840
THP1 DROSHA KD rep2 capped RNA	710,300	189,862
THP1 DROSHA KD rep2 mono. RNA	879,007	238,912
THP1 DROSHA KD rep2 hydrox. RNA	3,926,570	937,656
THP1 TERT KD rep1 capped RNA	273,490	78,805
THP1 TERT KD rep1 mono. RNA	923,827	277,600
THP1 TERT KD rep1 hydrox. RNA	1,108,293	374,824
THP1 TERT KD rep2 capped RNA	375,374	101,519
THP1 TERT KD rep2 mono. RNA	524,275	134,758
THP1 TERT KD rep2 hydrox. RNA	1,739,178	462,319
THP1 NC KD rep1 capped RNA	964,745	255,646
THP1 NC KD rep1 mono. RNA	736,262	198,303
THP1 NC KD rep1 hydrox. RNA	5,289,874	845,430
THP1 NC KD rep2 capped RNA	368,378	108,938
THP1 NC KD rep2 mono. RNA	1,508,644	481,764
THP1 NC KD rep2 hydrox. RNA	3,759,680	590,054
THP1 TERT KD deep sequencing	4,531,952	1,777,562
THP1 wild-type deep sequencing	5,647,547	2,908,381
HeLa sh-TERT#1 rep. 1 deep sequencing	5,634,715	2,078,146
HeLa sh-TERT#1 rep. 2 deep sequencing	6,937,945	2,592,417
HeLa sh-TERT#2 rep. 1 deep sequencing	3,162,291	1,009,308
HeLa sh-TERT#2 rep. 2 deep sequencing	3,462,017	1,139,788
HeLa sh-GFP rep. 1 deep sequencing	9,209,008	4,577,549
HeLa sh-GFP rep. 2 deep sequencing	10,088,978	5,149,440

The number of reads corresponds to the number of useable reads after filtering with TagDust. Reads mapping with a confidence of 90% or higher used.

Table S2. Individual miRNAs regulated by telomerase reverse transcriptase (TERT) in THP-1 broad screen.

miRNA Name	logConc	logFC	p Value	FDR
miRNA, MIRLET7I	-13.41207145	-4.623909945	3.74×10^{-6}	0.000965373
miRNA, MIRLET7G	-12.89724734	-4.394062931	4.27×10^{-6}	0.00102714
miRNA, MIR543	-26.97337018	-46.08536812	9.64×10^{-26}	1.37×10^{-21}
miRNA, MIR33A	-30.82239103	-38.38732643	8.06×10^{-9}	4.76×10^{-6}
miRNA, MIR32	-14.68511837	-4.038229683	0.000225634	0.030775118
miRNA, MIR30E	-9.79779121	-3.212437079	8.04×10^{-5}	0.012679203
miRNA, MIR30B	-14.43043154	-4.365966061	8.83×10^{-5}	0.013613836
miRNA, MIR29C	-31.69730251	-36.63750346	2.21×10^{-5}	0.004350262
miRNA, MIR29A	-14.55187209	-4.123084952	0.000245649	0.03318607
miRNA, MIR25	-15.12300076	-6.576159877	1.78×10^{-7}	7.01×10^{-5}
miRNA, MIR23A	-12.79536947	-3.524998809	8.42×10^{-5}	0.01311968
miRNA, MIR191	-14.99628835	-6.617569639	3.82×10^{-7}	0.000123202
miRNA, MIR18A	-31.73773651	-36.55663546	3.10×10^{-5}	0.0058708
miRNA, MIR15B	-13.02726006	-4.09728108	9.77×10^{-6}	0.002086537
miRNA, MIR142	-10.12773423	-4.865558318	3.70×10^{-8}	1.87×10^{-5}
miRNA, MIR140	-15.88645505	-5.049251305	0.000142925	0.020687703
miRNA, MIR1307	-11.79303176	-3.953078264	7.48×10^{-6}	0.001712225
miRNA, MIR106B	-12.68135541	-5.232546733	7.41×10^{-8}	3.24×10^{-5}

The table was produced by edgeR using the recommended settings for short RNA.

Table S3. Individual miRNAs regulated by TERT in HeLa with sh-TERT#1.

miRNA Name	logConc	logFC	p Value	FDR
miRNA, MIR1-2	-15.90492229	1.180550078	4.35×10^{-5}	0.003697068
miRNA, MIR101-1	-17.77464982	-1.728126187	0.00027126	0.017918344
miRNA, MIR103-1AS	-16.73729427	-1.925054564	3.87×10^{-7}	5.31×10^{-5}
miRNA, MIR103-2AS	-16.19391984	-1.601452605	1.24×10^{-6}	0.000152829
miRNA, MIR106B	-9.059643266	-0.780770518	0.000118527	0.008792732
miRNA, MIR107	-14.83774535	-1.41237631	6.80×10^{-8}	1.11×10^{-5}
miRNA, MIR1257	-20.06186043	-3.778213119	0.000331028	0.021142553
miRNA, MIR1275	-15.74263846	1.390425403	7.39×10^{-7}	9.57×10^{-5}
miRNA, MIR1276	-15.92473171	-1.542505397	7.28×10^{-7}	9.48×10^{-5}
miRNA, MIR128-1	-14.31681881	-1.492241608	1.12×10^{-9}	2.39×10^{-7}
miRNA, MIR1287	-16.79963906	-1.806430469	1.93×10^{-6}	0.000228869
miRNA, MIR1296	-14.65409325	-1.191771325	2.74×10^{-6}	0.000314303
miRNA, MIR1307	-10.20347963	-1.296065784	3.36×10^{-10}	7.95×10^{-8}
miRNA, MIR130B	-11.34174704	-0.819075799	7.84×10^{-5}	0.006122981
miRNA, MIR134	-13.79712331	-0.829338843	0.000315679	0.020353073
miRNA, MIR135B	-17.10894433	-2.519585132	1.44×10^{-9}	3.03×10^{-7}
miRNA, MIR137	-11.11166734	-1.677918044	1.72×10^{-15}	8.65×10^{-13}
miRNA, MIR138-1	-13.07411146	-0.842641519	0.000121559	0.008991072
miRNA, MIR145	-12.34317121	1.160526079	4.40×10^{-8}	7.34×10^{-6}
miRNA, MIR146A	-11.64927087	-1.661502818	6.23×10^{-15}	2.94×10^{-12}
miRNA, MIR148A	-12.28979304	-1.150928748	7.49×10^{-8}	1.21×10^{-5}

Table S3. *Cont.*

miRNA Name	logConc	logFC	<i>p</i> Value	FDR
miRNA, MIR148B	-8.589547432	-0.976927926	1.54×10^{-6}	0.000185532
miRNA, MIR149	-10.02779893	-0.934846107	4.85×10^{-6}	0.000525912
miRNA, MIR15A	-12.30115095	-0.777917426	0.000243019	0.016516109
miRNA, MIR16-2	-13.11761857	0.798597856	0.0002466	0.01666926
miRNA, MIR17	-8.255134224	-1.219205322	2.31×10^{-9}	4.75×10^{-7}
miRNA, MIR182	-13.69398288	-0.830064106	0.000288341	0.018799514
miRNA, MIR183	-8.623105978	-1.18919859	5.70×10^{-9}	1.10×10^{-6}
miRNA, MIR186	-8.110162827	-0.690592866	0.000628987	0.036050767
miRNA, MIR188	-16.02870425	-1.158406645	0.00016819	0.01190282
miRNA, MIR18A	-9.79416201	-1.582389894	2.32×10^{-14}	1.01×10^{-11}
miRNA, MIR190	-13.01653273	-2.225591659	1.34×10^{-22}	1.83×10^{-19}
miRNA, MIR221	-6.864714938	-0.853678543	2.42×10^{-5}	0.002183366
miRNA, MIR2276	-16.08514463	-1.729847803	8.35×10^{-8}	1.33×10^{-5}
miRNA, MIR24-1	-10.4751453	-0.690260197	0.000735344	0.041114874
miRNA, MIR24-2	-12.49413321	-0.827219417	0.000108253	0.008070262
miRNA, MIR27B	-6.820473634	-0.995801929	8.98×10^{-7}	0.000114004
miRNA, MIR29C	-15.62311601	-1.311104189	8.13×10^{-6}	0.000822629
miRNA, MIR30C2	-10.5613349	-0.787051307	0.000123243	0.009071118
miRNA, MIR320A	-10.60653447	-3.277763992	6.93×10^{-49}	8.70×10^{-45}
miRNA, MIR324	-13.70546299	-1.120707043	1.20×10^{-6}	0.000149633
miRNA, MIR330	-13.7371218	-1.175812405	4.00×10^{-7}	5.44×10^{-5}
miRNA, MIR331	-14.51711787	-1.038825715	3.12×10^{-5}	0.002753017
miRNA, MIR339	-11.96908338	-0.697739022	0.000872155	0.047121373
miRNA, MIR340	-14.64592398	-1.093517612	1.17×10^{-5}	0.001147322
miRNA, MIR345	-15.204734	-0.944507913	0.000530687	0.031248321
miRNA, MIR362	-14.33376343	-1.686206378	1.01×10^{-11}	2.87×10^{-9}
miRNA, MIR373	-34.33879308	-31.35452233	0.000440598	0.026495899
miRNA, MIR374A	-10.23273481	-1.349257425	6.54×10^{-11}	1.71×10^{-8}
miRNA, MIR374B	-11.25895531	-0.827315878	6.40×10^{-5}	0.005081472
miRNA, MIR378	-14.09600147	-1.072350179	5.17×10^{-6}	0.000557779
miRNA, MIR421	-14.01300377	-1.46247462	7.41×10^{-10}	1.66×10^{-7}
miRNA, MIR425	-9.790217108	-1.444723031	2.62×10^{-12}	8.41×10^{-10}
miRNA, MIR450B	-14.42140674	-1.062391932	1.34×10^{-5}	0.001288525
miRNA, MIR452	-7.579610724	-1.1888214	5.32×10^{-9}	1.03×10^{-6}
miRNA, MIR455	-12.60429635	-1.435222531	4.37×10^{-11}	1.16×10^{-8}
miRNA, MIR500	-13.44986444	-1.171622799	2.08×10^{-7}	3.03×10^{-5}
miRNA, MIR501	-13.74321905	-1.439340638	7.78×10^{-10}	1.73×10^{-7}
miRNA, MIR502	-15.00959115	-1.234191604	2.93×10^{-6}	0.000334691
miRNA, MIR503	-11.30273526	-0.691023594	0.000829021	0.045227895
miRNA, MIR505	-12.83011025	-0.826460701	0.000137613	0.010011459
miRNA, MIR542	-12.82972847	-1.26662788	7.05×10^{-5}	1.34×10^{-6}
miRNA, MIR548J	-16.3688335	-1.295689918	6.35×10^{-5}	0.005045759
miRNA, MIR551B	-18.19805261	-2.337292727	3.56×10^{-5}	0.003080703
miRNA, MIR573	-16.06535187	-1.869639352	5.55×10^{-9}	1.07×10^{-6}
miRNA, MIR584	-12.25975028	-1.317777817	8.11×10^{-10}	1.79×10^{-7}

Table S3. Cont.

miRNA Name	logConc	logFC	p Value	FDR
miRNA, MIR589	-12.59051624	-1.054454178	1.05×10^{-6}	0.000132159
miRNA, MIR590	-14.50552695	-1.356737459	4.76×10^{-8}	7.91×10^{-6}
miRNA, MIR627	-13.49718184	-0.819105972	0.000250435	0.016807918
miRNA, MIR651	-15.8273549	-1.250506674	4.47×10^{-5}	0.003747497
miRNA, MIR652	-11.65455961	-1.211803977	8.21×10^{-9}	1.54×10^{-6}
miRNA, MIR660	-15.12619093	-1.134644149	1.81×10^{-5}	0.001669233
miRNA, MIR663B	-18.20245383	2.43223483	2.52×10^{-6}	0.000292198
miRNA, MIR671	-13.19010649	-1.225742788	3.71×10^{-8}	6.24×10^{-6}
miRNA, MIR760	-14.21074834	-1.1136291	3.94×10^{-6}	0.000437018
miRNA, MIR767	-10.69602641	-1.149261733	2.67×10^{-8}	4.57×10^{-6}
miRNA, MIR769	-12.93542534	-1.599732552	6.47×10^{-13}	2.24×10^{-10}
miRNA, MIR877	-8.755703175	-1.734164855	5.88×10^{-17}	3.73×10^{-14}
miRNA, MIR92A1	-9.730473586	1.04666411	2.94×10^{-7}	4.16×10^{-5}
miRNA, MIR93	-7.550001524	-1.063199845	1.66×10^{-7}	2.46×10^{-5}
miRNA, MIR935	-16.50057542	-1.714189528	1.90×10^{-6}	0.000226242
miRNA, MIR937	-17.04922028	-1.825884732	3.35×10^{-6}	0.000378037
miRNA, MIR98	-9.884958924	-0.763119088	0.000179462	0.012605833
miRNA, MIRLET7A1	-12.12591121	1.051302552	5.60×10^{-7}	7.45×10^{-5}
miRNA, MIRLET7B	-3.586304887	1.214573232	2.36×10^{-9}	4.84×10^{-7}
miRNA, MIRLET7F2	-9.335457617	0.955789595	2.62×10^{-6}	0.000302338

The table was produced by edgeR using the recommended settings for short RNA.

Table S4. Individual miRNAs regulated by TERT in HeLa with sh-TERT#2.

miRNA Name	logConc	logFC	p Value	FDR
miRNA, MIR103-1AS	-17.42603096	-3.302583642	2.55×10^{-7}	3.82×10^{-5}
miRNA, MIR10B	-9.472756104	0.848940849	2.57×10^{-5}	0.002682758
miRNA, MIR1249	-16.54212193	1.927105293	4.50×10^{-6}	0.000543373
miRNA, MIR125A	-8.856876163	1.104173173	4.50×10^{-8}	7.59×10^{-6}
miRNA, MIR1287	-16.77701043	-1.761074216	0.000637051	0.046469074
miRNA, MIR1307	-10.00192552	-0.892957606	1.24×10^{-5}	0.001381543
miRNA, MIR130B	-11.38795496	-0.911489234	1.66×10^{-5}	0.001792417
miRNA, MIR137	-11.01379754	-1.482179636	2.86×10^{-12}	8.01×10^{-10}
miRNA, MIR138-1	-13.20237677	-1.099151086	4.31×10^{-6}	0.000525177
miRNA, MIR138-2	-15.754508	-1.635931146	1.74×10^{-5}	0.00187742
miRNA, MIR145	-12.48171444	0.883453952	5.21×10^{-5}	0.005104179
miRNA, MIR148A	-12.0897019	-0.7507522	0.000568698	0.042071229
miRNA, MIR148B	-8.741368061	-1.280569674	2.96×10^{-5}	6.81×10^{-8}
miRNA, MIR155	-8.361225833	-0.751662954	0.000179112	0.015439113
miRNA, MIR17	-9.5916811	-3.892299203	5.34×10^{-66}	2.01×10^{-62}
miRNA, MIR181B2	-14.73235918	3.385005474	1.27×10^{-34}	1.87×10^{-31}
miRNA, MIR182	-10.47064735	5.616618951	9.12×10^{-116}	1.55×10^{-111}
miRNA, MIR183	-8.717843451	-1.378673417	1.34×10^{-11}	3.56×10^{-9}
miRNA, MIR185	-12.23847475	-0.761367826	0.000520097	0.038900022
miRNA, MIR188	-16.39517896	-1.891378575	4.57×10^{-5}	0.0045586

Table S4. *Cont.*

miRNA Name	logConc	logFC	<i>p</i> Value	FDR
miRNA, MIR190	-12.56640634	-1.325327521	6.69×10^{-9}	1.28×10^{-6}
miRNA, MIR221	-7.02006737	-1.164383489	7.27×10^{-9}	1.39×10^{-6}
miRNA, MIR222	-8.752122041	-0.709597188	0.000410978	0.031467211
miRNA, MIR2276	-15.89638993	-1.352167279	0.00067973	0.048454239
miRNA, MIR24-1	-10.5197322	-0.779429439	0.000151283	0.01314047
miRNA, MIR24-2	-12.84691563	-1.532773782	7.22×10^{-11}	1.76×10^{-8}
miRNA, MIR27A	-7.599167811	-1.020887889	3.80×10^{-7}	5.58×10^{-5}
miRNA, MIR27B	-6.782561879	-0.919978443	4.35×10^{-6}	0.000526446
miRNA, MIR29A	-7.411749789	-0.830024273	3.38×10^{-5}	0.003453943
miRNA, MIR301A	-15.92420692	-1.86542242	3.23×10^{-6}	0.000403297
miRNA, MIR30D	-7.217412773	-0.934316833	3.15×10^{-6}	0.00039349
miRNA, MIR320A	-11.15547089	-4.37563722	1.85×10^{-73}	9.67×10^{-70}
miRNA, MIR324	-13.61057517	-0.930920091	0.000205976	0.01722931
miRNA, MIR339	-12.08185943	-0.923286048	2.41×10^{-5}	0.00252967
miRNA, MIR340	-14.58900266	-0.979705574	0.000701781	0.049902936
miRNA, MIR378	-14.17179781	-1.223917819	7.43×10^{-6}	0.000859753
miRNA, MIR424	-12.28061044	-1.147378827	2.36×10^{-7}	3.55×10^{-5}
miRNA, MIR425	-9.482170213	-0.828628111	4.28×10^{-5}	0.004343821
miRNA, MIR452	-7.540799775	-1.111199507	3.40×10^{-8}	5.87×10^{-6}
miRNA, MIR503	-11.64366719	-1.372887444	2.03×10^{-10}	4.74×10^{-8}
miRNA, MIR542	-12.88285834	-1.372883746	4.75×10^{-9}	9.45×10^{-7}
miRNA, MIR548J	-32.86851532	-34.29507784	1.34×10^{-12}	3.86×10^{-10}
miRNA, MIR574	-16.19031639	-3.779136138	5.74×10^{-17}	2.51×10^{-14}
miRNA, MIR584	-12.22908518	-1.256449988	1.71×10^{-8}	3.09×10^{-6}
miRNA, MIR627	-13.51394264	-0.852629747	0.000597641	0.043877488
miRNA, MIR652	-11.53783605	-0.97835363	4.22×10^{-6}	0.000516963
miRNA, MIR744	-10.2633214	-0.819429997	6.38×10^{-5}	0.006119354
miRNA, MIR760	-14.44483388	-1.581844708	4.42×10^{-8}	7.49×10^{-6}
miRNA, MIR769	-12.52918654	-0.787246748	0.000415326	0.031764259
miRNA, MIR877	-8.66611697	-1.554991561	3.01×10^{-14}	1.01×10^{-11}
miRNA, MIR92A1	-9.66171733	1.184179003	5.60×10^{-9}	1.09×10^{-6}
miRNA, MIR92A2	-11.76670323	-1.299918029	2.31×10^{-9}	4.74×10^{-7}
miRNA, MIR93	-7.463103767	-0.889404306	9.11×10^{-6}	0.001033156
miRNA, MIR96	-13.04308769	-1.390738292	5.45×10^{-9}	1.06×10^{-6}
miRNA, MIRLET7A3	-12.2715607	-6.434462355	3.00×10^{-113}	3.39×10^{-109}
miRNA, MIRLET7F2	-9.342782647	0.941140888	3.12×10^{-6}	0.000390911

The table was produced by edgeR using the recommended settings for short RNA.

Table S5. miRNAs associated with TERT.

miRNA Name	Observed Sequence	Count
let-7b	TGAGGTAGTAGGTTGTGTGGTTAT	1
let-7b	TGAGGGAGTAGGGTGTGTGGTTTCAGGGC	1
let-7b	TGAGGTAGTAGGTTGTGTGGTTTCAGGGC	3
let-7g	TGAGGTAGTAGTTTGTACAGTTTGAGGGTC	2
mir-125a	TCCCTGAGACCCCTTTAACCTGTG	1
mir-126	TCGTACCGTGAGTAATAATGC	1
mir-126	GTACCGTGAGTAATAATGCGC	1
mir-15b	TAGCAGCACATCATGGTTTACA	3
mir-183	TATGGCACTGCTAGAATTCAGTG	1
mir-183	TATGGCACTGGTAGAATTCCC	1
mir-186	CAAAGAATTCTCCTTTTGGGCTT	1
mir-191	CAACGGAATCCCAAAAGCAGCTG	14
mir-191	CAACGGAATCCCAAAATCAGCTG	1
mir-191	CAACGGAATCCCAAAAGCAGCT	2
mir-200c	TAATACTGCCGGGTAAATGATGGA	3
mir-21	TAGCTTATCAGACTGATGTTGACT	3
mir-21	TAGCTTATCAGACTGATGTTGACTGTTG	2
mir-21	TAGCTTATCAGACTGATGTTGACTGTTGAATC	1
mir-21	TAGCTTATCAGACTGATGTTGACTGTTGAATT	1
mir-21	AGCTTATCAGACTGATGTTGACTGTTG	2
mir-27a	CAAGTCGTGTTACAGTGGCTAAGTTACGC	1
mir-93	CAAAGTGCTGTTTCGTGCAGGTAG	2
mir-93	CAAAGTGTTGTTTCGTGCAGGTAG	2
mir-99b	CACCCGTAGAACCGACCTTGC	4
mir-99b	CACCCGTAGAACCGACCTTGCG	3