

**Table 1. miRNAs that are differentially expressed at the 5% significance level according to both hypergeometric test and paired t-test.**

**Up-regulated miRNAs**

<b>Hypergeometric test p-value</b>	<b>t-test p-value</b>	<b>miRNA</b>
3.76E-006	8.61E-003	hsa-miR-34c
1.51E-005	6.29E-003	hsa-miR-17-3p
6.10E-005	1.17E-003	hsa-miR-324-3p
9.81E-005	2.03E-004	hsa-miR-338
1.69E-004	1.06E-002	hsa-miR-107
1.85E-004	3.25E-002	hsa-miR-214
2.16E-004	7.41E-003	hsa-miR-339
4.48E-004	2.08E-002	hsa-miR-526b
2.42E-003	1.26E-003	hsa-let-7c
3.16E-003	3.30E-002	hsa-miR-223
3.28E-003	3.23E-002	hsa-miR-585
1.67E-002	4.89E-003	hsa-miR-342
1.79E-002	2.05E-002	hsa-miR-211
1.81E-002	2.56E-002	hsa-miR-324-5p
2.60E-002	5.71E-003	hsa-miR-425-5p

**Down-regulated miRNAs**

<b>Hypergeometric test p-value</b>	<b>t-test p-value</b>	<b>miRNA</b>
7.45E-004	4.15E-003	hsa-miR-642
1.06E-003	6.08E-005	hsa-miR-508
1.56E-003	1.91E-002	hsa-miR-505
2.68E-003	2.29E-003	hsa-miR-509
3.90E-003	9.28E-004	hsa-miR-133b
3.99E-003	3.10E-003	hsa-miR-99a
5.64E-003	1.77E-002	hsa-miR-181c
9.09E-003	4.01E-003	hsa-miR-23a
1.06E-002	8.91E-003	hsa-miR-100
1.07E-002	5.01E-004	hsa-miR-222
1.18E-002	2.00E-002	hsa-miR-31
1.39E-002	3.18E-002	hsa-miR-145
2.80E-002	3.31E-002	hsa-miR-125b
3.71E-002	4.41E-002	hsa-miR-379
4.17E-002	8.19E-003	hsa-miR-330

**Table 2. Sequence data for DNA oligonucleotides used in these studies.**

<b>DNA oligo nucleotide</b>	<b>sequence</b>	
ACTIN	Forward	5' ATGCCCACAGGATGCAGAA 3'
	Reverse	5' GCTGATCCACATCTGCTGGAA 3'
m-MITF	Forward	5' CATTGTTATGCTGGAAATGCTAGA 3'
	Reverse	5' GGCTTGCTGTATGTGGTACTTGG 3'
DICER ex1-ex2	Forward	5' GGTCCGATGGTTCTCGAAGGC 3'
	Reverse	5' GGGTTGCAAAGCAGGGCT 3'
DICER ex1-int1	Forward	5' GGGTCCGATGGTTCTCGAAGGC 3'
	Reverse	5' CCCGGACACAAAGCTGCTC 3'
DICER ex3-ex4	Forward	5' GGGAGACTTCAGCAGAAATGGAA 3'
	Reverse	5' CTGACAGCTGACACTTGTGAGCA 3'
DICERshort ex2-ex3	Forward	5' GCAGTTCAGACAAGAGCAACACAG 3'
	Reverse	5' GGGTTGCAAAGCAGGGCT 3'
hDAC1	Forward	5' ACATGTCCGAGTACAGCAAGCAGA 3'
	Reverse	5' TGACAGAACTCAAACAGGCCATCG 3'
DICER promoter	Forward	5' CACAGGCATGCAAGCCCTAGATC 3'
	Reverse	5' GTGTGCTCACAGCAACTGCAACCG 3'
Tyrosinase promoter	Forward	5' GTGGGATACGAGCCAATTCGAAAG 3'
	Reverse	5' TCCACCTCCAGCATCAAACACTT 3'
ACTIN negative control ChIP	Forward	5' CATCCTCACCTGAAGTACCC 3'
	Reverse	5' TAGAAGGTGTGGTGCCAGATT 3'
pre-miRNA-211	Forward	5' TTGTGGGCTTCCCTTTGTCATCCT 3'
	Reverse	5' TGCTGTGGGAAGTGACAACCTGA 3'
pre-miRNA-92a	Forward	5' TTCTACACAGGTTGGGATCGGTTG 3'
	Reverse	5' CCGGGACAAGTGCAATACCATACAGA 3'
pre-miRNA-17	Forward	5' AGTGCTTACAGTGCAGGTAGTG 3'
	Reverse	5' GTCACCATAATGCTACAAGTGCC 3'
pre-miRNA-34c	Forward	5' CTAGGCAGTGTAGTTAGCTG 3'
	Reverse	5' TTTACCTGGCCGTGTGGTTA 3'
pre-miRNA-107	Forward	5' CTGCTTTCAGCTTCTTTACAGTGTGGCC 3'
	Reverse	5' CCTGTACAATGCTGCTTGAACCTCC 3'
pre-miRNA-214	Forward	5' TGGCTGGACAGAGTTGTCAT 3'
	Probe	5' ACTTGCTGTGCAGAACATCCGCT 3'
	Reverse	5' TCATGTGACTGCCTGTCTGT 3'
pre-miRNA-324	Forward	5' CTGACTATGCCTCCC 3'
	Probe	5' ATGGTGTAAGCTGGAGACCCACTG 3'
	Reverse	5' CCCAGCAGCACCT 3'
pre-let7c	Forward	5' CCGGGTTGAGGTAGTAGTTGTAT 3'
	Reverse	5' GGTGTACAGTAACTCCCAGGGT 3'
pre-miRNA-425-5p	Forward	5' GCGCTTTGGAATGACACGATCACT 3'
	Reverse	5' AAAGAGCACTGGGCGGACACGACATT 3'
pre-miRNA-223	Forward	5' ACGCTCCGTGTATTTGACAAGCTG 3'
	Probe	5' TGGACACTCCATGTGGTAGAGTGCA 3'
	Reverse	5' CTGGTAAGCATGTGCCGC 3'
pre-miRNA-342	Forward	5' AAAGTGGGCTCAAGGTGAGGG 3'
	Probe	5' GTGCTATCTGTGATTGAGGGACATGGTT 3'
	Reverse	5' GGGTGGGATTTCTGTGTGAGACAA 3'
pre-miRNA-338	Forward	5' CCAACAATATCCTGGTGCTGAGTG 3'
	Reverse	5' AAATCACTGATGCTGGAGTCGC 3'
pre-miRNA-339	Forward	5' CGCTCTCCCTGTCCTCCA 3'
	Probe	5' TCACGTGTGCCCTGCCTGTGA 3'
	Reverse	5' CTCTGTGCTCGAGGCG 3'

pre-miRNA-585	Forward	5' TATGGCAGCCCTAGCACACAGATA 3'
	Probe	5' AGAGAAAGCCTGAACGTTGGGCGTAT 3'
	Reverse	5' TTGTTACAGCAGCCCTAGCATACA 3'
pre-miRNA-526b	Forward	5' CAGGCTGTGACCCTCTT 3'
	Probe	5' GAGGGAAGCACTTTCTGTTGTCTGAAAGA 3'
	Reverse	5' TCAGACAGTAAGCCTCTAAA 3'
pri-miRNA-18a	Forward	5' AGGTGCATCTAGTGCAGATAGTGA 3'
	Reverse	5' TTATGCCAGAAGGAGCACTTAGGG 3'
pri-miRNA-19a	Forward	5' GCATAGTTGCACTACAAGAAGAATGT 3'
	Reverse	5' TCATTTGAAGGAAATAAGCAGGCCACC 3'
pri-miRNA-20a	Forward	5' AGTGCTTATAGTGCAGGTAGTGT 3'
	Reverse	5' GCCGAAGCTGGAGTTCTAC 3'
pri-miRNA-19b	Forward	5' GCATAGTTGCACTACAAGAAGAATGT 3'
	Reverse	5' CCGGGACAAGTGCAATACCATACAGA 3'
beta-2-microglobulin (B2M)	purchases from Abi cat# 4333766F	
Xerodermia pigmentosa C (XPC)	Forward	5' ACAGCCTACCCAGGGGATGTGATGCTTCCT 3'
	Reverse	5' TGGTCTGTGGACAGAGAACACTGGCTGTGC 3'
Dicer floxed allele*	Forward	5' CCTGACAGTGACGGTCCAAAG 3'
Dicer floxed deletion allele *	Reverse	5' CCTGAGCAAGGCAAGTCATTC 3'

ex exon  
int intron

\* Harfe DB, et al PNAS 2005

**Table 3. Sequence data and manufacturers for RNA oligonucleotides used in these studies.**

reagenU	sequence	company
si control	sense	5' AAUUCUCCGAACGUGUCACGU 3'
	antisense	5' ACGUGACACGUUCGGAGAAUU 3'
miR-211 mimic	sense	5' GCGAAGGAUGACAAAGGGAAUU 3'
	antisense	5' UUCCCUUUGUCAUCCUUCGCCU 3'
miR-107 mimic	sense	5' AGCAGCAUUGUACAGGGCUAUCA 3'
	antisense	5' UGAUAGCCCUGUACAAUGCUGCU 3'
miR-17-3p mimic	sense	5' ACUGCAGUGAAGGCACUUGUAG 3'
	antisense	5' CUACAAGUGCCUUCACUGCAGU 3'
miR-92a mimic	sense	5' UAUUGCACUUGUCCCGGCCUGU 3'
	antisense	5' ACAGGCCGGGACAAGUGCAAUA 3'
si BIM (SMARTpool)	sense	5' CCGAGAAGGUAGACAAUUG 3'
	antisense	5' CAAUUGUCUACCUUCUCGG 3'
	sense	5' UGAUGUAAGUUCUGAGUGU 3'
	antisense	5' ACACUCAGAACUUACAUCA 3'
	sense	5' AUGUAAGUUCUGAGUGUGA 3'
	antisense	5' UCACACUCAGAACUUACA 3'
	sense	5' GUUCUGAGUGUGACCGAGA 3'
	antisense	5' UCUCGGUCACACUCAGAAC 3'
si MITF #1	sense	5' GGCUUUCUAGAAAGAAUAA 3'
	antisense	5' UUAUUCUUUCUAGAAAGCC 3'
si MITF #2	sense	5' GGUGAAUCGGAUCAUCAAG 3'
	antisense	5' CUUGAUGAUCCGAUUCACC 3'
si DICER #1	sense	5' CAGCAUACUUUAUCGCCUtt 3'
	antisense	5' AAGGCGAUAAAGUAUGCUGgg 3'
si DICER #2	sense	5' GAUCCUAUGUUCAAUUCUAAtt 3'
	antisense	5' UUAGAUUGAACAUAGGAUCga 3'
miR negative control	sense	5' AGUACUGCUUACGAUACGGUU 3'
	antisense	5' CCGUAUCGUAAGCAGUACUUU 3'

\* designed by Carreira et al, *Nature* 2005 and purchased from ABI Inc.