

**Supplement Table 1.** Summary of the 23 miRNAs with relative fold changes and P-values between 6 oral cancer cell lines (C) and 5 lines of normal keratinocytes (N), as determined by RT-qPCR. For each miRNA, the expression level as recorded by threshold cycle numbers (Ct), were normalized against an internal control (U6 RNA), and the comparative threshold cycle ( $\Delta$ Ct) method was used to determine relative miRNA expressions.

miRNA	Cancer (C)	Normal (N)	Fold (C/N)	P-value
	Mean (SD)	Mean (SD)		
miR-10b	4170.5 (2972.5)	46.73 (72.49)	89.25	0.019*
miR-9*	43.08 (51.82)	23.97 (45.36)	1.80	0.531
miR-196a	4146.5 (3486.6)	48.44 (70.66)	85.60	0.035*
miR-196b	94.38 (37.06)	1.52 (0.48)	62.09	0.002*
miR-582-5p	4.14 (1.28)	1.53 (0.40)	2.71	0.003*
miR-15b	7.94 (2.64)	2.39 (1.06)	3.32	0.023*
miR-301	5.13 (2.07)	1.37 (0.59)	3.74	0.005*
miR-7	29.78 (23.66)	9.08 (10.71)	3.28	0.090
miR-148b	6.02 (3.31)	1.51 (0.50)	3.99	0.020*
miR-468	41.04 (48.26)	4.07 (3.16)	10.08	0.531
miR-93	10.13 (7.23)	3.85 (2.44)	2.63	0.090
miR-652	5.06 (3.26)	3.23 (2.46)	1.57	0.254
miR-30a-3p	1.80 (0.56)	2.25 (2.22)	0.80	0.676
miR-30e-3p	1.97 (0.70)	2.28 (0.94)	0.86	0.562
miR-128b	13.62 (12.44)	3.56 (2.50)	3.83	0.105
miR-324-5p	3.57 (1.18)	2.35 (1.73)	1.52	0.224
miR-25	4.04 (1.27)	2.65 (2.12)	1.52	0.240
miR-18a	5.37 (1.67)	2.34 (2.28)	2.29	0.124
miR-128a	4.75 (1.46)	2.71 (1.52)	1.75	0.050*
miR-638	45.56 (33.55)	11.21 (12.17)	4.06	0.053
miR-503	2.14 (0.81)	11.19 (7.70)	0.19	0.018*
miR-22	2.23 (1.08)	2.97 (0.90)	0.75	0.248
miR-31	2.04 (1.48)	5.51 (2.52)	0.37	0.034*

## Supplement Figure Legend

**Supplement Figure 1.** The relative expression levels of representative miRNAs in 6 oral cancer cell lines and 5 lines of normal oral keratinocytes, as determined by RT-qPCR. For each miRNA, the expression levels as recorded by threshold cycle numbers (Ct), were normalized against an internal control (U6 RNA), and the comparative threshold cycle method ( $\Delta$ Ct) was used to determine relative miRNA expression. The samples are indicated at the bottom of each figure, six samples of cancer cells (left) and five samples of normal cells (right).

**Supplement Figure 2.** Minimal effect of miR-10b on cell growth and chemo-/radio-sensitivity (A) Effectiveness of miR-10b knockdown after transfection of miR-10b antagomir into oral cancer cells. Various doses (75 to 300 nM) of miR-10b antagomir or the scramble (SC) oligonucleotides were transfected into oral cancer cells (OECM1) for 1 or 2 days, and miRNA levels were determined by real time RT-qPCR analysis. (B) Minimal effect of miR-10b on cell growth. Two oral cancer cell lines, OECM1 and SAS, were examined. Cell growth status and colony forming ability were determined after transfecting 150  $\mu$ M of anti-miR10b or scramble oligonucleotides for 1 day. (C) Minimal effect of miR-10b on chemo-/radio- sensitivity. Oral cancer cells (OECM1 or SAS) were transfected with 150 $\mu$ M of anti-miR10b or scramble oligonucleotides for 8 hours. For chemosensitivity, the relative number of surviving cells was determined after treatment with various doses of cisplatin (0 to 80 $\mu$ g/ml) for 2 days. For radiosensitivity, the colongenic survival fractions were determined after the cells were irradiated with various doses (0 to 6 Gy).

**Supplement Figure 3.** Expression levels of the potential miR-10b target genes (HOXD10, RhoA, RhoC, KFL4, and Tiam1) in various oral cancer cell lines. (A) The mRNA expressions of the genes HOXD10, RhoA, RhoC, KFL4, and Tiam1 in miR-10b antagomir expressing cell lines. After transfecting 150  $\mu$ M of anti-miR10b or the scramble (sc) oligonucleotides into OECM1 or SAS cells for 1 or 2 days, the cells were harvested and the mRNA expression for each gene was determined by RT-qPCR methods. (B) The protein expressions of HOXD10 and RhoA in miR-10b antagomir expressing cell lines. After transfecting 150  $\mu$ M of anti-miR10b or the scramble (sc) oligonucleotides into OECM1 or SAS cells for 1 or 2 days, the cells were harvested and the protein expression for each gene was determined by western blot analysis. Actin expression was shown as an internal control. (C) The mRNA expressions of the genes HOXD10, RhoA, RhoC, KFL4, and Tiam1 in 6 oral cancer

cell lines and 5 normal keratinocytes. For each gene, the mRNA expression level was determined by RT-qPCR method after normalization against an internal control (U6 RNA), similarly as described in the material and method section. The  $p$  values were indicated underneath each molecule to show the statistical significances between cancer and normal cells.