

Supplementary Table 1. Gene list considered for salivary biomarker.

Symbol	Gene name	Reference	Primer Sequence (5'→3')		Length (bp)	GC%
UBAP1L	Ubiquitin Associated Protein 1 Like	<u>Mazzio EA. et al.</u> ¹	F	GAGGAGCAAGACCTCATTGG	20	55
			R	GAACATCTCCATGGCCTCAT	20	50
GFRA1	Glial Cell Line-Derived Neurotrophic Factor Receptor Alpha1	<u>Esseghir S. et al.</u> ²	F	TCCAATGTGTCTGGGCAATAC	20	50
			R	GGAGGAGCAGCCATTGATTT	20	50
PAPPA	Pregnancy-Associated Plasma Protein A	<u>Torres D. et al.</u> ³	F	GGCCTCCATCCTACATCTCA	20	55
			R	ATCGCCACAGTACCCACTTC	20	55
RUFY2	RUN And FYVE Domain Containing 2	<u>Lukács J. et al.</u> ⁴	F	CTGGTCTGAAGACCCCTCTG	20	60
			R	ACCAGCAGCCCAACAATTAC	20	50
SLC27A5	Solute Carrier Family 27 Member 5	<u>Gao Q. et al.</u> ⁵	F	AGCTCCTGCGGTACTTGTGT	20	55
			R	CCTTCTGTGGAGCCGTAGAC	20	60
CREB3L2	CAMP Responsive Element Binding Protein 3 Like 2	<u>Krawczyk KK. et al.</u> ⁶	F	ATCCTTCTGCCACCAAGATG	20	50
			R	TGAGCAGGGAGGAACCTCTA	20	55
SIAE	Sialic Acid Acetylesterase	<u>Louwen F. et al.</u> ⁷	F	TGCGGCATATCAGTCTGTCC	20	55
			R	CCTAAGTTTCTGAGGTGGGCT	22	50
ZNF335	Zinc Finger Protein 335	<u>Jen J. et al.</u> ⁸	F	GCTTTCCTCCAAGAACAAG	20	50
			R	TGACTTCCTCCCATCAGGAC	20	55
MMP2	Matrix Metalloproteinase 2	<u>Hsu WH. et al.</u> ⁹	F	GTCCAGAGGCAATGCAGTGGG	21	61.9
			R	TCACTAGGCCAGCTGGTTGGTT C	23	56.5
MMP9	Matrix Metalloproteinase-9	<u>Huang H.</u> ¹⁰	F	CGGTGATTGACGACGCCT	18	61.1
			R	ATACCCGTCTCCGTGCTC	18	61.1
BMP7	Bone Morphogenetic Protein 7	<u>Kang SM. et al.</u> ¹¹	F	TCGTGGAACATGACAAGGAATT	22	40.9
			R	TGGAAAGATCAAACCGGAACT C	22	45.5
NAB2	NGFI-A Binding Protein 2	<u>Choi SY. et al.</u> ¹²	F	CACATCCCTGCTAAAGCTGAA	21	47.6
			R	GTCGAAACGGCCATAGATGAT	21	47.6
NPIP4	Nuclear Pore Complex Interacting Protein Family Member B4	<u>Duan F. et al.</u> ¹³	F	ACCTTTGGGTGTCTCTCCTG	20	55
			R	CCTCAGCCCTTCCTGTCTAC	20	60

Supplementary Table 1. Gene list considered for salivary biomarker-continued

MMP1	Matrix Metallopeptidase 1	Wang QM. et al. ¹⁴	F	AATAGTGGCCCAGTGGTTGA	20	50
			R	GGCTGCTTCATCACCTTCAG	20	55
MAOB	Monoamine Oxidase B	<u>Hodorová I. et al.</u> ¹⁵	F	TCTGCTCTCTGGTTCCTGTG	20	55
			R	GGAGGTCCATTATCCGCTCA	20	55
CYP27A1	Cytochrome P450 Family 27 Subfamily A Member 1	<u>He S. et al.</u> ¹⁶	F	ACGATAAGTTCAGGCAGCAC	20	50
			R	AGGAGGTACATCTCCAGCTC	20	55
Col3A1	Collagen Type III Alpha 1 Chain	<u>Engqvist H. et al.</u> ¹⁷	F	TTGGGATTGCTGGGATCACT	20	50
			R	TGGTTTCCCACTTTCACCCT	20	50
CD44		Chen C. et al. ¹⁸	F	TTTGCAATTGCAGTCAACAGTC	21	42.9
			R	GTTACACCCCAATCTTCATGTCCA	24	45.8
DUSP1	Dual Specificity Phosphatase 1	<u>Tuglu MM.</u> ¹⁹	F	CCTACCAGTATTATTCCCGACG	22	50
			R	TTGTGAAGGCAGACACCTACAC	22	50
IL1b	Interleukin 1 Beta	<u>Bent R. et al.</u> ²⁰	F	CTCTCTCCTTTCAGGGCCAA	20	55
			R	GCGGTTGCTCATCAGAATGT	20	50
S100P	S100 Calcium Binding Protein	<u>Arumugam T. et al.</u> ²¹	F	GAGTTCATCGTGTTCGTGGCTG	22	54.6
			R	CTCCAGGGCATCATTTGAGTCC	22	54.6
CYP	Cyclophilin	<u>Lee J. et al.</u> ²²	F	CGGGTCCTGGCATCTTGT	18	61.1
			R	GCAGATGAAAACTGGGAACCA	22	45.5
CALM1	Calmodulin1	<u>Berchtold MW. et al.</u> ²³	F	TGACAAGGATGGCAATGGTTATA	23	39.13
			R	TACTTCTTCATCTGTTAGTTTTTCTCC T	28	32.1
KLF17	Kruppel Like Factor 17	<u>Shan Zhou S. et al.</u> ²⁴	F	CTGCCTGAGCGTGGTATGAG	20	60
			R	TCATCCGGGAAGGAGTGAGA	20	55
ATXN-1	Ataxin 1	<u>Kang A. et al.</u> ²⁵	F	TCCTGCTGTCCGGAGAGAAC	20	60
			R	GCAGACATCCCCAACTGAGAGT	22	54.6
CCL2	C-C Motif Chemokine Ligand 2	Li M. et al. ²⁶	F	AAGCAGAAGTGGGTTTCAGGA	20	50
			R	TGGGTTGTGGAGTGAGTGTT	20	50
ENO1	Enolase-1	<u>Zhu W. et al.</u> ²⁷	F	CGCCAAGGCCGTGAAC	16	68.8
			R	CGGAGCCAATCTGGTTGACT	20	55

Supplementary Table 1. Gene list considered for salivary biomarker-continued

KPNA4	Karyopherin a-4	<u>Cagatay T. et al.</u> ²⁸	F	TCAAGCAGTAGTTCAGTCCAATGC	24	45.8
			R	GCTTGCTCACAGACATTCTGATG	23	45.8
NDRG1	N-Myc Downstream Regulated 1	<u>Zhang S. et al.</u> ²⁹	F	CTCCTGCAAGAGTTTGATGTCC	22	50
			R	TCATGCCGATGTCATGGTAGG	21	52.4
GJA1	Gap Junction Protein Alpha 1	Busby M. et al. ³⁰	F	CTTCTGGGTCCTGCAGATCA	20	55
			R	ACACCATCAGTTTGGGCAAC	20	50

Supplementary Table 2. Average mRNA level of 6 candidate genes in the under-60 age groups

Gene	Non-tumor ($\Delta\Delta Ct \pm S.D.$)	OSCC ($\Delta\Delta Ct \pm S.D.$)	Relative fold change (OSCC/ Non-tumor)	P value	$\Delta\Delta Ct$ for Cancer diagnosis (Non-tumor - S.D.)
MAOB	2.43 ± 0.77	0.53 ± 0.27	0.22	0.0033	below 1.66
NAB2	2.15 ± 0.49	0.38 ± 0.06	0.18	0.0062	below 1.65
COL3A1	1.28 ± 0.30	0.57 ± 0.16	0.44	0.0046	below 1.02
NPIPB4	1.49 ± 0.22	0.62 ± 0.21	0.42	0.0030	below 1.27
CYP27A1	1.44 ± 0.22	0.69 ± 0.17	0.47	0.0146	below 1.22
SIAE	2.27 ± 1.30	1.07 ± 0.26	0.48	0.3100	below 0.93

References for Table S1

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