

SUPPLEMENTAL MATERIAL

Supplemental Tables

Table S1. Demographic data of MDACC datasets.

Dataset	Samplename	Smoke	QuitYrs	SmokeYrs	PPD	PkYrs	Sex	Age	Race
MDACC1	C4.19.B	CURRENT	.	29.3	0.8	22.0	M	49	Black
MDACC1	C0.13.3M	CURRENT	.	34.0	1.0	34.0	M	54	White
MDACC1	C0.13.B	CURRENT	.	34.0	1.0	34.0	M	54	White
MDACC1	C0.15.3M	CURRENT	.	32.5	1.0	32.5	M	56	White
MDACC1	C0.15.B	CURRENT	.	32.5	1.0	32.5	M	56	White
MDACC1	C4.20.B	CURRENT	.	41.0	1.0	41.0	F	57	White
MDACC1	C2.14.B	CURRENT	0.6	41.1	1.5	61.6	M	58	White
MDACC1	C4.17.B	CURRENT	.	36.1	1.0	36.1	M	58	White
MDACC1	C2.11.B	CURRENT	.	43.1	1.0	43.1	F	61	White
MDACC1	C4.18.B	CURRENT	.	48.8	0.9	44.0	M	67	White
MDACC1	C2.12.B	CURRENT	.	46.8	1.3	58.5	M	72	White
MDACC1	F2.3.B	FORMER	15.6	15.8	2.0	31.7	F	46	White
MDACC1	F2.4.B	FORMER	6.1	27.5	1.3	34.4	M	54	White
MDACC1	F0.8.3M	FORMER	16.1	27.6	1.4	38.7	M	58	White
MDACC1	F0.8.B	FORMER	16.1	27.6	1.4	38.7	M	58	White
MDACC1	F0.7.3M	FORMER	13.9	38.5	1.0	38.5	F	66	White
MDACC1	F0.7.B	FORMER	13.9	38.5	1.0	38.5	F	66	White
MDACC1	F2.16.B	FORMER	35.3	20.4	1.0	20.4	M	73	White
MDACC2	CB2HT09	CURRENT	.	32.1	1.5	48.2	M	46	White
MDACC2	CB4HT27	CURRENT	.	29.6	2.5	73.9	F	48	White
MDACC2	CB4HT31	CURRENT	0.1	26.1	0.9	23.5	M	50	White
MDACC2	CB2HT01	CURRENT	.	38.3	1.5	57.5	F	53	White
MDACC2	CB2HT13	CURRENT	.	41.2	1.5	61.8	M	54	White
MDACC2	CA0HT06	CURRENT	.	31.8	1.0	31.8	F	57	Hispanic
MDACC2	CB0HT05	CURRENT	.	31.8	1.0	31.8	F	57	Hispanic
MDACC2	CA0HT26	CURRENT	.	39.7	1.5	59.5	M	58	White
MDACC2	CB0HT25	CURRENT	.	39.7	1.5	59.5	M	58	White
MDACC2	CA0HT16	CURRENT	.	40.0	1.0	40.0	F	65	White
MDACC2	CB0HT15	CURRENT	.	40.0	1.0	40.0	F	65	White
MDACC2	CB2HT11	CURRENT	.	46.5	1.0	46.5	F	66	White
MDACC2	CA0HT30	CURRENT	.	21.7	1.0	21.7	F	#N/A	#N/A
MDACC2	CB0HT29	CURRENT	.	21.7	1.0	21.7	F	#N/A	#N/A
MDACC2	CB4HT33	CURRENT	0.1	37.9	1.0	37.9	F	#N/A	#N/A
MDACC2	FA0HT04	FORMER	2.3	19.4	1.1	21.3	M	41	Black
MDACC2	FB2HT17	FORMER	2.4	28.9	1.0	28.9	F	45	White
MDACC2	FB2HT19	FORMER	1.0	45.7	1.0	45.7	M	62	White
MDACC2	FB2HT21	FORMER	15.4	31.3	0.8	25.0	M	64	White
MDACC2	FA0HT24	FORMER	1.1	59.1	1.0	59.1	M	73	White
MDACC2	FB0HT23	FORMER	1.1	59.1	1.0	59.1	M	73	White
MDACC2	FA0HT36	FORMER	5.1	30.2	1.5	45.3	M	#N/A	#N/A
MDACC2	FB0HT35	FORMER	5.1	30.2	1.5	45.3	M	#N/A	#N/A

Table S2. Differentially expressed genes between former and current smokers. Positive log fold change (Log_{10}FC) means that expression is lower in former smokers. The symbols of genes that were also found to be significantly differentially expressed between current and never smokers are shown in **BOLD**.

Symbol	Log_{10}FC	Z	Gene Title	Probeset	RefSeq
SCGB1A1	-0.9	-10	secretoglobin, family 1A, member 1	205725_at	NM_003357
PROS1	-0.8	-9	protein S (alpha)	207808_s_at	NM_000313
C3	-0.8	-8	complement component 3	217767_at	NM_000064
MUC5AC	-0.7	-9	mucin 5, subtypes A and C	213432_at	---
FLJ10134	-0.7	-12	hypothetical protein FLJ10134 potassium channel tetramerisation domain containing 12	219410_at	NM_018004
KCTD12	-0.7	-8	domain containing 12	212192_at	NM_138444
AMY2A	-0.7	-9	amylase, alpha 2A; pancreatic	208498_s_at	NM_000699
RYR3	-0.6	-11	ryanodine receptor 3	206306_at	NM_001036
SAA2	-0.5	-7	serum amyloid A2	214456_x_at	NM_030754
PROM1	-0.5	-5	prominin 1	204304_s_at	NM_006017
SDC4	-0.5	-5	syndecan 4 (amphiglycan, ryudocan)	202071_at	NM_002999
MAOB	-0.5	-8	monoamine oxidase B	204041_at	NM_000898
HLA-DQA1	-0.5	-7	MHC, class II, DQ alpha 1	213831_at	NM_002122
HLA-DQB2	-0.5	-6	MHC, class II, DQ beta 2	212998_x_at	NM_182549
BF	-0.5	-5	B-factor, properdin	202357_s_at	NM_001710
FABP6	-0.5	-6	fatty acid binding protein 6	210445_at	NM_001445
DKFZP586A0522	-0.5	-4	DKFZP586A0522 protein	207761_s_at	NM_014033
C14orf132	-0.4	-8	Ch 14 open reading frame 132	218820_at	NM_020215
HLA-DRB3	-0.4	-9	MHC, class II, DR beta 3	221491_x_at	NM_022555
TMC5	-0.4	-4	transmembrane channel-like 5	219580_s_at	NM_024780
ITM2A	-0.4	-10	integral membrane protein 2A	202746_at	NM_004867
HLA-DQB1	-0.4	-6	MHC, class II, DQ beta 1	212999_x_at	NM_002123
PTGER4	-0.4	-5	prostaglandin E receptor 4	204897_at	NM_000958
C6	-0.4	-9	complement component 6	210168_at	NM_000065
RARRES1	-0.4	-5	retinoic acid receptor responder 1	221872_at	NM_002888
RRAD	-0.4	-5	Ras-related associated with diabetes	204802_at	NM_004165
TEKT2	-0.4	-6	tektin 2 (testicular)	210323_at	NM_014466
SOD2	-0.4	-5	superoxide dismutase 2, mitochondrial	215223_s_at	NM_000636
---	-0.4	-6	---	217028_at	---
LY75	-0.4	-5	lymphocyte antigen 75 dimethylarginine dimethylaminohydrolase	205668_at	NM_002349
DDAH1	-0.4	-4	1 Homo sapiens mRNA; cDNA	209094_at	NM_012137
---	-0.4	-4	DKFZp564J0323	212463_at	---
SOX9	-0.4	-10	SRY (sex determining region Y)-box 9	202935_s_at	NM_000346
SAA2	-0.4	-5	serum amyloid A2	208607_s_at	NM_030754
HM74	-0.4	-5	putative chemokine receptor	205220_at	NM_006018
MYB	-0.3	-5	v-myb viral oncogene homolog	204798_at	NM_005375
SAA4	-0.3	-6	serum amyloid A4, constitutive	207096_at	NM_006512
CCL4	-0.3	-6	chemokine (C-C motif) ligand 4	204103_at	NM_002984
ACTN1	-0.3	-4	actinin, alpha 1	208636_at	NM_001102
TNFAIP3	-0.3	-4	TNF, alpha-induced protein 3	202644_s_at	NM_006290
ANXA4	-0.3	-4	annexin A4	201302_at	NM_001153
C14orf78	-0.3	-5	chromosome 14 open reading frame 78	212992_at	---
PECI	-0.3	-6	peroxisomal D3,D2-enoyl-CoA isomerase	218025_s_at	NM_006117

LRBA	-0.3	-5	LPS-responsive vesicle trafficking, beach and anchor containing	214109_at	NM_006726
SLIT2	-0.3	-7	slit homolog 2 (Drosophila)	209897_s_at	NM_004787
CYP2A7	-0.3	-8	CYP2A7	207718_x_at	NM_000764
PER2	-0.3	-4	period homolog 2 (Drosophila)	205251_at	NM_003894
TMPRSS3	-0.3	-5	transmembrane protease, serine 3	220177_s_at	NM_022364
ADH6	-0.3	-5	alcohol dehydrogenase 6 (class V)	214261_s_at	NM_000672
LAS1	-0.3	-4	lung adenoma susceptibility 1-like	220168_at	NM_018272
MB	-0.3	-4	myoglobin	204179_at	NM_005368
FSTL1	-0.3	-5	follistatin-like 1	208782_at	NM_007085
AK1	-0.3	-4	adenylate kinase 1	202587_s_at	NM_000476
OXTR	-0.3	-5	oxytocin receptor	206825_at	NM_000916
PIP5K1B	-0.3	-5	phosphatidylinositol-4-phosphate 5-kinase, type I, beta	205632_s_at	NM_003558
DDX3Y	-0.3	-4	DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, Y-linked	205000_at	NM_004660
CCL3	-0.3	-5	chemokine (C-C motif) ligand 3	205114_s_at	NM_002983
SERPING1	-0.3	-5	serine (or cysteine) proteinase inhibitor	200986_at	NM_000062
FLJ22028	-0.3	-4	hypothetical protein FLJ22028	219802_at	NM_024854
H2AV	-0.3	-4	histone H2A.F/Z variant	212205_at	NM_012412
---	-0.3	-4	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class), mRNA (cDNA clone IMAGE:6213090), containing frame-shift errors	213766_x_at	---
CTNNAL1	-0.3	-4	catenin (cadherin-associated protein), alpha-like 1	202468_s_at	NM_003798
VNN3	-0.3	-4	vanin 3	220528_at	NM_018399
DOCK4	-0.3	-5	dedicator of cytokinesis 4	205003_at	NM_014705
AIP1	-0.3	-6	atrophin-1 interacting protein 1	209737_at	NM_012301
KIAA1069	-0.3	-5	KIAA1069 protein	214745_at	---
SLIT1	-0.3	-6	slit homolog 1 (Drosophila)	213601_at	NM_003061
SHANK2	-0.3	-6	SH3 and multiple ankyrin repeat domains 2	213307_at	NM_012309
CYP2A6	-0.3	-6	cytochrome P450, family 2	1494_f_at	NM_000762
MAK	-0.3	-5	male germ cell-associated kinase	220302_at	NM_005906
GIPC2	-0.3	-5	PDZ domain protein GIPC2	219970_at	NM_017655
INHBB	-0.3	-4	inhibin, beta B (activin AB beta polypeptide)	205258_at	NM_002193
FHL1	-0.3	-5	four and a half LIM domains 1	201540_at	NM_001449
CYP4F11	0.3	7	cytochrome P450, family 4	206153_at	NM_021187
PTPRD	0.3	5	protein tyrosine phosphatase, receptor type, D	205712_at	NM_002839
SPRR3	0.3	7	small proline-rich protein 3	218990_s_at	NM_005416
SPDEF	0.3	5	SAM pointed domain containing ets transcription factor	213441_x_at	NM_012391
TRIM16	0.3	4	tripartite motif-containing 16	204341_at	NM_006470
SERPINB13	0.3	5	serine (or cysteine) proteinase inhibitor	217272_s_at	NM_012397
HTATIP2	0.3	4	HIV-1 Tat interactive protein 2, 30kDa	209448_at	NM_006410
HGD	0.3	6	homogentisate 1,2-dioxygenase	205221_at	NM_000187
NKX3-1	0.3	5	NK3 transcription factor related, locus 1	209706_at	NM_006167
GSTA4	0.3	4	glutathione S-transferase A4	202967_at	NM_001512
KLK11	0.3	4	kallikrein 11	205470_s_at	NM_006853
CABYR	0.3	8	fibrousheathin 2	219928_s_at	NM_012189
---	0.3	5	---	217430_x_at	---
CBR3	0.3	7	carbonyl reductase 3	205379_at	NM_001236
ALDH1A3	0.3	5	aldehyde dehydrogenase 1 family	203180_at	NM_000693

AKR1C2	0.3	8	aldo-keto reductase family 1	217626_at	NM_001354
PROL4	0.3	6	proline rich 4 (lacrimal)	204919_at	NM_007244
---	0.3	7	---	216881_x_at	---
SRPUL	0.3	7	sushi-repeat protein	205499_at	NM_014467
CBR1	0.3	5	carbonyl reductase 1	209213_at	NM_001757
CYP4F3	0.3	8	cytochrome P450, family 4	206515_at	NM_000896
GCC2	0.3	4	GRIP & coiled-coil domain-containing 2	202832_at	NM_014635
MUC2	0.3	6	mucin 2, intestinal/tracheal	204673_at	NM_002457
TXN	0.3	5	thioredoxin	216609_at	NM_003329
DEFB1	0.3	7	defensin, beta 1	210397_at	NM_005218
CH25H	0.3	5	cholesterol 25-hydroxylase	206932_at	NM_003956
SCGB2A1	0.3	5	secretoglobin, family 2A, member 1	205979_at	NM_002407
UQCR	0.3	4	ubiquinol-cytochrome c reductase subunit	202090_s_at	NM_006830
UGT1A10	0.3	8	UDP glycosyltransferase 1 family, A10	208596_s_at	NM_019075
KRT5	0.3	4	keratin 5	201820_at	NM_000424
SPDEF	0.3	6	SAM pointed domain	220192_x_at	NM_012391
SPDEF	0.4	6	containing ets transcription factor	214404_x_at	NM_012391
TKT	0.4	7	transketolase	208699_x_at	NM_001064
PGD	0.4	5	phosphogluconate dehydrogenase	201118_at	NM_002631
TFF1	0.4	6	trefoil factor 1 (breast cancer)	205009_at	NM_003225
KRT13	0.4	7	keratin 13	207935_s_at	NM_002274
S100A2	0.4	4	S100 calcium binding protein A2	204268_at	NM_005978
F3	0.4	4	coagulation factor III	204363_at	NM_001993
RPL36	0.4	4	ribosomal protein L36	219762_s_at	NM_015414
GPX2	0.4	6	glutathione peroxidase 2	202831_at	NM_002083
SLC7A11	0.4	8	solute carrier family 7, member 11	217678_at	NM_014331
PSCA	0.4	4	prostate stem cell antigen	205319_at	NM_005672
TKT	0.4	6	(Wernicke-Korsakoff syndrome)	208700_s_at	NM_001064
KRT15	0.4	5	keratin 15	204734_at	NM_002275
TM4SF3	0.4	4	transmembrane 4 superfamily 3	203824_at	NM_004616
AKR1B1	0.4	6	aldo-keto reductase family 1, B1	201272_at	NM_001628
GAPD	0.4	4	glyceraldehyde-3-phosphate dehydrogenase	HUMGAPDH/M33 197_M_at	NM_002046
TCN1	0.4	6	transcobalamin I	205513_at	NM_001062
PRDX1	0.4	4	peroxiredoxin 1	208680_at	NM_002574
RPL35	0.4	4	ribosomal protein L35	200002_at	NM_007209
RPL18A	0.4	4	ribosomal protein L18a	200869_at	NM_000980
RPS18	0.4	4	ribosomal protein S18	201049_s_at	NM_022551
SFN	0.5	5	stratifin	33323_r_at	NM_006142
RPL28	0.5	5	ribosomal protein L28	200003_s_at	NM_000991
FTH1	0.5	4	ferritin, heavy polypeptide 1	200748_s_at	NM_002032
S100A9	0.5	7	S100 calcium binding protein A9 (calgranulin B)	203535_at	NM_002965
TXNRD1	0.5	5	thioredoxin reductase 1	201266_at	NM_003330
UPK1B	0.5	5	uroplakin 1B	210065_s_at	NM_006952
FTH1	0.5	5	ferritin, heavy polypeptide 1	214211_at	NM_002032
GCLM	0.5	6	glutamate-cysteine ligase, modifier subunit	203925_at	NM_002061
SPARCL1	0.5	7	SPARC-like 1 (mast9, hevin)	200795_at	NM_004684
ME1	0.5	9	malic enzyme 1, NADP(+)-dependent, cytosolic	204059_s_at	NM_002395
UGT1A10	0.5	7	UDP glycosyltransferase 1 family, A10	204532_x_at	NM_019075

UPK1B	0.5	6	uroplakin 1B	210064_s_at	NM_006952
UGT1A10	0.5	7	UDP glycosyltransferase 1 family, A10	206094_x_at	NM_019075
SFN	0.5	5	stratifin	33322_i_at	NM_006142
GCLC	0.5	7	glutamate-cysteine ligase, catalytic subunit	202923_s_at	NM_001498
UGT1A10	0.5	9	UDP glycosyltransferase 1 family, A10	215125_s_at	NM_019075
AGR2	0.6	5	anterior gradient 2 homolog	209173_at	NM_006408
UGT1A10	0.6	8	UDP glycosyltransferase 1 family, A10	207126_x_at	NM_019075
FTL	0.6	6	ferritin, light polypeptide	212788_x_at	NM_000146
PIR	0.6	10	Pirin	207469_s_at	NM_003662
MSMB	0.6	6	microseminoprotein, beta-	210297_s_at	NM_002443
TALDO1	0.6	6	transaldolase 1	201463_s_at	NM_006755
HLA-DRB3	0.6	10	MHC, class II, DR beta 3	209728_at	NM_022555
---	0.6	10	---	217187_at	---
UCHL1	0.7	13	ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesterase)	201387_s_at	NM_004181
FTL	0.7	6	ferritin, light polypeptide	213187_x_at	NM_000146
TXN	0.7	6	thioredoxin	208864_s_at	NM_003329
MSMB	0.7	6	microseminoprotein, beta-	207430_s_at	NM_002443
CSTA	0.7	8	cystatin A (stefin A)	204971_at	NM_005213
SLC7A11	0.7	15	solute carrier family 7, member 11	209921_at	NM_014331
TFF3	0.8	7	trefoil factor 3 (intestinal)	204623_at	NM_003226
S100P	0.8	7	S100 calcium binding protein P	204351_at	NM_005980
CYP1A1	0.8	17	cytochrome P450, family 1, subfamily A,	205749_at	NM_000499
CLDN10	0.8	11	claudin 10	205328_at	NM_006984
NQO1	0.8	8	NAD(P)H dehydrogenase, quinone 1	201468_s_at	NM_000903
NQO1	0.8	10	NAD(P)H dehydrogenase, quinone 1	201467_s_at	NM_000903
CEACAM5	0.9	10	carcinoembryonic antigen	201884_at	NM_004363
AKR1C3	0.9	10	aldo-keto reductase family 1, C3	209160_at	NM_003739
NQO1	0.9	9	NAD(P)H dehydrogenase, quinone 1 alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide	210519_s_at	NM_000903
ADH7	1	14		210505_at	NM_000673
CYP1B1	1	21	cytochrome P450, family 1,	202435_s_at	NM_000104
AKR1C2	1.1	12	aldo-keto reductase family 1, C2	211653_x_at	NM_001354
AKR1C1	1.1	11	aldo-keto reductase family 1,	216594_x_at	NM_001353
AKR1C1	1.2	11	aldo-keto reductase family 1,	204151_x_at	NM_001353
MUC5AC	1.2	11	mucin 5, subtypes A and C,	214303_x_at	---
AKR1B10	1.2	22	aldo-keto reductase family 1, B10	206561_s_at	NM_004812
AKR1C2	1.3	12	aldo-keto reductase family 1,	209699_x_at	NM_001354
MUC5AC	1.3	12	mucin 5, subtypes A and C	214385_s_at	---
CYP1B1	1.6	30	cytochrome P450, family 1	202437_s_at	NM_000104
CYP1B1	1.6	25	cytochrome P450, family 1, B, 1	202436_s_at	NM_000104
ALDH3A1	1.8	18	aldehyde dehydrogenase 3 family, A1	205623_at	NM_000691

Supplemental Figure Legend

Figure S1. Comparison of microarray and RT-PCR measurements of gene expression. The measurements are shown on log-based 2 scale for gene ALDH3A1 in MDACC1.

**Ed: Actual Fig. S1
submitted with
other figure files in
required format.
Thank you**