

Supplementary Material: List of the 202 genes represented on the DualChip Human General array

Symbol	Gene	General Function	Gene bank
23kd	23KDa Highly basic protein	Protein synthesis	X56932
ACTB	Beta-Actin	Cell motility	NM_001101
ADAM1	A disintegrin and metalloproteinase	Cell migration	XM_090479
ADPRT	Polysynthetase	Cell proliferation	J03473
Aldo	Aldolase A,	Glycolysis	NM_000034
ANX1	Annexin1	Anti-inflammatory	NM_000700
AOP2	Anti-oxidant-protein2	Defense system	NM_004905
APOJ	ApolipoproteinJ	Lipid metabolism	J02908
ATM	Ataxia telangiectasia mutated	Protein kinase; Cell cycle control	U26455
BAD	BCL2-antagonist of cell death	Pro-apoptotic	NM_004322
BAX	BCL2-associated X protein	Apoptosis	NM_004324
BCL2	B-cell lymphoma2	Inhibitor of Apoptosis	NM_000633
BCLX	BCLX	Apoptosis	NM_001191
BID	BH3 interacting domain death agonist	Apoptosis	NM_001196
BIN1	Bridging integrator 1	Cell cycle control; apoptosis	NM_004305
BMP2	Bone morphogenetic protein2	Cell-cell signaling	NM_001200
BSG	Basigin	Immonoglobulin superfamily	NM_001728
CANX	Calnexin	Protein secretion; probably apoptosis	NM_001746
CASP2	Caspase2	Apoptosis	NM_001224
CASP3	Caspase3	Apoptosis	NM_004346
CASP7	Caspase7	Apoptosis	NM_001227
CASP8	Caspase8	Apoptosis	X98172
CASP9	Caspase9	Apoptosis	NM_001229
CATB	Catenin, beta 1	Cell adhesion; transduction signal	NM_001904
CAV1	Caveolin-1	Signal transduction; endocytosis; potocytosis	NM_001753
CCNA1	CyclinA1	Cell cycle control	NM_003914
CCNB1	CyclinB1	Cell cycle control	NM_031966
CCND1	CyclinD1	Cell cycle control	NM_053056
CCND2	CyclinD2	Cell cycle control	NM_001759
CCND3	CyclinD3	Cell cycle control	NM_001760
CCNE1	CyclinE	Cell cycle control	NM_001238
CCNF	CyclinF	Cell cycle control	NM_001761
CCNH	CyclinH	Cell cycle control	NM_001239
CDC42	Cell division cycle42	Cell cycle	NM_001791
CDH1	Cadherine1/E-cadherine	calcium-dependent glycoprotein; Cell adhesion	NM004360
CDH11	Cadherine11	calcium-dependent glycoprotein; Cell adhesion	NM_001797
CDH13	Cadherine13	calcium-dependent glycoprotein; Cell adhesion	U59289
CDK2	Cyclin dependent kinase2	Cell proliferation	NM_001798
CDK4	Cyclin dependent kinase4	Cell proliferation	U79269
CDK6	Cyclin dependent kinase6	Cell proliferation	NM001259
CENPF	Mitosisin	DNA replication	U30872
CKB	Creatin-kinase-brain	Energy homeostasis	M16364
cmyc	c-myc	Oncogenesis	NM012333
COL6A2	CollagenVI-alpha2	Extracellular matrix	NM_001849
COX2	Prostaglandin endoperoxidase synthase 2	Cell migration/angiogenesis	NM_000963
CROC1A	Ubiquitin (E2 variant1)	Cell cycle control	NM_003349
CSF1	Colony stimulating factor 1	Cell proliferation	M37435
CSF1R	Colony stimulating factor 1 receptor	Cell proliferation	NM_005211
CTGF	Connective tissue growth factor	Cell proliferation	U14750
CTSB	CathepsinB	Intracellular degradation and turnover of proteins	NM_001904
CTSD	CathepsinD	Intracellular degradation and turnover of proteins	NM_001904

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CTSL	CathepsinL	Intracellular degradation and turnover of proteins	NM_001912
cyc	Cyclophilin 33A	Synthesis proteins	AF042385
DHFR	Dihydrofolate reductase	Cell cycle	NM_000791
DP1	Transcription factor Dp-1	Cell cycle control	NM_007111
DP2	Transcription factor Dp-2	Cell cycle control	NM_006286
E2F2	E2F transcription factor2	Cell cycle control; apoptosis	NM_004091
E2F3	E2F transcription factor3	Cell cycle control	NM_001949
E2F4	E2F transcription factor4	Cell cycle control	NM_001950
EGFR	Epidermal growth factor receptor	Control of cell growth and differentiation	NM_005228
EGR1	Early growth response1	Transcriptional regulator	NM_001964
EGR3	Early growth response3	Transcription factor	NM_004430
EIF4	Eukaryotic translation initiation	Protein synthesis	NM_001968
EMS1	EMS1	Regulation of cell adhesion	NM_005231
ESR2	Estrogen receptor beta	Cell-cell signaling	X99101
ETFB	Electron-transfert-flavoprotein-beta	Energy generation	NM_001985
FES	Feline sarcoma oncogene	Oncogenesis	X52192
FGF2	fibroblast growth factor 2	Cell proliferation	NM_002006
FGF8	Fibroblast growth factor 8	Cell proliferation	U36223
FGFR	Fibroblast growth factor receptor 1	Cell proliferation	NM_000604
FHIT	Fragile histidine triad gene	Purine metabolism	NM_002012
FN1	Fibronectin	Cell adhesion/migration	X02761
FOS	c-fos	Oncogenesis	NM_005252
G6PD	Glucose-6-phosphate-dehydrogenase	Energetic metabolism	NM_000402
GADD153	DNA damage inducible transcript3	Cell stress	S40706
GAPD	Glyceraldehyde-3-phosphate-dehydrogenase	Glycolysis	NM002046
GLB1	Beta1-galactosidase	Glycoprotein degradation	M34423
GPX	Glutathione peroxidase	Defense system	M21304
GRB2	Growth factor receptor-bound protein2	Cell proliferation control	NM_002086
GSN	Gelsoline	Cell mobility	X04412
GSTPi	Glutathione S-transferase pi	Detoxification	NM_000852
H2B/S	Histone2b member B/S consensus	Cell cycle	NM_080593
H3FF	Histone3 member F consensus	Cell cycle	NM_003533
H4FM	Histone4 member M consensus	Cell cycle	NM_003495
HK1	Hexokinase	Glycolytic enzyme	M75126
HMOX	Heme-oxygenase	Defense system	NM_002133
HPRT	Hypoxanthine phosphoribosyltransferase 1	HouseKeeping gene	NM_000194
HSP27	Heat shock 27kD protein1	Defense system	AB020027
HSP40	Heat shock 40kD protein1	Defense system	D49547
HSP70	Heat shock 70kD protein1	Defense system	AB023420
HSP90-a	Heat shock 90kD protein1 alpha	Defense system	X15183
HSP90-b	Heat shock 90kD protein 1, beta	Defense system	NM_007355
ICAM-1	Intracellular adhesion molecule1	Cell adhesion	J03132
IGF1	Insulin like growth factor1	Cell proliferation control	X57025
IGF1R	Insulin like growth factor1 receptor	Cell proliferation; anti-apoptotic	NM_000875
IGFBP2	Insulin growth factor binding protein2	Signal transduction; disrupts binding of IGF-1	M35410
IGFBP3	Insulin growth factor binding protein3	Signal transduction; disrupts binding of IGF-1	X64875
IGFBP5	Insulin growth factor binding protein5	Signal transduction; disrupts binding of IGF-1	M65062
IL10	Interleukin 10	Immune response	NM_000572
IL11	Interleukin 11	Inflammatory responses	NM_000641
IL11RA	Interleukin 11-receptor-alpha	Signal transduction	U32324
IL15	Interleukin 15	Immune response	NM_000585
IL1A	Interleukin1 alpha	Inflammatory responses	NM000575
IL1B	Interleukin1 beta	Inflammatory and immune responses	M15330
IL4	Interleukin 4	Immune response	NM_000589

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IL6	Interleukin 6	Immune response	NM000600
IL8	Interleukin 8	Cell adhesion/migration	NM_000584
ING1	Inhibitor of growth family, member 1	Cell proliferation	NM005537
ITGA5	Integrin alpha5	Cell adhesion	NM_002205
ITGA6	Integrin alpha6	Cell adhesion	NM_000210
ITGB1	Integrin beta1	Cell adhesion	NM_002211
JNK1	Mitogen activated protein kinase8	Stress response	L26318
JNK2	Mitogen activated protein kinase9	Stress response	U09759
JNK3	mitogen-activated protein kinase 10	Stress response	NM_002753
JUND	Jun D proto-oncogene	Transcription factor	NM_005354
Ki-67	Ki-67	Cell proliferation	NM_002417
KNSL5	Mitotic-kinesin-like-protein1	Cell proliferation	NM_004856
KNSL6	Mitotic-centromere-associated-kinesin	Cell proliferation	NM_006845
MAX	MAX protein	Cell proliferation control	NM_002382
MDH	Malate dehydrogenase 1	Citric acid cycle	NM_005917
MDM2	MDM2	Cell cycle control	NM_002392
MEK1	Mitogen activated protein kinase kinase1	Cell proliferation control	L11284
MEK2	Mitogen activated protein kinase kinase2	Cell mobility	NM_030662
MMP1	Matrix metalloproteinase 1	Degradation of extracellular matrix	NM_002421
MMP11	Matrix metalloproteinase 11	Degradation of extracellular matrix	NM_005940
MMP12	Matrix metalloproteinase 12	Degradation of extracellular matrix	NM_002426
MMP13	Matrix metalloproteinase 13	Degradation of extracellular matrix	NM_002427
MMP14	Matrix metalloproteinase 14	Degradation of extracellular matrix	NM_004995
MMP15	Matrix metalloproteinase 15	Degradation of extracellular matrix	NM_002428
MMP2	Matrix metalloproteinase 2	Degradation of extracellular matrix	NM_004530
MMP3	Matrix metalloproteinase 3	Degradation of extracellular matrix	NM_002422
MMP7	Matrix metalloproteinase 7	Degradation of extracellular matrix	NM_002423
MMP9	Matrix metalloproteinase 9	Degradation of extracellular matrix	NM_004994
MSRA	Methionine-sulfoxide-reductase A/peptide	Stress response	AF183420
MYBL2	b-myb	Cell cycle control	X13293
NCK1	NCK adaptor protein1	Cell cycle	NM_006153
NCOR1	Nuclear receptor co-repressor 1	Transcription	NM_006311
NCOR2	Nuclear receptor co-repressor 2	Cell cycle	NM_006312
ODC	Ornithine decarboxylase1	Cell cycle & proliferation	NM_002539
ON	Osteonectin	Ossification	NM_003118
OPN	Osteopontin	Ossification	NM_000582
p16	Cyclin dependent kinase inhibitor 2A	Cell cycle control	L27211
p21	Cyclin dependent kinase inhibitor 1A	Cell cycle control	U03106
p27	Cyclin dependent kinase inhibitor 1B	Cell cycle control	NM_004064
p35	Cyclin dependent kinase5 regulatory subunit1	Cell proliferation	NM_003885
p53	Tumor protein p53	regulation of cell cycle	AF307851
p57	Cyclin dependent kinase inhibitor 1C	regulation of cell cycle	NM_000076
PAI1	Plasminogen activator inhibitor type1	Fibrinolysis; Cell cycle	M14083
PAI2	Plasminogen activator inhibitor type2	Fibrinolysis; Cell cycle	J02685
PAK	P21 activated kinase1	Cell mobility/morphology	NM_002576
PCNA	Proliferating cell nuclear antigen	Control of DNA replication	NM002592
PGR	Progesterone receptor	Cell-cell signaling	NM_000926
PKM2	pyruvate-kinase-muscle 2	Energetic metabolism	M26252
PLA2	Phospholipase A2	Signal transduction	M86400
PLAU	Urokinase	Regulation of cell-surface plasminogen activation	NM_002658
PLK	Polo-like kinase	Cell cycle control	U01038
POLA2	Polymerase alpha	Cell cycle	NM_002689
PSMD11	26S-proteasome-subunit-p44.5	Protein degradation	AB003102
RAF1	c-raf-1	Oncogenesis	X03484

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RB1	Retinoblastome1	regulator of transcription	NM_000321
RRM1	Ribonucleotide-reductase M1	DNA synthesis	NM_001033
S100A	S100 calcium binding protein A4	Cell cycle control	NM_002961
S100A8	Calprotectin	Inflammatory response	NM_002964
S9	Ribosomal Proteine S9	Protein synthesis	NM_001013
SDS	Serine Dehydratase		NM_006843
SHC	p66-SHC transforming protein1	Cell proliferation; apoptosis	U73377
SM22	Transgelin	Muscle development	M95787
SMAD1	SMAD1	Signal transduction	U59423
SMAD2	SMAD2	Signal transduction	U68018
SMAD3	SMAD3	Signal transduction	U68019
SMAD4	SMAD4	Signal transduction	U44378
SOD2	Superoxide dismutase2	Stress response	NM_000636
SPRR1B	Cornifin	Cell structure	NM_003125
TB10	Thymosin beta 10	Cell motility	NM_021103
TBXA2R	Thromboxane-A2-receptor	Respiration	D38081
TERT	Telomerase-reverse transcriptase	DNA synthesis	AF018167
TFAP2A	Transcription factor AP2-alpha	Morphology	M36711
TFAP2B	Transcription factor AP2-beta	Neurogenesis; morphology	X95694
TFAP2C	Transcription factor AP2-gamma	Morphology	NM_003222
TFR	Transferrin receptor	Transporter	NM_003234
TGFBR2	TGF-beta-R2	Cell proliferation	D50683
TIMP1	Tissue inhibitor of metalloproteinase1	Inhibitor of degradation of extracellular matrix	NM_003254
TIMP2	Tissue inhibitor of metalloproteinase2	Inhibitor of degradation of extracellular matrix	NM_003255
TK1	Thymidine-kinase	DNA synthesis	NM_003258
TNFa	Tumor necrosis factor alpha	Apoptosis and proinflammatory response	NM_000594
TOP2	Topoisomerase2-alpha	DNA replication	NM_001067
TPA	Plasminogen activator tissue	Cell migration and tissue remodeling	NM_000930
TRF1	Telomeric repeat binding factor1	Control of mitosis	U40705
TSP1	Thrombospondin 1	Cell adhesion	NM_003246
TSP2	Thrombospondin 2	Cell adhesion	NM_003247
Tubu	Alpha-tubulin	cytoskeletal	NM006082
TYMS	Thymidylate-synthetase	DNA synthesis	NM_001071
UBE2C	Ubiquitin conjugating enzyme E2C/ubiquitin carrier protein	Cell proliferation	NM_007019
uPAR	Urokinase-receptor	Regulation of cell-surface plasminogen activation	NM_002659
VEGF	Vascular endothelial growth factor	Angiogenesis; Cell proliferation	AF022375
VEGFB	Vascular endothelial growth factor B	Angiogenesis; Cell proliferation	U43368
VEGFC	Vascular endothelial growth factor C	Angiogenesis; Cell proliferation	NM_005429
VEGFD	Vascular endothelial growth factor D	Angiogenesis; Cell proliferation	NM_004469
VEGFR1	Vascular endothelial growth factor receptor1	Angiogenesis; Cell proliferation	NM_002019
VEGFR2	Vascular endothelial growth factor receptor2	Angiogenesis; Cell proliferation	NM_002253
VEGFR3	Vascular endothelial growth factor receptor3	Angiogenesis; Cell proliferation	NM_002020
VWF	Factor von willebrand	Role in blood coagulation	NM_000552