		Gene Expression AI? log2 (Tumor/Normal)					Allelic Imbalance (AI) Patient 8 Patient 33 Patient 51												neighbor α	adhesion/E
	8	AI? 33	51	log2	(Tumor/Nor	mal) 51	1->2	Patient 8	2->2	1->2	2 -> 1	2->2	1->2	2 -> 1	2->2	1			<u>.</u>	푹
DST	÷	33	31	-1.3	0.1	0.0	1-92	2->1 L->F	2-32	Syn, I/NSS	2-31	2-32	G->R	2-91	2-32	chr6		56,596,090	1	~
	-	-	-					271	0 (0)	3411, 1,1133			G AIX							
PERP	•	•	•	0.7	0.0	1.7			3 (2)			Syn, R->P			3	chr6		138,461,949	4	4
FAT2	0	•	•	0.1	0.3	1.9						Syn		S->L, I	I->M, Syn	chr5		150,896,272	4	4
MALAT1	•	•	•	0.3	-0.6	0.3			NC			NC 3, K->R, S-			NC	chr11	+	65,026,161	4	×
DSC3	•	•	•	-0.9	0.5	1.1			3			>T K->R		3 (3)	. (1.00	chr18	-	26,850,414	· ·	1
GJB2	-	-	:	-0.9	-0.7	1.3		Syn, I		W->C		K->R		1. 3	I/NSS	chr11 chr13	+	35,163,759 19.662.360		3
CTNND1	-	-	- 5	1.2	0.0	1.0		1, 3		W->C		1, 3		1, 3		chr11	+	57,314,519	ż	7
CCND1	-	-	ŏ	3.7	-0.1	1.2		3	3			3				chr11	+	69,171,738	Ĭ	×
DSP				-0.1	-0.3	1.6		I->F. Svn				Syn				chr6	+	7,509,407	2	7
	_	_	_					, , ,				-,								
PKP1 S100A2	-	- 5	-	0.0	0.6	1.5		3	I, I/NSS I/NSS				I/NSS			chr1 chr1		199,543,971 151,802,569	×	×
3100712	•	_	•	0.1	0.7	1.3			1)1133				171433			Cimi		131,002,303	_	^
SKP1	0	•	•	0.2	-0.6	-0.4						5			5	chr5	-	133,530,302	Î	×
NCRNA00084	•	•	0	0.4	0.1	-0.3			NC (5)	NC		NC (3)				chr11	+	64,956,406	4	×
POLR2A	0	•	•	-0.5	1.2	0.4					Syn			3		chr17	+	7,343,614	4	×
KRT14				-0.5	0.4	0.9			Syn, I/NSS						I/NSS	chr17	_	36,994,366	Ŷ	×
	Ξ	_	-	-0.6	-2.1	-2.0									9.100					
H19 RUNX1	•	•		-0.6	-2.1 1.0	-2.0	111		!!!		NC					chr11 chr21	-	1,974,311 35.212.716	Ĩ.	×
KUNX1 KRT1	-	- 3	•	0.6	-3.0	1.5	3	-						6		chr12	-	51,357,622	×	×
KRII	•		•	0.8	-3.0	1.5	3							Syn		cnr12	-	51,357,622	-	~
MAP4	0	•	•	-1.5	-0.1	-1.0						3			3	chr3	-	47,897,033	Î	×
KRT6A	•	•	0	-1.8	-0.1	0.9		3 (2), I (3)				I, 3				chr12	-	51,170,336	4	×
HSPG2		•	•	0.1	0.4	-1.1						R->H			Syn	chr1	-	22,078,830	><	4
HNRNPH1		•	٠	-0.1	-0.5	-0.3						- 1			_	chr5		178,978,556	4	×
SQSTM1		•	•	0.3	0.9	-0.7						Syn (2)			Syn (2)	chr5	+	179,189,065	4	×
HLA-A	•	0	•	-0.3	0.3	0.5			Syn, F->L			3				chr6	+	30,019,971	Ŷ	×
NDST1	•	0	•	-0.3	0.0	-0.7		Syn							Syn	chr5	+	149,892,916	Ŷ	×
EIF4G1	0	•	•	0.8	1.2	0.6						Syn	A->P	E->G		chr3	+	185,525,445	×	×
EPN2	•	•	0	-0.8	0.3	0.4		- 1				3				chr17	+	19,130,952	4	×
PITX1		•	0	-0.9	-0.7	-2.8		Syn	_			Syn				chr5		134,394,593	4	×××
ALDH3A1	•	•	0	-0.9	1.4	-2.4		3	Syn			D->G				chr17	-	19,585,628	4	×
CTSB		•	•	0.4	1.4	-0.5						3			3, L->V	chr8	-	11,750,249	Ŷ	×
ACTG1	•	0	•	0.5	0.4	0.7			V->I						3	chr17	-	77,093,008	×	×
ZFP36L1	•		•	-0.5	-0.4	0.1			3						G->S	chr14	-	68,326,833	×	×
ANXA1	0	•	•	-3.5	-2.2	-1.0						I/NSS			T->K	chr9	+	74,965,864	Ŷ	><
SH3PXD2A		•	•	-0.2	0.6	0.4						3			Syn	chr10		105,474,464	Ĭ.	×
PHKB		•		-0.2	0.3	0.4			I (2)			- 1				chr16	+	46,172,823	Ĭ	XXXXXXXX
SRRM2 TMFM107	9	•	•	-0.4	0.9	-0.1						Syn	R->Q			chr16	+	2,751,872	Ţ	×
TMEM107 HLA-DRB6	:	=	:	-0.9	0.2	-1.2			3		3	NC			NC	chr17 chr6	-	8,018,730 32.632.112	٠.	~
HLA-DRB6 ALKBH5	-	=	-	-0.9	1.6	-1.2 0.4						NC 3		3	NC	chr6 chr17	+	32,632,112 18,040,792	×	0
BAT2L	-	-	ĭ	-0.9	1.6	0.4						R->L		3	3	chr17		18,040,792	-	0
CDKN2AIPNL	0	ě	ĕ	1.2	-0.3	-0.2										chr5		133,610,065		2
AHNAK	•	-	ě	-0.2	0.0	0.5	Syn							A->E		chr11	-	62,014,250	×	8
COL1A1	•	0	•	4.5	1.1	-1.1									I/NSS	chr17	-	45,625,227		×
COL4A1		•	•	2.3	0.4	-1.5				A->T, Syn						chr13	_	109,678,404	î	×
	_	-	0							,.,.		2.1								
FAM129B ITGB4	-	=	- =	-1.2 1.1	-0.2 4.2	-0.7 2.5						3, I Syn (2)				chr9 chr17	+	129,344,264 71,248,932	1	×
KRT13	-	-	ĭ	-7.2	-1.7	-6.4			G->A	_		5yri (2)	Syn			chr17	+	71,248,932 36,913,075	ģ	×
	Ξ	_	Ξ					3, I (2),					37							
KRT5 PID1	:		:	-0.5 -1.4	-0.3 -3.5	1.6 -3.6		Syn (2)	S->G						I/NSS (2)	chr12 chr2		51,197,568 229,720,617	₹.	×
PLEC1	•	•	ĭ	1.7	1.7	1.0							Syn			chr2 chr8		145,076,101	×	^
TGM3	•	•	- 5	-3.9	-2.3	-7.1	3			3			Jyn			chr20	+	2,247,169	X	
. 51415	_	-	_						-					-				,,	-	

member of the plakin protein family of adhesion junction plaque proteins. some isoforms are expressed in epithelial tissue, anchoring keratin-containing intermediate

Drosophila and human homolog is a tumor suppressor gene

metastasis associated lung adenocarcinoma transcript 1 (non-protein coding) (MALAT1), non-coding RNA.

a calcium-dependent glycoprotein that is a member of the desmocollin subfamily, cell adhesion and desmosome formation.

adhesion molecule involved in migration, cell fusion and resportion in osteoclasts that also plays a role in cellular metastasis.

forms gap junctions; may play a role in epididymal development

norms gap junications, may pay a time in equivaryina uneversioners.

member of the Armadillo protein family, which function in adhesion between cells and signal transduction. Multiple translation initiation codons regulatory subunit of CDK4 or CDK6; involved in regulation of the G1/S transition of the cell cycle

Desmosomes are intercellular junctions that tightly link adjacent cells. Desmoplakin is an obligate component of functional desmosomes that anchors intermediate filic plakophilin 1 and plakoglobin. The C-terminus of desmoplakin binds with intermediate filiaments. In the mid-region of desmoplakin, a coiled-coiled rod domain is respu paraneoplastic pemphigus.

may be involved in molecular recruitment and stabilization during desmosome formation.

a member of the \$100 family of proteins containing 2 EF-hand calcium-binding motifs. \$100 proteins are involved in the regulation of cell cycle progression and differe

component of SCF complexes, which are composed of this protein cullin 1, a ring-box protein, and one member of the F-box family of proteins. This protein binds directly degradation by the proteosome. Specific F-box proteins recognize different target protein(s), and many specific SCF substrates have been identified including regulato

largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The product of this gene contains a carboxy terminal phosphorylated in actively transcribing RNA polymerase. In addition, this subunit, in combination with several other polymerase subunits, forms the DNA binding dom member of the keratin family, the most diverse group of intermediate filaments. a type I keratin, is usually found as a heterotetramer with two keratin 5 molecules, a simplex. At least one pseudogene has been identified at 17p12-p11.

putative transcription factor that may be involved in skeletal muscle gene regulation; human homolog is associated with a form of acute myeloid leukemia

a major non-neuronal microtubule-associated protein. This protein contains a domain similar to the microtubule-binding domains of neuronal microtubule-associated interphase microtubule catastrophe promotion. Cyclin B was found to interact with this protein, which targets cell division cycle 2 (CDC2) kinase to microtubules. The

The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of he

Heparan sulfate proteoglycan is a major component of basement membranes, where the molecule may be involved in the stabilization of other molecules as well as b

interacts with PKC-zeta and GABA(C) receptors to form ternary postsynaptic complex in the retina HLA-A belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). Cla

enzyme that catalyzes the transfer of sulfate from 3'-phosphoadenosine 5'-phosphosulfate to the nitrogen of glucosamine in heparan sulfate

a component of the protein complex EIF4F, which is involved in the recognition of the mRNA cap, ATP-dependent unwinding of 5'-terminal secondary structure, and ra may mediate membrane dynamics at the cell surface

paired-like homeobox transcription factor; transcription regulator of pituitary genes; genetic marker for nascent Rathke's pouch, precursor of anterior and intermedia aldehyde dehydrogenase that is expressed during hepatocarcinogenesis

lysosomal nentidase Actins are highly conserved proteins that are involved in various types of cell motility, and maintenance of the cytoskeleton. The beta and gamma actins co-exist in m

nonmuscle cells.

putative nuclear transcription factor; member of the TIS11 family of early response genes; may regulate the response to growth factors [RGD]. plays a role in regulation of insulin secretion; may inhibit phopsholipase A2

expression in regenerating muscle may be correlated with that of other phosphorylase kinase subunits

Homo sapiens major histocompatibility complex, class II, DR beta 6 (pseudogene) (HLA-DRB6), non-coding RNA.

CDKN2A interacting protein N-terminal like AHNAK nucleoprotein isoform 3 alpha 1 type I collagen preproprotein

alpha 1 type IV collagen preproprotein

dystonin isoform 1e precursor

PERP, TP53 apoptosis effector FAT tumor suppressor homolog 2

metastasis associated lung adenocarcinoma transcript 1

desmocollin 3 isoform Dsc3a preproprotein

gap junction protein, beta 2

desmoplakin isoform I

plakophilin 1 \$100 calcium binding protein A2

S-phase kinase-associated protein 1

0

polymerase (RNA) II (DNA directed) polypeptide

keratin 14 runt-related transcription factor 1

keratin complex 2, basic, gene 1

microtubule-associated protein 4

keratin 6A heparan sulfate proteoglycan 2

heterogeneous nuclear ribonucleoprotein H1 sequestosome 1 isoform 1

major histocompatibility complex, class I, A

N-deacetylase/N-sulfotransferase (heparan

eukaryotic translation initiation factor 4

epsin 2 isoform b

paired-like homeodomain 1 aldehyde dehydrogenase 3A1 cathensin B preproprotein

actin, gamma, cytoplasmic 1

zinc finger protein 36, C3H type-like 1

annexin A1

SH3 and PX domains 2A phosphorylase kinase, beta serine/arginine repetitive matrix 2

transmembrane protein 107 isoform 1 major histocompatibility complex, class II, DR beta 6 alkB, alkylation repair homolog 5

HLA-B associated transcript 2-like

hypothetical protein LOC362115 integrin beta 4 keratin 13

keratin 5

plectin 1

phosphotyrosine interaction domain containing 1 transglutaminase 3 precursor

pro-alpha1 chains of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective t product claims or type UNA. Ehlers-Danies who depressed on the same and one alphae claims. Type it is a monitoring congenitoring congenitoring syndrome type UNA. Ehlers-Danies syndrome type. Caffey Disease and Idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, w protuberans, resulting from unregulated expression of the growth factor.

the major type IV alpha collagen chain of basement membranes. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head

beta subunit of integrin alpha6/beta4 which is a cell surface receptor for laminin; involved in hemidesmosome formation.

cytoskeletal intermediate filament protein: provides a cortical scaffold to primary spermatocytes

cytoskeletal cross-linking protein: interacts with all three major groups of cytoskeletal proteins, actin filaments, microtubules, and intermediate filaments Transglutaminases are enzymes that catalyze the crosslinking of proteins by epsilon-gamma glutamyl lysine isopeptide bonds. involved the later stages of cell envelope