Appendx 1. Differential gene details

Name	Gene	Annotation
1	AVPR1A	Vasopressin V1a receptor; Receptor for arginine vasopressin. The activity of this receptor is mediated by G proteins which activate a phosphatidyl- inositol-calcium second messenger system.
2	BIRC3	Baculoviral IAP repeat-containing protein 3;Multi functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, mitogenic kinase signaling and cell proliferation, as well as cell invasion and metastasis.
3	CDKN1A	Cyclin-dependent kinase inhibitor 1;May be involved in p53/TP53 mediated inhibition of cellular proliferation in response to DNA damage.Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression.
4	CLEC4D	C-type lectin domain family 4 member D; Functions as an endocytic receptor. May be involved in antigen uptake at the site of infection, either for clearance of the antigen, or for processing and further presentation to T cells.
5	CLEC4E	C-type lectin domain family 4 member E; C-type lectin that functions as cell-surface receptor for a wide variety of ligands such as damaged cells, fungi and mycobacteria. Plays a role in the recognition of pathogenic fungi, such as Candida albicans. The detection of mycobacteria is via trehalose 6,6'-dimycolate (TDM), a cell wall glycolipid.
6	CR1	Complement receptor type 1;Mediates cellular binding of particles and immune complexes that have activated complement.
7	DISP1	Protein dispatched homolog 1;Functions in hedgehog (Hh) signaling. Regulates the release and extracellular accumulation of cholesterol-modified hedgehog proteins and is hence required for effective production of the Hh signal (By similarity).
8	ELL2	RNA polymerase II elongation factor ELL2; Elongation factor component of the super elongation complex (SEC), a complex required to increase the catalytic rate of RNA polymerase II transcription by suppressing transient pausing by the polymerase at multiple sites along the DNA.
9	FAM171A1	Protein FAM171A1; Family with sequence similarity 171 member A1
10	FCN1	Ficolin-1; Extracellular lectin functioning as a pattern- recognition receptor in innate immunity. Binds the sugar moieties of pathogen-associated molecular patterns (PAMPs) displayed on microbes and activates the lectin pathway of the complement system.

11	FPR1	fMet-Leu-Phe receptor; High affinity receptor for N-formyl-methionyl peptides (fMLP),which are powerful neutrophil chemotactic factors.
12	HPGD	15-hydroxyprostaglandin dehydrogenase [NAD(+)]; Prostaglandin inactivation. Contributes to the regulation of events that are under the control of prostaglandin levels.
13	IL18RAP	Interleukin-18 receptor accessory protein; Within the IL18 receptor complex, does not mediate IL18- binding, but involved in IL18-dependent signal transduction, leading to NF-kappa-B and JNK activation
14	IL1R2	Interleukin-1 receptor type 2; Non-signaling receptor for IL1A, IL1B and IL1RN. Reduces IL1B activities. Serves as a decoy receptor by competetive binding to IL1B and preventing its binding to IL1R1.
15	MT1M	Metallothionein-1M; Metallothioneins have a high content of cysteine residues that bind various heavy metals; these proteins are transcriptionally regulated by both heavy metals and glucocorticoids.
16	MTHFD2	Bifunctional methylenetetrahydrofolate dehydrogenase /cyclohydrolase, mitochondrial; Although its dehydrogenase activity is NAD-specific, it can also utilize NADP at a reduced efficiency.
17	NAMPT	Nicotinamide phosphoribosyltransferase; Catalyzes the condensation of nicotinamide with 5- phosphoribosyl-1-pyrophosphate to yield nicotinamide mononucleotide, an intermediate in the biosynthesis of NAD.
18	PHLDA1	Pleckstrin homology-like domain family A member 1; Seems to be involved in regulation of apoptosis. May be involved in detachment-mediated programmed cell death. May mediate apoptosis during neuronal development.
19	PIK3R5	Phosphoinositide 3-kinase regulatory subunit 5; Regulatory subunit of the PI3K gamma complex. Required for recruitment of the catalytic subunit to the plasma membrane via interaction with beta-gamma G protein dimers.
20	PIM1	Serine/threonine-protein kinase pim-1; Proto-oncogene with serine/threonine kinase activity involved in cell survival and cell proliferation and thus providing a selective advantage in tumorigenesis.
21	PKP2	Plakophilin-2; May play a role in junctional plaques; Armadillo repeat containing
22	QPCT	Glutaminyl-peptide cyclotransferase; Responsible for the biosynthesis of pyroglutamyl peptides. Has a bias against acidic and tryptophan residues adjacent to the N-terminal glutaminyl residue and a lack of importance of chain length after the second residue.

23	S100A8	Protein S100-A8; S100A8 is a calcium- and zinc-binding protein which plays a prominent role in the regulation of inflammatory processes and immune response. It can induce neutrophil chemotaxis and adhesion.
24	SAMD5	Sterile alpha motif domain containing 5
25	SAMSN1	SAM domain-containing protein SAMSN-1; Negative regulator of B-cell activation. Down-regulates cell proliferation (in vitro). Promotes RAC1-dependent membrane ruffle formation and reorganization of the actin cytoskeleton.
26	SLCO4A1	Solute carrier organic anion transporter family member 4A1; Mediates the Na(+)-independent transport of organic anions such as the thyroid hormones T3 (triiodo-L-thyronine), T4 (thyroxine) and rT3, and of estrone-3-sulfate and taurocholate.
27	SPSB1	SPRY domain-containing SOCS box protein 1; Probable substrate recognition component of a SCF-like ECS (Elongin BC-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins.
28	TBX3	T-box transcription factor TBX3; Transcriptional repressor involved in developmental processes.
29	THBS2	Thrombospondin-2; Adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions.
30	TIPARP	TCDD-inducible poly [ADP-ribose] polymerase; Poly [ADP-ribose] polymerase using NAD(+) as a substrate to transfer ADP-ribose onto glutamic acid residues of a protein acceptor; repeated rounds of ADP-ribosylation leads to the formation of poly(ADPribose) chains on the protein, thereby altering the function of the target protein.
31	TNFAIP6	Tumor necrosis factor-inducible gene 6 protein; Possibly involved in cell-cell and cell-matrix interactions during inflammation and tumorigenesis
32	TNFRSF10D	Tumor necrosis factor receptor superfamily member 10D; Receptor for the cytotoxic ligand TRAIL. Contains a truncated death domain and hence is not capable of inducing apoptosis but protects against TRAIL-mediated apoptosis.
33	UAP1	UDP-N-acetylhexosamine pyrophosphorylase; Converts UTP and GlcNAc-1-P into UDP-GlcNAc, and UTP and GalNAc-1-P into UDP-GalNAc.
34	VNN1	Pantetheinase; Amidohydrolase that hydrolyzes specifically one of the carboamide linkages in D-pantetheine thus recycling pantothenic acid (vitamin B5) and releasing cysteamine; Belongs to the carbon-nitrogen hydrolase superfamily.