

PHARMACEUTICAL COMPOSITIONS

Technical Field

The present invention concerns compositions which are therapeutically active, against some types of cancer.

- 5 Thus it provides the use of a composition derived from *Fagopyrum dibotrys* (or *Fagopyrum cymosum meisen*) (golden buckwheat; jinqiaomai) in a method of manufacturing a therapeutic composition.

10 Background Art

- Fagopyrum dibotrys* is one of the innumerable plants used in Chinese traditional medicine. The whole plant, particularly the rhizome, is used as a medicament, allegedly having a wide range of beneficial effects,
- 15 including antitumour activity.

- Zhang Wen-Jie et al., Acta Botanica Yunnanica, 1994, 16, 354-356 separated and identified a number of phenolic constituents. The compound obtained in highest yield (0.19%) was termed procyanidin B-2 and was assigned the
- 20 formula (1) (see Fig 1). This compound has 5 asymmetric centres (asterisked in Fig 1), so potentially there are 32 stereoisomers. No information is available about

which isomer(s) is/are present in the isolated material. They are 5,7,3',4'- tetrahydroxy flavon-3-ol C₄ - C₈ dimers. Such a dimer or dimers was previously isolated from avocado seed (T.A. Geissmann et al. Phytochem.,
5 1965, 4, 359-368).

Disclosure of Invention

We have now investigated materials derived from rhizomes of *Fagopyrum dibotrys* and have demonstrated
10 remarkable and wholly unexpected levels of activity, notably against a number of cancers. Thus in one aspect, there is provided the use of a composition as prepared by a method comprising (a) comminuting rhizomes of *Fagopyrum dibotrys*; (b) extracting the comminuted material with a
15 solvent comprising a C₁-C₄ alcohol to produce a liquid extract; and (c) removing solvent from the liquid extract to produce a dried or concentrated material; and optionally (d) fractionating the dried or concentrated material in the manufacture of a composition for
20 treatment or prevention of a cancer selected from breast cancer, liver cancer and melanoma.

Material can be obtained from plant material by extraction with a lower (C_1 - C_4) alcohol, preferably ethanol or methanol. This extract can be further purified by solvent extraction etc and by chromatography.

The material can be obtained from the plant or a compound isolated therefrom may be formulated in various ways for use in therapy. Conditions which may be treated include, for example, neoplastic diseases, particularly breast cancer.

The compounds provided may be administered to individuals. Administration is preferably in a "therapeutically effective amount", this being sufficient to show benefit to a patient. Such benefit may be at least amelioration of at least one symptom. The actual amount administered, and rate and time-course of administration, may depend on the nature and severity of what is being treated. Prescription of treatment, e.g. decisions on dosage, can be within the responsibility of general practitioners and other medical doctors.

A compound may be administered alone or in combination with other treatments, either simultaneously or sequentially dependent upon the condition to be treated.

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Pharmaceutical compositions prepared according to the method disclosed may comprise, in addition to the active ingredient, a pharmaceutically acceptable excipient, carrier, buffer, stabiliser or other materials well known to those skilled in the art. Such materials should be non-toxic and should not interfere with the efficacy of the active ingredient. The precise nature of the carrier or other material may depend on the route of administration, which may be oral, or by injection, e.g. cutaneous, subcutaneous, or intravenous.

Pharmaceutical compositions for oral administration may be in tablet, capsule, powder or liquid form. A tablet may comprise a solid carrier or an adjuvant. Liquid pharmaceutical compositions generally comprise a liquid carrier such as water, petroleum, animal or vegetable oils, mineral oil or synthetic oil. Physiological saline solution, dextrose or other saccharide solution or glycols such as ethylene glycol,

propylene glycol or polyethylene glycol may be included.

A capsule may comprise a solid carrier such a gelatin.

For intravenous, cutaneous or subcutaneous injection, or injection at the site of affliction, the active ingredient may be in the form of a parenterally acceptable aqueous solution which is pyrogen-free and has suitable pH, isotonicity and stability. Those of relevant skill in the art are well able to prepare suitable solutions using, for example, isotonic vehicles such as Sodium Chloride Injection, Ringer's Injection, Lactated Ringer's Injection. Preservatives, stabilisers, buffers, antioxidants and/or other additives may be included, as required.

15 Brief Description of Drawings

Fig 1 shows the formula of procyanidin B-2.

Figs 2-4 are graphs showing activity against breast cancer

Figs 5 and 6 are pie charts giving a functional breakdown of up-regulated and down-regulated genes, respectively.

5

Modes for Carrying out the Invention

Production of Extract

Method A

10 Samples of Fagopyrum dibotrys were obtained from parts of China: Yun Nan Province; Long Quan District of Sichuan Province, Liang Shan District of Sichuan Province, and Chong Qing County of Sichuan Province. The material from Liang Shan appeared to be of the best
15 quality and analysis showed it had by far the highest content of ketones (7.65% by weight), and a significantly higher tannin content (2.90% by weight). Therefore this material was used for further study.

Fagopyrum dibotrys rhizomes were broken into small
20 particles, and 2400kg of this particulate material was extracted with 70% ethanol 12 times using a total of 28,800kg. The extract was concentrated by evaporation to give 1896 litres, 2184 kg. Half of this concentrate was further concentrated by evaporation under reduced

pressure, which gave 278kg of syrup. The other part was spray dried, which gave dry powder (80kg). The syrup could be converted into a dry solid by heating in an oven. The solid could then be powdered.

- 5 The powder (spray or oven dried) contained 4.63% water, 35.35% ketones and 46.62% tannins, all by weight.

Method B

This is the result of further work on the
10 development of a pilot plant.

1. Pre-processing (done in Sichuan Province, P.R.C)

- 1.1. Harvest the herb of Rhizoma Fagopyri
Dibotryis, remove the stem and rootlet, clean and wash,
dry at temperature below 60°C to a moisture content of
15 between 9%~13% (for an actual example, the moisture content was 11.97% prior to extraction).

1.2. Chop the dried clean herb into particulate to achieve the diameter of less than 2mm.

2. Extraction of herb

- 20 2.1 Using four 50 litre percolators, fill each percolator with 10kg of the raw material.

2.2 Fill in 180L 70% ethanol for the first time at 60°C and the flow rate of 300L/h. It took 12h to macerate less than 60°C. Then make a circulation at 60°C

for 0.5h. After that it took 15 minutes to discharge the liquid extract.

2.3 Fill in 300L 70% ethanol for the second time at 60°C and the flow rate of 300L/h. Then it took 1h to
5 discharge the liquid extract.

3. Evaporation

Fill the evaporator with liquid extract, condense it
10 at 50~60°C to the relative density at 1.06~1.10
(50~60°C).

14.99kg concentrated extract was obtained and-
employed for drying.

4. Vacuum Drying

15 Half of the concentrated extract (7.495kg), was
mixed with 0.565kg maltodextrin and 0.055kg colloidal
anhydrous silica, then dried at 50~60°C in the vacuum
oven for 6h to the moisture content of 2.93%. A total of
2.53kg dry material was obtained of which 20% is 0.506kg
20 excipient and 80% (2.024kg) being the dry herbal extract.

Purification of Procyanidin B-2

Powder (2kg) obtain by Method A was extracted with
technical ethanol. After warming at 65°C for 2 hrs, the

solution was filtered. 13.2g of mixture was obtained after removal of the solvent from the filtrate. The herb was macerated again overnight and warmed for 2 hrs at 65°C and filtered. 8.2g of brown residue was obtained from the second filtrate. TLC analysis of the two extractions showed that the constituents of them are essentially the same.

For the purification of Procyanidin B-2 with chromatography, we found that by using ETHYL ACETATE: ACETIC ACID: WATER = 450: 10: 10 as eluent, most of the non-polar components could be removed. Three belts in the column were observed during the washing, the first one is green; the second one is red and the third one is brown. After the brown belt was washed down, Procyanidin B-2 was detected in the fractions collected. The relatively pure fractions were found to be suitable to view the component on TLC board, but not pure enough to run an NMR spectrum.

The detailed purification of Procyanidin B-2 on a column was carried out as follows: 100g of the crude extract was dissolved in 1 L water with strong stirring. The dark solution was extracted twice with ethyl acetate (2 x 500 ml). A brown glass (10.6g) was obtained after removal of the solvent under vacuum. This step of

purification could possibly remove most of the salts from the extraction.

120g of silica gel was loaded into a column with hexane to reach the length of 60cm. The brown glass
5 (10.6g) was dissolved in 15ml ethyl acetate and added into the column. The column was washed with ETHYL ACETATE: ACETIC ACID: WATER = 700: 10: 10 to get a mixture. In order to recover the silica gel, the column was washed with 500ml water, followed by 500ml methanol
10 and then 500ml ethyl acetate. The mixture obtained from the first run was loaded into this column again and eluted by the same solvent system. However, the fractions collected are still not pure enough. The 3.6g mixture obtained was a pale yellow glass after being
15 vacuum dried.

The mixture (3.6g) was purified again by repeating the above mentioned procedures to get 0.29g Procyanidin B-2. On TLC plate, its purity seems quite good. In its NMR spectrum, we could observe the resonances reported by
20 Zhang et al. (op.cit.) but some impurities which cannot be identified are also present. Its Mass spectrum shows the molecular ion at m/z 577.2 ($[M-H]$) as the highest peak. Another peak at m/z 289.2 suggests that the fragment is the ion generated by breaking the C4-C8" bond
25 of Procyanidin B-2.

An alternative method to purify Procyanidin B-2 is to elute the column with ethyl acetate/hexane as a gradient solvent system (increasing the volume ratio from 1/1 to 2.5/1) to remove most of the components that are less polar than Procyanidin B-2 (The washing is slow yet efficient). The mixture containing Procyanidin B-2 is collected and purified further with the first method.

The detailed spectroscopic data of Procyanidin B-2 are summarised as follow: $UV\lambda^{MeOH}$ (1g): 208(4.96), 281(3.95); FAB-MS m/z : 577[M-H]⁻; ¹H-NMR [(CD₃)₂CO]; δ 2.73(1H, br, J = 16.0Hz), 2.89(1H, dd J = 16.0, 4.0 Hz), 3.98 (1H, m), 4.32(1H, m), 4.71(1H, s), 4.98(1H, br), 5.05(1H, br), 5.93-6.03(3H, m), 6.64-6.96(6H, m).

15 Biological Activity

We have found that material extracted from *Fagopyrum dibotrys* possesses significant anti-tumour activity. In this study, it is named "MPCB". It was found to inhibit the production of matrix metalloproteinases from tumour cells, particularly IV collagenases. We have found that the invasion of B16-BL6 melanoma cells through the basement membrane was inhibited by MPCB in a concentration-dependent manner. We also investigated the therapeutic effects of multiple oral administration of MPCB on mice inoculated with B16-BL6 melanoma cells. The

administration of MPCB also significantly reduced the metastasis incidence as compared to untreated controls.

In an acute toxic test of the drug on mice, the calculated LD50 is 61g/kg; 95% confidence interval 48.73g/kg to 77.02g/kg. According to the standard physiology index ratio between mouse and human beings, 5 the calculated LD50 is 183.78g/man(60kg); 95% confidence interval 146.19 to 213.06g/man. Based on this result, the dosage of 10g/day is only 5.4% of the LD dosage. In addition, it was demonstrated that at low doses, as used in this study, indices such as WBC, Platelet, RBC, RDW 10 and MCHC did not display significant changes. A sample of the drug was submitted to the Health Sciences Authority for analysis and no significant toxic compounds such as heavy metals were detected. The method of extraction and processing of the herb has received 15 certification from the Sichuan Health Authorities.

Test were made of the purified B-2 compound on human breast cancer cells grown in tissue culture. A marked reduction in the number of cells in the treated samples was apparent.

The experiment was repeated using human liver cancer cells. Once again it was visually evident that the number of cancer cells was substantially reduced by the drug.

Therapeutic Activity Against Breast Cancer

1x10⁷ human MDA-231 breast cancer cells (200μl of
5 2.5x10⁷ cells/ml) were inoculated subcutaneously into 48
female SCID mice (4-6 weeks old, weight 15±4g). In 8-14
days, the sizes of the tumor of the recipient mice ranged
from 0.3-0.5 cm in diameter (when determined by vernier

calipers). At this time, the mice were divided into four treatment groups as follows:

12 SCID mice were given distilled water (control group);

5 12 SCID mice were given 1.45g/kg (1/5 LD₅₀) of the MPCB extract (Test group 1);

12 SCID mice were given 0.84g/kg of the MPCB extract (Test group 2);

10 12 SCID mice were given 0.39g/kg of the MPCB extract (Test group 3).

MPCB herbal extract as used in the preceding experiment (aqueous suspension, 0.20g/ml) was administered orally to the SCID mice and the development of tumor was recorded.

Following the injection of the MDA-231 human breast cancer cells till the end of the experiment, no behavioral and physiological abnormality was observed in both the control and test groups.

20 It was observed that in comparison to the control group of which the tumor developed progressively, tumor growth in all the three test groups of which the tumor-bearing SCID mice were given the MPCB extract, the rate of tumor growth was much reduced. The data are presented in Figs 2-4. Hence, it was therefore concluded that MPCB

has a therapeutic effect towards the growth of human breast cancer in the SCID mice model.

Gene Activity

The mechanism of action at the gene level was investigated using Affymetrix gene chips. Tables 1-4

- 5 list genes up-regulated at days 2 and 5, and down-regulated at days 2 and 5

Human A549 lung cancer cells in SCID mice were treated with the MPCB extract. These genes are differentially up-regulated or down-regulated after subtracting out their level of expression in untreated tumor cells. We have classified these genes according to their reported functions (see Figs 5 and 6). This information allows one to easily formulate the roles of these genes in the various known biochemical pathways. For example, when 16 of the most highly up-regulated and down-regulated differentially expressed genes are employed, they could be fitted into various known pathways. In addition, when we fit some of these genes into one of the reported pathways for oncogenesis, we could demonstrate that many of these genes are down-regulate. All these data support strongly the anti-oncolytic function of the MPCB extract.

Table 1: genes up-regulated at day 2

	Gene Name	Gene Description
5	200000_s_at	PRP8 pre-mRNA processing factor 8 homolog (yeast)
	200023_s_at	eukaryotic translation initiation factor 3, subunit 5 (epsilon, 47kD)
	200044_at	splicing factor, arginine/serine-rich 9
	200047_s_at	YY1 transcription factor
10	200055_at	TAF10 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 30 kD
	200069_at	squamous cell carcinoma antigen recognised by T cells 3
	200071_at	sin3-associated polypeptide, 18kD
	200083_at	ubiquitin specific protease 22
15	31874_at	growth arrest-specific 2 like 1
	32032_at	clathrin, heavy polypeptide-like 1 [BLAST]
	32137_at	jagged 2
	33132_at	cleavage and polyadenylation specific factor 1, 160kD subunit
20	33322_i_at	stratifin
	34764_at	activity-dependent neuroprotector
	36553_at	acetylserotonin O-methyltransferase-like
	37462_i_at	splicing factor 3a, subunit 2, 66kD
	37652_at	ribosomal protein L13a
25	38157_at	dom-3 homolog 2 (C. elegans)
	39248_at	aquaporin 3
	39729_at	peroxiredoxin 2 [BLAST]
	39835_at	SET binding factor 1
	40465_at	fatty acid desaturase 2
30	40472_at	peroxisomal farnesylated protein
	41047_at	chromosome 9 open reading frame 16
	41858_at	RAB30, member RAS oncogene family [BLAST]
	44111_at	vacuolar protein sorting 33B (yeast)
	44654_at	ribosomal protein S4-like 2
35	44696_at	protocadherin beta 17 pseudogene
	44783_s_at	hairy/enhancer-of-split related with YRPW motif 1
	46665_at	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4C
	47069_at	Rho GTPase activating protein 8
40	47083_at	prion protein interacting protein
	50314_i_at	chromosome 20 open reading frame 27
	52164_at	chromosome 11 open reading frame 24
	53071_s_at	hypothetical protein FLJ22222
	59625_at	nucleolar protein 3 (apoptosis repressor with CARD domain)
45	55872_at	solute carrier family 12, (potassium-chloride transporter) member 5
	60474_at	chromosome 20 open reading frame 42
	64474_g_at	RNA binding motif protein 15
50	65884_at	mannosidase, alpha, class 1B, member 1
	91703_at	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)
	91816_f_at	CUB and Sushi multiple domains 1
55	200593_s_at	gb:BC003621.1 /DEF=Homo sapiens, heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A), clone MGC:1992, mRNA, complete cds. /FEA=mRNA /PROD=heterogeneous nuclear ribonucleopro ...
	200618_at	LIM and SH3 protein 1
	200619_at	splicing factor 3b, subunit 2, 145kD

- 200623_s_at calmodulin 3 (phosphorylase kinase, delta)
 200637_s_at protein tyrosine phosphatase, receptor type, F
 200655_s_at calmodulin 1 (phosphorylase kinase, delta)
 5 200675_at CD81 antigen (target of antiproliferative antibody 1)
 200702_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 24 [BLAST]
 200707_at protein kinase C substrate 80K-H
 200710_at acyl-Coenzyme A dehydrogenase, very long chain
 200743_s_at ceroid-lipofuscinosis, neuronal 2, late infantile
 (Jansky-Bielschowsky disease)
 10 200747_s_at nuclear mitotic apparatus protein 1
 200766_at cathepsin D (lysosomal aspartyl protease)
 200768_s_at methionine adenosyltransferase II, alpha
 200810_s_at cold inducible RNA binding protein
 200811_at cold inducible RNA binding protein
 15 200816_s_at platelet-activating factor acetylhydrolase, isoform Ib,
 alpha subunit (45kD)
 200827_at procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine
 hydroxylase, Ehlers-Danlos syndrome type VI)
 200864_s_at RAB11A, member RAS oncogene family
 20 200867_at zinc finger protein 313
 200875_s_at nucleolar protein 5A (56kD with KKE/D repeat)
 200884_at creatine kinase, brain
 200891_s_at signal sequence receptor, alpha (translocon-associated
 protein alpha)
 25 200899_s_at meningioma expressed antigen 5 (hyaluronidase)
 200903_s_at S-adenosylhomocysteine hydrolase
 200914_x_at kinectin 1 (kinesin receptor)
 200918_s_at signal recognition particle receptor ('docking protein')
 200950_at actin related protein 2/3 complex, subunit 1A (41 kD)
 30 200959_at fusion, derived from t(12;16) malignant liposarcoma
 200965_s_at actin binding LIM protein
 200967_at peptidylprolyl isomerase B (cyclophilin B)
 200968_s_at peptidylprolyl isomerase B (cyclophilin B)
 200980_s_at pyruvate dehydrogenase (lipoamide) alpha 1
 35 200990_at gb:NM_005762.1 /DEF=Homo sapiens KRAB-associated protein
 1 (TIF1B), mRNA. /FEA=mRNA /GEN=TIF1B /PROD=KRAB-associated protein 1
 /DB_XREF=gi:5032178 /UG=Hs.228059 KRAB-associated protein 1 /FL=gb:B
 ...
 40 201003_x_at gb:NM_003349.2 /DEF=Homo sapiens ubiquitin-conjugating
 enzyme E2 variant 1 (UBE2V1), transcript variant 2, mRNA. /FEA=mRNA
 /GEN=UBE2V1 /PROD=ubiquitin-conjugating enzyme E2 variant 1, isoform b
 / ...
 201008_s_at thioredoxin interacting protein
 201011_at ribophorin I
 45 201015_s_at junction plakoglobin
 201024_x_at Consensus includes gb:BG261322 /FEA=EST
 /DB_XREF=gi:12771138 /DB_XREF=est:602373079F1 /CLONE=IMAGE:4484563
 /UG=Hs.158688 KIAA0741 gene product /FL=gb:AB018284.1 gb:AF078035.1
 gb:NM_015904.1
 50 201034_at L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain
 201037_at phosphofructokinase, platelet
 201052_s_at proteasome (prosome, macropain) inhibitor subunit 1
 (PI31)
 201054_at heterogeneous nuclear ribonucleoprotein A0 [BLAST]
 55 201064_s_at poly(A) binding protein, cytoplasmic 4 (inducible form)
 201065_s_at general transcription factor II, i [BLAST]
 201074_at SWI/SNF related, matrix associated, actin dependent
 regulator of chromatin, subfamily c, member 1
 201079_at synaptogyrin 2

- 201082_s_at dynactin 1 (p150, glued homolog, Drosophila)
 201102_s_at phosphofructokinase, liver
 201113_at Tu translation elongation factor, mitochondrial
 201128_s_at ATP citrate lyase
 5 201129_at gb:NM_006276.2 /DEF=Homo sapiens splicing factor,
 arginineserine-rich 7 (35kD) (SFRS7), mRNA. /FEA=mRNA /GEN=SFRS7
 /PROD=splicing factor, arginineserine-rich 7 (35kD)
 /DB_XREF=gi:6857827 /UG=Hs. ...
 201160_s_at cold shock domain protein A
 10 201161_s_at cold shock domain protein A
 201176_s_at archain 1
 201183_s_at chromodomain helicase DNA binding protein 4
 201188_s_at inositol 1,4,5-triphosphate receptor, type 3
 201189_s_at inositol 1,4,5-triphosphate receptor, type 3
 15 201190_s_at phosphatidylinositol transfer protein
 201198_s_at proteasome (prosome, macropain) 26S subunit, non-ATPase,
 1
 201209_at histone deacetylase 1
 201225_s_at serine/arginine repetitive matrix 1
 20 201244_s_at v-raf-1 murine leukemia viral oncogene homolog 1
 201247_at sterol regulatory element binding transcription factor 2
 201255_x_at HLA-B associated transcript 3
 201264_at coatamer protein complex, subunit epsilon
 201271_s_at RNA binding protein (autoantigenic, hnRNP-associated with
 25 lethal yellow)
 201296_s_at golgi associated, gamma adaptin ear containing, ARF
 binding protein 1
 201310_s_at Kruppel-like factor 4 (gut)
 201313_at gb:NM_001975.1 /DEF=Homo sapiens enolase 2, (gamma,
 30 neuronal) (ENO2), mRNA. /FEA=mRNA /GEN=ENO2 /PROD=enolase 2, (gamma,
 neuronal) /DB_XREF=gi:5803010 /UG=Hs.146580 enolase 2, (gamma,
 neuronal) / ...
 201315_x_at interferon induced transmembrane protein 2 (1-8D)
 201331_s_at signal transducer and activator of transcription 6,
 35 interleukin-4 induced
 201356_at splicing factor 3a, subunit 1, 120kD
 201360_at cystatin C (amyloid angiopathy and cerebral hemorrhage)
 201362_at polymerase (RNA) III (DNA directed) polypeptide F (39 kD)
 201363_s_at polymerase (RNA) III (DNA directed) polypeptide F (39 kD)
 40 201373_at plectin 1, intermediate filament binding protein, 500kD
 201377_at synaptosomal-associated protein, 91 kD homolog (mouse)
 201379_s_at tumor protein D52-like 2
 201393_s_at insulin-like growth factor 2 receptor
 201413_at hydroxysteroid (17-beta) dehydrogenase 4
 45 201440_at fatty acid desaturase 2
 201448_at TIA1 cytotoxic granule-associated RNA binding protein
 201454_s_at Consensus includes gb:AW055008 /FEA=EST
 /DB_XREF=gi:5920711 /DB_XREF=est:wy98c09.x1 /CLONE=IMAGE:2556592
 /UG=Hs.293007 aminopeptidase puromycin sensitive /FL=gb:NM_006310.1
 50 201459_at RuvB-like 2 (E. coli)
 201482_at quiescin Q6
 201489_at peptidylprolyl isomerase F (cyclophilin F)
 201498_at ubiquitin specific protease 7 (herpes virus-associated)
 201526_at ADP-ribosylation factor 5
 55 201545_s_at poly(A) binding protein, nuclear 1
 201555_at MCM3 minichromosome maintenance deficient 3 (S.
 cerevisiae)
 201564_s_at singed-like (fascin homolog, sea urchin) (Drosophila)
 201569_s_at POM121 membrane glycoprotein-like 1 (rat)

- 201585_s_at splicing factor proline/glutamine rich (polypyrimidine tract binding protein associated)
- 201598_s_at inositol polyphosphate phosphatase-like 1
- 5 201612_at aldehyde dehydrogenase 9 family, member A1
- 201618_x_at GPAA1P anchor attachment protein 1 homolog (yeast)
- 201620_at membrane-bound transcription factor protease, site 1
- 201623_s_at aspartyl-tRNA synthetase
- 201624_at aspartyl-tRNA synthetase
- 10 201639_s_at cleavage and polyadenylation specific factor 1, 160kD subunit
- 201641_at bone marrow stromal cell antigen 2
- 201643_x_at chromosome 5 open reading frame 7
- 201645_at tenascin C (hexabrachion)
- 201650_at keratin 19
- 15 201669_s_at myristoylated alanine-rich protein kinase C substrate
- 201670_s_at myristoylated alanine-rich protein kinase C substrate
- 201675_at A kinase (PRKA) anchor protein 1
- 201679_at tripartite motif-containing 33
- 201689_s_at tumor protein D52
- 20 201690_s_at tumor protein D52
- 201697_s_at DNA (cytosine-5-)-methyltransferase 1
- 201704_at ectonucleoside triphosphate diphosphohydrolase 6 (putative function)
- 201714_at tubulin, gamma 1
- 25 201719_s_at erythrocyte membrane protein band 4.1-like 2
- 201726_at ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R)
- 201746_at tumor protein p53 (Li-Fraumeni syndrome)
- 201747_s_at scaffold attachment factor B
- 30 201790_s_at 7-dehydrocholesterol reductase
- 201795_at lamin B receptor
- 201818_at brain and acute leukemia, cytoplasmic
- 201828_x_at CAAX box 1
- 201833_at histone deacetylase 2
- 35 201841_s_at heat shock 27kD protein 1
- 201853_s_at cell division cycle 25B
- 201885_s_at diaphorase (NADH) (cytochrome b-5 reductase)
- 201889_at family with sequence similarity 3, member C
- 201928_at plakophilin 4
- 40 201937_s_at aspartyl aminopeptidase
- 201970_s_at nuclear autoantigenic sperm protein (histone-binding)
- 202039_at TGFBI-induced anti-apoptotic factor 1
- 202043_s_at spermine synthase
- 202060_at Rho guanine nucleotide exchange factor (GEF) 10
- 45 202066_at protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 1
- 202097_at nucleoporin 153kD
- 202104_s_at spastic paraplegia 7, paraplegin (pure and complicated autosomal recessive)
- 50 202106_at golgi autoantigen, golgin subfamily a, 3
- 202115_s_at ATP-binding cassette, sub-family A (ABC1), member 12
- 202117_at Rho GTPase activating protein 1
- 202119_s_at copine III
- 202127_at myotubularin related protein 2
- 55 202130_at sudD suppressor of bimD6 homolog (A. nidulans)
- 202136_at S-adenosylhomocysteine hydrolase-like 1
- 202139_at aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase)
- 202151_s_at CD2 antigen (cytoplasmic tail) binding protein 2

- 202159_at phenylalanine-tRNA synthetase-like
 202161_at protein kinase C-like 1
 202171_at zinc finger protein 161
 202173_s_at zinc finger protein 161
 5 202180_s_at major vault protein
 202182_at GCN5 general control of amino-acid synthesis 5-like 2 (yeast)
 202189_x_at polypyrimidine tract binding protein 1 [BLAST]
 10 202219_at solute carrier family 6 (neurotransmitter transporter, creatine), member 8
 202220_at calsyntenin 1
 202227_s_at jumping translocation breakpoint
 202228_s_at dynein, axonemal, intermediate polypeptide 1
 202230_s_at calcium homeostasis endoplasmic reticulum protein
 15 202240_at polo-like kinase (Drosophila)
 202241_at growth differentiation factor 11
 202251_at PRP4 pre-mRNA processing factor 4 homolog (yeast)
 202275_at glucose-6-phosphate dehydrogenase
 202289_s_at transforming, acidic coiled-coil containing protein 2
 20 202308_at sterol regulatory element binding transcription factor 1
 202320_at general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD)
 202344_at heat shock transcription factor 1
 202357_s_at B-factor, properdin [BLAST]
 25 202384_s_at Treacher Collins-Franceschetti syndrome 1
 202424_at mitogen-activated protein kinase kinase 2
 202430_s_at phospholipid scramblase 1
 202446_s_at phospholipid scramblase 1
 202464_s_at 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3
 30 202478_at immunoglobulin kappa joining 1
 202510_s_at tumor necrosis factor, alpha-induced protein 2
 202534_x_at dihydrofolate reductase
 202536_at EGF-like-domain, multiple 6
 202540_s_at 3-hydroxy-3-methylglutaryl-Coenzyme A reductase
 35 202561_at tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase
 202569_s_at MAP/microtubule affinity-regulating kinase 3
 202580_x_at forkhead box M1
 202589_at thymidylate synthetase
 40 202605_at glucuronidase, beta
 202686_s_at AXL receptor tyrosine kinase
 202715_at carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
 202718_at insulin-like growth factor binding protein 2 (36kD)
 45 202757_at rotatin
 202804_at ATP-binding cassette, sub-family C (CFTR/MRP), member 1
 202809_s_at down-regulated in colon cancer 1
 202812_at glucosidase, alpha; acid (Pompe disease, glycogen storage disease type II)
 50 202836_s_at mannosidase, alpha, class 1A, member 2
 202853_s_at RYK receptor-like tyrosine kinase
 202870_s_at CDC20 cell division cycle 20 homolog (S. cerevisiae)
 202890_at Consensus includes gb:AW242297 /FEA=EST
 /DB_XREF=gi:6576051 /DB_XREF=est:xm96b11.x1 /CLONE=IMAGE:2692029
 55 /UG=Hs.146388 microtubule-associated protein 7 /FL=gb:NM_003980.1
 202917_s_at S100 calcium binding protein A8 (calgranulin A)
 202929_s_at D-dopachrome tautomerase
 202934_at hexokinase 2 [BLAST]

- 202936_s_at SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal)
- 202951_at serine/threonine kinase 38
- 202962_at kinesin family member 13B
- 5 202979_s_at ras homolog gene family, member U
- 202998_s_at lysyl oxidase-like 2
- 203021_at secretory leukocyte protease inhibitor (antileukoprotease) [BLAST]
- 203062_s_at heparan sulfate 2-O-sulfotransferase 1
- 10 203065_s_at caveolin 1, caveolae protein, 22kD [BLAST]
- 203067_at cysteine and glycine-rich protein 3 (cardiac LIM protein)
- 203098_at chromodomain protein, Y chromosome-like
- 203102_s_at mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase
- 15 203103_s_at HIV TAT specific factor 1
- 203108_at retinoic acid induced 3
- 203109_at ubiquitin-conjugating enzyme E2M (UBC12 homolog, yeast)
- 203124_s_at solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2
- 20 203126_at inositol(myo)-1(or 4)-monophosphatase 2
- 203137_at M-phase phosphoprotein 1
- 203153_at interferon-induced protein with tetratricopeptide repeats 1
- 203155_at SET domain, bifurcated 1
- 25 203156_at A kinase (PRKA) anchor protein 11
- 203184_at fibrillin 2 (congenital contractural arachnodactyly)
- 203189_s_at NADH dehydrogenase (ubiquinone) Fe-S protein 8 (23kD) (NADH-coenzyme Q reductase)
- 203195_s_at nucleoporin 98kD
- 30 203198_at cyclin-dependent kinase 9 (CDC2-related kinase) [BLAST]
- 203219_s_at adenine phosphoribosyltransferase
- 203224_at chromosome 20 open reading frame 38
- 203234_at uridine phosphorylase
- 203244_at peroxisome receptor 1
- 35 203252_at gb:NM_005851.1 /DEF=Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R), mRNA. /FEA=mRNA /GEN=DOC-1R /PROD=tumor suppressor deleted in oral cancer-related1 /DB_XREF=gi:503166 ...
- 203262_s_at DNA segment on chromosome X (unique) 9928 expressed sequence
- 40 203276_at lamin B1
- 203282_at glucan (1,4-alpha-), branching enzyme 1 (glycogen branching enzyme, Andersen disease, glycogen storage disease type IV)
- 203286_at Rho-related BTB domain containing 3
- 45 203338_at protein phosphatase 2, regulatory subunit B (B56), epsilon isoform
- 203386_at chromosome 21 open reading frame 108
- 203391_at gb:NM_004470.1 /DEF=Homo sapiens FK506-binding protein 2 (13kD) (FKBP2), mRNA. /FEA=mRNA /GEN=FKBP2 /PROD=FK506-binding protein 2 (13kD) /DB_XREF=gi:4758381 /UG=Hs.227729 FK506-binding protein 2 ...
- 50 203417_at microfibrillar-associated protein 2
- 203439_s_at stanniocalcin 2
- 203477_at collagen, type XV, alpha 1
- 55 203482_at zinc finger protein 334
- 203495_at syndecan 3 (N-syndecan)
- 203564_at Fanconi anemia, complementation group G
- 203612_at bystin-like [BLAST]
- 203683_s_at vascular endothelial growth factor B

- 203690_at ariadne homolog 2 (Drosophila)
 203701_s_at chromosome 20 open reading frame 13
 203739_at zinc finger protein 217
 203767_s_at steroid sulfatase (microsomal), arylsulfatase C, isozyme
 5 S
 203775_at solute carrier family 25, member 13 (citrin)
 203802_x_at LUC7-like (S. cerevisiae)
 203818_s_at splicing factor 3a, subunit 3, 60kD
 203825_at bromodomain containing 3
 10 203828_s_at zinc finger protein 206
 203831_at [BLAST]
 203848_at A kinase (PRKA) anchor protein 8
 203867_s_at toll interacting protein
 203919_at transcription elongation factor A (SII), 2
 15 203955_at GRB2-associated binding protein 2
 203974_at synapsin III
 203976_s_at chromatin assembly factor 1, subunit A (p150)
 204022_at abhydrolase domain containing 1
 204030_s_at schwannomin interacting protein 1
 20 204058_at malic enzyme 1, NADP(+)-dependent, cytosolic
 204133_at cyclin E2
 204142_at SRY (sex determining region Y)-box 6
 204143_s_at SRY (sex determining region Y)-box 6
 204178_s_at RNA binding motif protein 14
 25 204224_s_at GTP cyclohydrolase 1 (dopa-responsive dystonia)
 204238_s_at secretagogin, EF-hand calcium binding protein
 204274_at Consensus includes gb:AA812215 /FEA=EST
 /DB_XREF=gi:2881826 /DB_XREF=est:ob84g01.s1 /CLONE=IMAGE:1338096
 /UG=Hs.9222 estrogen receptor binding site associated, antigen, 9
 30 /FL=gb:BC005249.1 gb:AF0 ...
 204275_at small optic lobes homolog (Drosophila)
 204295_at surfeit 1
 204367_at Sp2 transcription factor
 204372_s_at KH-type splicing regulatory protein (FUSE binding protein
 35 2)
 204383_at clathrin, heavy polypeptide-like 1
 204401_at potassium intermediate/small conductance calcium-
 activated channel, subfamily N, member 4
 204409_s_at eukaryotic translation initiation factor 1A, Y chromosome
 40 204480_s_at chromosome 9 open reading frame 16
 204520_x_at bromodomain containing 1
 204521_at cleavage and polyadenylation specific factor 1, 160kD
 subunit
 204531_s_at breast cancer 1, early onset
 45 204584_at L1 cell adhesion molecule (hydrocephalus, stenosis of
 aqueduct of Sylvius 1, MASA (mental retardation, aphasia, shuffling
 gait and adducted thumbs) syndrome, spastic paraplegia 1)
 204617_s_at aquaporin 9
 204641_at NIMA (never in mitosis gene a)-related kinase 2
 50 204698_at interferon stimulated gene (20kD)
 204717_s_at solute carrier family 29 (nucleoside transporters),
 member 2
 204805_s_at H1 histone family, member X
 204808_s_at transmembrane protein 5
 55 204839_at membrane-bound transcription factor protease, site 2
 204849_at transcription factor-like 5 (basic helix-loop-helix)
 204857_at MAD1 mitotic arrest deficient-like 1 (yeast)
 204858_s_at endothelial cell growth factor 1 (platelet-derived)
 204875_s_at GDP-mannose 4,6-dehydratase

- 204908_s_at B-cell CLL/lymphoma 3
 205000_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide, Y chromosome
 205053_at primase, polypeptide 1 (49kD)
 5 205068_s_at paternally expressed 10
 205081_at cysteine-rich protein 1 (intestinal)
 205155_s_at spectrin, beta, non-erythrocytic 2
 205199_at carbonic anhydrase IX
 205202_at protein-L-isoaspartate (D-aspartate) O-methyltransferase
 10 205353_s_at prostatic binding protein
 205382_s_at D component of complement (adipsin)
 205412_at acetyl-Coenzyme A acetyltransferase 1 (acetoacetyl Coenzyme A thiolase)
 205436_s_at H2A histone family, member X
 15 205449_at cleavage and polyadenylation specific factor 1, 160kD subunit
 205501_at phosphodiesterase 10A
 205516_x_at neuronal guanine nucleotide exchange factor
 205527_s_at gem (nuclear organelle) associated protein 4
 20 205534_at BH-protocadherin (brain-heart) [BLAST]
 205546_s_at tyrosine kinase 2
 205552_s_at 2',5'-oligoadenylate synthetase 1 (40-46 kD)
 205565_s_at Friedreich ataxia
 205583_s_at NIMA (never in mitosis gene a)- related kinase 11
 25 205640_at aldehyde dehydrogenase 3 family, member B1
 205658_s_at small nuclear RNA activating complex, polypeptide 4, 190kD
 205780_at BCL2-interacting killer (apoptosis-inducing) -
 205961_s_at gb:NM_004682.1 /DEF=Homo sapiens PC4 and SFRS1
 30 interacting protein 2 (PSIP2), mRNA. /FEA=mRNA /GEN=PSIP2 /PROD=PC4 and SFRS1 interacting protein 2 /DB_XREF=gi:4758869 /UG=Hs.306179 PC4 and SFRS1 ...
 205967_at H4 histone family, member G
 206023_at neuromedin U
 35 206095_s_at gb:NM_006625.2 /DEF=Homo sapiens TLS-associated serine-arginine protein 1 (TASR1), mRNA. /FEA=mRNA /GEN=TASR1 /PROD=TLS-associated serine-arginine protein 1 /DB_XREF=gi:12056474 /UG=Hs.288038 TL ...
 206102_at tripartite motif-containing 14
 40 206200_s_at annexin A11
 206332_s_at interferon, gamma-inducible protein 16
 206499_s_at chromosome condensation 1
 206785_s_at killer cell lectin-like receptor subfamily C, member 2
 206809_s_at heterogeneous nuclear ribonucleoprotein A3
 45 207002_s_at pleiomorphic adenoma gene-like 1
 207076_s_at argininosuccinate synthetase [BLAST]
 207122_x_at sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2
 207140_at alkaline phosphatase, intestinal
 50 207165_at hyaluronan-mediated motility receptor (RHAMM)
 207169_x_at discoidin domain receptor family, member 1
 207170_s_at ribosomal protein L36
 207196_s_at UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5
 55 207414_s_at paired basic amino acid cleaving system 4
 207564_x_at O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
 207622_s_at ATP-binding cassette, sub-family F (GCN20), member 2

- 207714_s_at serine (or cysteine) proteinase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)
- 207723_s_at killer cell lectin-like receptor subfamily C, member 3
- 207760_s_at nuclear receptor co-repressor 2
- 5 207761_s_at component of oligomeric golgi complex 4
- 207824_s_at MYC-associated zinc finger protein (purine-binding transcription factor)
- 207831_x_at deoxyhypusine synthase
- 207842_s_at zyxin [BLAST]
- 10 207847_s_at mucin 1, transmembrane
- 208072_s_at diacylglycerol kinase, delta (130kD)
- 208132_x_at HLA-B associated transcript 2
- 208149_x_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, *S. cerevisiae*) [BLAST]
- 15 208156_x_at gb:NM_031308.1 /DEF=Homo sapiens epiplakin 1 (EPPK1), mRNA. /FEA=mRNA /GEN=EPPK1 /PROD=epiplakin 1 /DB_XREF=gi:13876385 /FL=gb:NM_031308.1
- 208159_x_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, *S. cerevisiae*)
- 20 208248_x_at amyloid beta (A4) precursor-like protein 2
- 208270_s_at arginyl aminopeptidase (aminopeptidase B)
- 208313_s_at splicing factor 1
- 208336_s_at glycoprotein, synaptic 2
- 208407_s_at catenin (cadherin-associated protein), delta 1
- 25 208436_s_at interferon regulatory factor 7
- 208617_s_at protein tyrosine phosphatase type IVA, member 2
- 208621_s_at villin 2 (ezrin)
- 208625_s_at eukaryotic translation initiation factor 4 gamma, 1
- 208636_at actinin, alpha 1
- 30 208647_at farnesyl-diphosphate farnesyltransferase 1
- 208655_at cyclin I
- 208676_s_at chromosome 20 open reading frame 54
- 208700_s_at transketolase (Wernicke-Korsakoff syndrome)
- 208703_s_at amyloid beta (A4) precursor-like protein 2
- 35 208704_x_at amyloid beta (A4) precursor-like protein 2
- 208705_s_at 5'-nucleotidase, cytosolic IA
- 208706_s_at 5'-nucleotidase, cytosolic IA
- 208713_at protein tyrosine phosphatase, non-receptor type 21
- 208714_at NADH dehydrogenase (ubiquinone) flavoprotein 1 (51kD)
- 40 208719_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17 (72kD)
- 208729_x_at major histocompatibility complex, class I, B
- 208773_s_at baculoviral IAP repeat-containing 6 (apollon)
- 208774_at casein kinase 1, delta
- 208788_at transgene insertion 2, Craig B Thompson
- 45 208794_s_at SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4
- 208798_x_at F-box only protein 21
- 208804_s_at splicing factor, arginine/serine-rich 6
- 208809_s_at gb:AL136632.1 /DEF=Homo sapiens mRNA; cDNA DKFZp564G182 (from clone DKFZp564G182); complete cds. /FEA=mRNA /GEN=DKFZp564G182 /PROD=hypothetical protein /DB_XREF=gi:12052789 /UG=Hs.173685 hypothe
- 50 ...
- 208820_at PTK2 protein tyrosine kinase 2
- 208858_s_at WD repeat domain 7
- 55 208863_s_at splicing factor, arginine/serine-rich 1 (splicing factor 2, alternate splicing factor)
- 208880_s_at chromosome 20 open reading frame 14
- 208890_s_at plexin B2
- 208891_at dual specificity phosphatase 6

- 208892_s_at dual specificity phosphatase 6
 208906_at ligand of numb-protein X
 208912_s_at gb:BC001362.1 /DEF=Homo sapiens, 2,3-cyclic nucleotide 3
 5 phosphodiesterase, clone MGC:2262, mRNA, complete cds. /FEA=mRNA
 /PROD=2,3-cyclic nucleotide 3 phosphodiesterase /DB_XREF=gi:12655028
 /UG ...
 208923_at cytoplasmic FMRI interacting protein 1
 208928_at P450 (cytochrome) oxidoreductase
 208930_s_at interleukin enhancer binding factor 3, 90kD
 10 208931_s_at interleukin enhancer binding factor 3, 90kD
 208938_at papillary renal cell carcinoma (translocation-associated)
 208968_s_at aldo-keto reductase family 1, member B10 (aldose
 reductase)
 208978_at cysteine-rich protein 2
 15 208984_x_at RNA binding motif protein 10
 208988_at F-box and leucine-rich repeat protein 11
 208998_at uncoupling protein 2 (mitochondrial, proton carrier)
 209007_s_at solute carrier family 17 (sodium-dependent inorganic
 phosphate cotransporter), member 7
 20 209029_at COP9 constitutive photomorphogenic homolog subunit 7A
 (Arabidopsis)
 209044_x_at splicing factor 3b, subunit 4, 49kD
 209052_s_at Wolf-Hirschhorn syndrome candidate 1
 209053_s_at Wolf-Hirschhorn syndrome candidate 1
 25 209054_s_at Wolf-Hirschhorn syndrome candidate 1
 209075_s_at bromodomain containing 4
 209112_at cyclin-dependent kinase inhibitor 1B (p27, Kip1)
 209118_s_at platelet-activating factor acetylhydrolase, isoform Ib,
 pseudogene 1
 30 209120_at nuclear receptor subfamily 2, group F, member 2
 209128_s_at squamous cell carcinoma antigen recognised by T cells 3
 209153_s_at transcription factor 3 (E2A immunoglobulin enhancer
 binding factors E12/E47)
 209156_s_at collagen, type VI, alpha 2
 35 209215_at glycoprotein A33 (transmembrane)
 209228_x_at zinc finger protein 212
 209236_at solute carrier family 23 (nucleobase transporters),
 member 1
 209262_s_at nuclear receptor subfamily 2, group F, member 6
 40 209263_x_at transmembrane 4 superfamily member 7
 209264_s_at transmembrane 4 superfamily member 7
 209265_s_at thioredoxin interacting protein
 209289_at nuclear factor I/B
 209290_s_at nuclear factor I/B
 45 209295_at tumor necrosis factor receptor superfamily, member 10b
 209318_x_at pleiomorphic adenoma gene-like 1
 209332_s_at MAX protein
 209337_at gb:AF063020.1 /DEF=Homo sapiens lens epithelium-derived
 growth factor mRNA, complete cds. /FEA=mRNA /PROD=lens epithelium-
 50 derived growth factor /DB_XREF=gi:3283351 /UG=Hs.82110 PC4 and SFRS1
 int ...
 209341_s_at inhibitor of kappa light polypeptide gene enhancer in B-
 cells, kinase beta
 209407_s_at deformed epidermal autoregulatory factor 1 (Drosophila)
 55 209409_at growth factor receptor-bound protein 10
 209449_at chromosome 6 open reading frame 28
 209496_at retinoic acid receptor responder (tazarotene induced) 2
 209505_at nuclear receptor subfamily 2, group F, member 1
 209581_at HRAS-like suppressor 3

- 209607_x_at sulfotransferase family, cytosolic, 1A, phenol-
preferring, member 3
- 209623_at methylcrotonoyl-Coenzyme A carboxylase 2 (beta) [BLAST]
- 5 209630_s_at G protein-coupled receptor 37 (endothelin receptor type
B-like)
- 209675_s_at protein tyrosine phosphatase, non-receptor type 21
- 209723_at serine (or cysteine) proteinase inhibitor, clade B
(ovalbumin), member 9
- 209729_at growth arrest-specific 2 like 1
- 10 209754_s_at thymopoietin
- 209759_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 37
- 209784_s_at jagged 2
- 209832_s_at carcinoembryonic antigen-related cell adhesion molecule 1
- 209873_s_at plakophilin 3
- 15 209899_s_at DnaJ (Hsp40) homolog, subfamily C, member 8 [BLAST]
- 210010_s_at solute carrier family 25 (mitochondrial carrier; citrate
transporter), member 1
- 210026_s_at succinate dehydrogenase complex, subunit D, integral
membrane protein pseudogene 1
- 20 210028_s_at origin recognition complex, subunit 3-like (yeast)
- 210069_at carnitine palmitoyltransferase I, muscle
- 210105_s_at FYN oncogene related to SRC, FGR, YES
- 210111_s_at G protein-coupled receptor 61
- 210150_s_at laminin, alpha 5
- 25 210208_x_at HLA-B associated transcript 3
- 210336_x_at zinc finger protein 42 (myeloid-specific retinoic acid-
responsive)
- 210337_s_at ATP citrate lyase
- 210371_s_at retinoblastoma binding protein 4
- 30 210410_s_at mutS homolog 5 (E. coli)
- 210428_s_at hepatocyte growth factor-regulated tyrosine kinase
substrate
- 210448_s_at purinergic receptor P2X, ligand-gated ion channel, 5
- 210802_s_at serine protease inhibitor, Kazal type 4
- 35 210878_s_at chromosome 5 open reading frame 7
- 210891_s_at general transcription factor II, i
- 211052_s_at tubulin-specific chaperone d [BLAST]
- 211060_x_at GPAA1P anchor attachment protein 1 homolog (yeast)
[BLAST]
- 40 211065_x_at phosphofructokinase, liver [BLAST]
- 211075_s_at gb:Z25521.1 /DEF=H.sapiens integrin associated protein
mRNA, complete CDS, . /FEA=mRNA /PROD=integrin associated protein
/DB_XREF=gi:396704 /FL=gb:Z25521.1
- 45 211270_x_at polypyrimidine tract binding protein 1
- 211284_s_at granulin
- 211300_s_at tumor protein p53 (Li-Fraumeni syndrome)
- 211358_s_at neuronal guanine nucleotide exchange factor
- 211375_s_at interleukin enhancer binding factor 3, 90kD
- 211385_x_at sulfotransferase family, cytosolic, 1A, phenol-
preferring, member 2
- 50 211529_x_at HLA-G histocompatibility antigen, class I, G
- 211564_s_at KH-type splicing regulatory protein (FUSE binding protein
2)
- 211596_s_at l(3)mbt-like (Drosophila) [BLAST]
- 55 211618_s_at gb:M31008.1 /DEF=Human intestinal alkaline phosphatase
mRNA, complete cds. /FEA=mRNA /GEN=ALPI /DB_XREF=gi:178443
/FL=gb:M31008.1
- 211678_s_at maternally expressed 3 [BLAST]
- 211929_at heterogeneous nuclear ribonucleoprotein A3

- 211967_at F-box only protein 32 [BLAST]
 211986_at AHNAK nucleoprotein (desmoyokin)
 212005_at golgi associated, gamma adaptin ear containing, ARF binding protein 1
- 5 212015_x_at polypyrimidine tract binding protein 1 [BLAST]
 212028_at proline dehydrogenase (oxidase) 2
 212030_at proline dehydrogenase (oxidase) 2
 212032_s_at prostate tumor over expressed gene 1 [BLAST]
 212033_at proline dehydrogenase (oxidase) 2
- 10 212037_at pinin, desmosome associated protein
 212056_at MDN1, midasin homolog (yeast)
 212062_at ATPase, Class II, type 9A
 212067_s_at Consensus includes gb:AL573058 /FEA=EST /DB_XREF=gi:12931931 /DB_XREF=est:AL573058 /CLONE=CSODI014YC05 (3 prime) /UG=Hs.1279 complement component 1, r subcomponent
- 15 212068_s_at ATPase, Class V, type 10B
 212069_s_at ATPase, Class V, type 10B
 212089_at lamin A/C
 212124_at retinoic acid induced 17
- 20 212126_at regulator of G-protein signalling 8
 212137_at ATP synthase mitochondrial F1 complex assembly factor 2
 212139_at GCN1 general control of amino-acid synthesis 1-like 1 (yeast)
 212159_x_at adaptor-related protein complex 2, alpha 2 subunit
- 25 212170_at RNA binding motif protein 12
 212179_at SAM domain and HD domain, 1
 212186_at acetyl-Coenzyme A carboxylase alpha
 212203_x_at interferon induced transmembrane protein 3 (1-8U)-
 212206_s_at opsin 4 (melanopsin) [BLAST]
- 30 212218_s_at F-box only protein 9 [BLAST]
 212231_at F-box only protein 21
 212251_at nuclear autoantigenic sperm protein (histone-binding) [BLAST]
 212269_s_at MCM3 minichromosome maintenance deficient 3 (S. cerevisiae) associated protein
- 35 212285_s_at agrin
 212300_at Consensus includes gb:AL049795 /DEF=Human DNA sequence from clone RP4-622L5 on chromosome 1p34.2-36.11. Contains the gene for importin alpha 7 (karyopherin), up to six novel genes and the 5 end o ...
- 40 212307_s_at O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
 212316_at Rho-related BTB domain containing 2
 212319_at synaptosomal-associated protein, 91 kD homolog (mouse)
- 45 212361_s_at ATPase, Ca++ transporting, cardiac muscle, slow twitch 2 [BLAST]
 212396_s_at golgi associated, gamma adaptin ear containing, ARF binding protein 2
 212403_at solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21 [BLAST]
- 50 212408_at golgi associated, gamma adaptin ear containing, ARF binding protein 1
 212414_s_at capicua homolog (Drosophila)
 212429_s_at general transcription factor IIIC, polypeptide 2 (beta subunit, 110kD)
- 55 212456_at chromosome 21 open reading frame 80
 212493_s_at chromosome 20 open reading frame 30
 212498_at brain-specific angiogenesis inhibitor 3 [BLAST]

- 212499_s_at collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) [BLAST]
- 212520_s_at SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4
- 5 212547_at Consensus includes gb:N34842 /FEA=EST /DB_XREF=gi:1155984 /DB_XREF=est:yy45dl1.s1 /CLONE=IMAGE:276501 /UG=Hs.6580 Homo sapiens cDNA: FLJ23227 fis, clone CAE00645, highly similar to AF052138 Homo
- ...
- 212561_at ATPase, Class VI, type 11A
- 10 212563_at block of proliferation 1
- 212566_at ret finger protein 2
- 212589_at related RAS viral (r-ras) oncogene homolog 2
- 212612_at REST corepressor
- 212630_at chromobox homolog 3 (HP1 gamma homolog, Drosophila)
- 15 212643_at collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) [BLAST]
- 212644_s_at collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) [BLAST]
- 212647_at related RAS viral (r-ras) oncogene homolog
- 20 212685_s_at Consensus includes gb:AI608789 /FEA=EST /DB_XREF=gi:4617956 /DB_XREF=est:tw94g12.x1 /CLONE=IMAGE:2267398 /UG=Hs.52515 transducin (beta)-like 2
- 212691_at SH3-domain GRB2-like endophilin B2 [BLAST]
- 212693_at MDN1, midasin homolog (yeast)
- 25 212747_at chromosome 17 open reading frame 31 [BLAST]
- 212752_at cytoplasmic linker associated protein 1
- 212761_at transcription factor 7-like 2 (T-cell specific, HMG-box) [BLAST]
- 212762_s_at transcription factor 7-like 2 (T-cell specific, HMG-box) [BLAST]
- 30 212770_at pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 4
- 212774_at zinc finger protein 238
- 212825_at PAX transcription activation domain interacting protein 1
- 35 like
- 212887_at Sec23 homolog A (S. cerevisiae)
- 212890_at integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)
- 212900_at SEC24 related gene family, member A (S. cerevisiae)
- 40 212919_at FGD1 family, member 3 [BLAST]
- 212929_s_at fatty-acid-Coenzyme A ligase, long-chain 6
- 212936_at neurocalcin delta [BLAST]
- 212955_s_at polymerase (RNA) II (DNA directed) polypeptide I (14.5kD)
- 212973_at Consensus includes gb:AI692341 /FEA=EST
- 45 /DB_XREF=gi:4969681 /DB_XREF=est:wd85g04.x1 /CLONE=IMAGE:2338422 /UG=Hs.79886 ribose 5-phosphate isomerase A (ribose 5-phosphate epimerase)
- 212987_at F-box only protein 9
- 212993_at G protein-coupled receptor kinase 7
- 50 213026_at APG12 autophagy 12-like (S. cerevisiae)
- 213029_at son of sevenless homolog 1 (Drosophila) [BLAST]
- 213032_at son of sevenless homolog 1 (Drosophila) [BLAST]
- 213041_s_at ATP synthase, H⁺ transporting, mitochondrial F1 complex, delta subunit
- 55 213050_at activity-regulated cytoskeleton-associated protein
- 213051_at low voltage-activated T-type calcium channel alpha-1 subunit (CACNA1I)
- 213057_at ATP synthase mitochondrial F1 complex assembly factor 2 [BLAST]

- 213089_at Consensus includes gb:AU158490 /FEA=EST
/DB_XREF=gi:11020011 /DB_XREF=est:AU158490 /CLONE=PLACE3000042
/UG=Hs.303632 Human DNA sequence from clone RP11-110H4 on chromosome
5 Contains a pseudogene ...
- 5 213145_at nucleoporin 133kD [BLAST]
213154_s_at chromosome 17 open reading frame 31
213182_x_at Consensus includes gb:R78668 /FEA=EST /DB_XREF=gi:854949
/DB_XREF=est:yi74c04.r1 /CLONE=IMAGE:144966 /UG=Hs.106070 cyclin-
dependent kinase inhibitor 1C (p57, Kip2)
- 10 213212_x_at F-box only protein 21
213243_at F-box and WD-40 domain protein 1B
213263_s_at mitogen-activated protein kinase kinase 12
213294_at aldo-keto reductase family 1, member C1 (dihydrodiol
dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)
- 15 213302_at phosphoribosylformylglycinamide synthase (FGAR
amidotransferase)
213304_at mitochondrial ribosomal protein S27
213313_at nucleoporin 62kD
213318_s_at HLA-B associated transcript 3
- 20 213360_s_at chromosome 21 open reading frame 108
213378_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-
like helicase homolog, *S. cerevisiae*)
213390_at chromosome 19 open reading frame 7
213398_s_at mitochondrial ribosomal protein S22
- 25 213400_s_at transducin (beta)-like 1X-linked [BLAST]
213410_at golgi associated, gamma adaptin ear containing, ARF
binding protein 1
213428_s_at collagen, type VI, alpha 1
213460_x_at chromosome 21 open reading frame 108
- 30 213505_s_at C-type (calcium dependent, carbohydrate-recognition
domain) lectin, superfamily member 1 (cartilage-derived)
213518_at RNA binding motif protein 15
213581_at chromosome 21 open reading frame 67
213645_at Consensus includes gb:AF305057 /DEF=Homo sapiens RTS
(RTS) gene, complete cds, alternatively spliced /FEA=mRNA_1
- 35 /DB_XREF=gi:11094017 /UG=Hs.180433 rTS beta protein
213668_s_at Consensus includes gb:AI989477 /FEA=EST
/DB_XREF=gi:5836358 /DB_XREF=est:ws25b11.x1 /CLONE=IMAGE:2498205
/UG=Hs.83484 SRY (sex determining region Y)-box 4
- 40 213670_x_at chromosome 21 open reading frame 108
213682_at Consensus includes gb:AL036344 /FEA=EST
/DB_XREF=gi:5927743 /DB_XREF=est:DKFZp564A053_r1 /CLONE=DKFZp564A053
/UG=Hs.169329 DKFZP564A043 protein
213704_at Rab geranylgeranyltransferase, beta subunit
- 45 213720_s_at SWI/SNF related, matrix associated, actin dependent
regulator of chromatin, subfamily a, member 4 [BLAST]
213746_s_at filamin A, alpha (actin binding protein 280) [BLAST]
213773_x_at LUC7-like (*S. cerevisiae*)
213838_at RAN binding protein 9
- 50 213842_x_at Williams Beuren syndrome chromosome region 22
213872_at Consensus includes gb:BE465032 /FEA=EST
/DB_XREF=gi:9510807 /DB_XREF=est:hv76g09.x1 /CLONE=IMAGE:3179392
/UG=Hs.173685 hypothetical protein FLJ12619
213887_s_at polymerase (RNA) II (DNA directed) polypeptide E (25kD)
- 55 [BLAST]
213892_s_at adenine phosphoribosyltransferase
213923_at RAP2B, member of RAS oncogene family
213947_s_at Rho-related BTB domain containing 2 [BLAST]
213977_s_at neuronal guanine nucleotide exchange factor

- 213998_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17 (72kD)
 214020_x_at integrin, beta 5
 214035_x_at nuclear pore complex interacting protein
 214093_s_at RNA polymerase I associated factor, 53 kD
 5 214097_at ribosomal protein S21
 214100_x_at LUC7-like (*S. cerevisiae*)
 214113_s_at RNA binding motif protein 8A
 214149_s_at Consensus includes gb:AI252582 /FEA=EST
 /DB_XREF=gi:3849111 /DB_XREF=est:qv25b02.x1 /CLONE=IMAGE:1982571
 10 /UG=Hs.24322 ATPase, H⁺ transporting, lysosomal (vacuolar proton pump) 9kD
 214211_at ferritin, heavy polypeptide 1
 214239_x_at zinc finger protein 144 (Mel-18)
 214246_x_at cholinergic receptor, nicotinic, epsilon polypeptide
 15 214259_s_at aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase)
 214356_s_at pumilio homolog 2 (*Drosophila*)
 214383_x_at testis intracellular mediator protein
 214484_s_at protease, serine, 16 (thymus)
 20 214500_at H2A histone family, member Y
 214531_s_at sorting nexin 1
 214581_x_at tumor necrosis factor receptor superfamily, member 21
 214657_s_at Consensus includes gb:AU134977 /FEA=EST
 /DB_XREF=gi:10995516 /DB_XREF=est:AU134977 /CLONE=PLACE1000926
 25 /UG=Hs.322149 Human clone 137308 mRNA, partial cds
 214679_x_at Consensus includes gb:AL110227.1 /DEF=Homo sapiens mRNA;
 cDNA DKFZp434J194 (from clone DKFZp434J194). /FEA=mRNA
 /DB_XREF=gi:5817165 /UG=Hs.323067 Homo sapiens mRNA; cDNA -
 DKFZp434J194 (from clone ...
 30 214753_at Consensus includes gb:AW084068 /FEA=EST
 /DB_XREF=gi:6039220 /DB_XREF=est:xc26c06.x1 /CLONE=IMAGE:2585386
 /UG=Hs.110630 Human BRCA2 region, mRNA sequence CG006
 214870_x_at Consensus includes gb:AC002045 /DEF=Human Chromosome 16
 BAC clone CIT987SK-A-589H1 /FEA=mRNA_2 /DB_XREF=gi:2951945
 35 /UG=Hs.251928 nuclear pore complex interacting protein
 214911_s_at Consensus includes gb:S78771.1 /DEF=NAT=CpG island-
 associated gene human, mRNA, 1741 nt. /FEA=mRNA /DB_XREF=gi:244232
 /UG=Hs.75243 bromodomain-containing 2
 214919_s_at baculoviral IAP repeat-containing 6 (apollon)
 40 215001_s_at glutamate-ammonia ligase (glutamine synthase)
 215089_s_at Protein tyrosine phosphatase, receptor type, epsilon
 polypeptide
 215210_s_at dihydrolipoamide S-succinyltransferase (E2 component of
 2-oxo-glutarate complex)
 45 215235_at spectrin, alpha, non-erythrocytic 1 (alpha-fodrin)
 215245_x_at fragile X mental retardation 1 [BLAST]
 215464_s_at phosphoinositide-3-kinase, regulatory subunit 4, p150
 215482_s_at PRP31 pre-mRNA processing factor 31 homolog (yeast)
 215498_s_at mitogen-activated protein kinase kinase 3
 50 215690_x_at GPAA1P anchor attachment protein 1 homolog (yeast)
 215696_s_at aryl-hydrocarbon receptor nuclear translocator 2
 215731_s_at M-phase phosphoprotein 9
 215735_s_at tuberous sclerosis 2
 215807_s_at plexin B1
 55 215823_x_at Consensus includes gb:U64661 /DEF=Human poly(A)-binding
 protein processed pseudogene3 /FEA=mRNA /DB_XREF=gi:1519214
 /UG=Hs.283767 poly(A)-binding protein, cytoplasmic, pseudogene 3
 215884_s_at ubiquitin 2
 216033_s_at chromosome 20 open reading frame 100

- 216237_s_at MCM5 minichromosome maintenance deficient 5, cell division cycle 46 (*S. cerevisiae*) [BLAST]
 216264_s_at laminin, beta 2 (laminin S)
 216384_x_at Consensus includes gb:AF257099 /DEF=Homo sapiens prothymosin alpha (PTMA) gene, complete cds /FEA=CDS /DB_XREF=gi:8037944 /UG=Hs.283947 Homo sapiens prothymosin alpha (PTMA) gene, complete cds
 216457_s_at pecanex-like 3 (*Drosophila*)
 216565_x_at Consensus includes gb:AL121994 /DEF=Human DNA sequence from clone RP4-781L3 on chromosome 1p34.3-36.11 Contains a pseudogene similar to IFITM3 (interferon induced transmembrane protein 3 (1-8U)), ...
 216620_s_at Rho guanine nucleotide exchange factor (GEF) 10
 216894_x_at Consensus includes gb:D64137 /DEF=Human KIP2 gene for Cdk-inhibitor p57KIP2, complete cds (exon1-4) /FEA=mRNA_4 /DB_XREF=gi:992945 /UG=Hs.106070 cyclin-dependent kinase inhibitor 1C (p57, Kip2)
 216913_s_at Rho-related BTB domain containing 2 [BLAST]
 216952_s_at lamin B2
 217028_at chemokine (C-X-C motif), receptor 4 (fusin) [BLAST]
 217168_s_at homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1
 217188_s_at chromosome 14 open reading frame 1
 217221_x_at RNA binding motif protein 10
 217301_x_at retinoblastoma binding protein 4
 217419_x_at Consensus includes gb:AK021586.1 /DEF=Homo sapiens cDNA FLJ11524 fis, clone HEMBA1002547, highly similar to Homo sapiens agrin precursor mRNA. /FEA=mRNA /DB_XREF=gi:10432794 /UG=Hs.273330 Homo s ...
 217716_s_at sorting nexin 11 [BLAST]
 217717_s_at mitochondrial ribosomal protein L42
 217718_s_at mitochondrial ribosomal protein L42
 217749_at ring finger protein 12
 217751_at spastic paraplegia 3A (autosomal dominant)
 217755_at hematological and neurological expressed 1
 217759_at sperm associated antigen 10
 217767_at complement component 3
 217770_at tripartite motif-containing 33
 217779_s_at zinc finger, DHHC domain containing 7
 217794_at TAF7-like RNA polymerase II, TATA box binding protein (TBP)-associated factor, 50 kD
 217807_s_at glioma tumor suppressor candidate region gene 2
 217809_at G protein-coupled receptor kinase-interactor 1
 217836_s_at chromosome 20 open reading frame 44
 217853_at ATP synthase mitochondrial F1 complex assembly factor 1 [BLAST]
 217906_at cyclin D-type binding-protein 1
 217911_s_at BCL2-associated athanogene 3 [BLAST]
 217914_at nucleoporin 54kD
 217918_at ORM1-like 2 (*S. cerevisiae*)
 217957_at ORM1-like 2 (*S. cerevisiae*)
 217964_at elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 2
 217969_at chromosome 11 open reading frame2
 217970_s_at solute carrier family 12, (potassium-chloride transporter) member 5
 217973_at hydroxyacid oxidase 2 (long chain)
 217983_s_at RTC domain containing 1
 217984_at RTC domain containing 1

- 218001_at mitochondrial ribosomal protein S2 [BLAST]
 218010_x_at chromosome 20 open reading frame 149
 218019_s_at FK506 binding protein 10 (65 kDa)
 218035_s_at chromosome 20 open reading frame 16
 5 218059_at ribosomal protein L26-like 1
 218076_s_at solute carrier family 38, member 4
 218083_at prostaglandin E synthase 2
 218090_s_at gb:NM_018117.8 /DEF=Homo sapiens WD40 repeat domain 11
 10 protein (WDR11), mRNA. /FEA=mRNA /GEN=WDR11 /PROD=WD40 repeat domain
 11 protein /DB_XREF=gi:13324687 /UG=Hs.16677 WD repeat domain 15
 /FL=gb ...
 218096_at chromosome 20 open reading frame 46
 218112_at mitochondrial ribosomal protein S34
 218123_at chromosome 21 open reading frame 59
 15 218135_at toll-like receptor 7
 218145_at chromosome 20 open reading frame 97
 218149_s_at B-cell translocation gene 4
 218180_s_at RNA binding motif protein 15
 218205_s_at eukaryotic translation initiation factor 2 alpha kinase 4
 20 218220_at chromosome 12 open reading frame 10
 218224_at paraneoplastic antigen MA1 [BLAST]
 218228_s_at tankyrase, TRF1-interacting ankyrin-related ADP-ribose
 polymerase 2
 218229_s_at myosin, heavy polypeptide 7B, cardiac muscle, beta
 25 218241_at golgi autoantigen, golgin subfamily a, 5
 218244_at FK506 binding protein 14 (22 kDa)
 218263_s_at ras homolog gene family, member U
 218294_s_at PRP31 pre-mRNA processing factor 31 homolog (yeast)
 218315_s_at chromosome 20 open reading frame 34
 30 218317_x_at ganglioside-induced differentiation-associated protein 1-
 like 1
 218323_at chromosome 15 open reading frame 12
 218328_at mitochondrial ribosomal protein S2
 218366_x_at WD repeat domain 13
 35 218379_at RNA binding motif protein 7
 218388_at 6-phosphogluconolactonase
 218391_at dual specificity phosphatase 12
 218415_at vacuolar protein sorting 33B (yeast)
 218422_s_at 3-oxoacid CoA transferase 2
 40 218437_s_at leucine zipper transcription factor-like.1
 218443_s_at DAZ associated protein 1
 218448_at chromosome 20 open reading frame 11
 218450_at heme binding protein 1
 218494_s_at SLC2A4 regulator
 45 218496_at ribonuclease H1 pseudogene 1
 218529_at toll-like receptor 7
 218592_s_at cat eye syndrome chromosome region, candidate 5 [BLAST]
 218652_s_at protein phosphatase 1, regulatory (inhibitor) subunit 14D
 218659_at chromosome 20 open reading frame 36
 50 218697_at G-2 and S-phase expressed 1
 218740_s_at CDK5 regulatory subunit associated protein 3
 218744_s_at protein kinase C and casein kinase substrate in neurons 3
 218755_at RAB6 interacting, kinesin-like (rabkinesin6)
 218756_s_at matrix metalloproteinase 28
 55 218767_at chromosome 12 open reading frame 5
 218773_s_at kinesin-associated protein 3
 218796_at chromosome 20 open reading frame 42
 218821_at aminopeptidase-like 1
 218839_at hairy/enhancer-of-split related with YRPW motif 1

- 218848_at MEF2-interacting transcription repressor
 218856_at mitochondrial ribosomal protein L35
 218860_at hypothetical protein, clone MTA.D02.090
 218865_at ATP synthase mitochondrial F1 complex assembly factor 1
 5 218875_s_at F-box only protein 5 [BLAST]
 218896_s_at chromosome Y open reading frame 14
 218908_at alveolar soft part sarcoma chromosome region, candidate 1
 218921_at testicular cell adhesion molecule 1
 218983_at immediate early response 5
 10 218986_s_at aldehyde reductase (aldose reductase) like 6
 219007_at hypothetical protein FLJ13287
 219041_s_at pre-B lymphocyte gene 3
 219053_s_at epsin 3
 219066_at mitochondrial ribosomal protein S35
 15 219117_s_at FK506 binding protein 11 (19 kDa)
 219151_s_at general transcription factor.IIE, polypeptide 1 (alpha subunit, 56kD)
 219165_at arachidonate lipooxygenase 3
 219166_at mitochondrial ribosomal protein S18A
 20 219188_s_at chromosome 20 open reading frame 40
 219192_at vacuolar protein sorting 11 (yeast)
 219203_at chromosome 20 open reading frame 45
 219357_at mitochondrial ribosomal protein S28
 219491_at ganglioside-induced differentiation-associated protein 1-like 1
 25 219534_x_at cyclin-dependent kinase inhibitor 1C (p57, Kip2)
 219549_s_at reticulon 3
 219571_s_at G protein-coupled receptor, family C, group 1, member B
 219763_at zinc finger protein 317
 30 219764_at frizzled homolog 10 (Drosophila)
 219816_s_at zinc finger, DHHC domain containing 4
 219880_at conserved intergenic sequence 2
 219911_s_at solute carrier family 21 (organic anion transporter), member 12
 35 219914_at endothelin converting enzyme-like 1
 220079_s_at pecanex-like 3 (Drosophila)
 220099_s_at gb:NM_016007.1 /DEF=Homo sapiens CGI-59 protein (LOC51625), mRNA. /FEA=mRNA /GEN=LOC51625 /PROD=CGI-59 protein /DB_XREF=gi:7706297 /UG=Hs.279867 CGI-59 protein /FL=gb:AF151817.1
 40 gb:NM_016007.1
 220212_s_at neuromedin U
 220597_s_at bridging integrator 3
 220690_s_at EGF-like-domain, multiple 6
 220748_s_at serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 10
 45 220925_at transgene insertion A2, Pierre Coulombe
 220954_s_at solute carrier family 2, (facilitated glucose transporter) member 8
 221050_s_at GTP binding protein 2
 50 221203_s_at hypoxia-inducible factor 1, alpha subunit inhibitor
 221264_s_at Alpha1,2-fucosyltransferase a [BLAST]
 221269_s_at SH3 domain binding glutamic acid-rich protein like 3 [BLAST]
 221500_s_at syntaxin 16
 55 221501_x_at nuclear pore complex interacting protein
 221509_at density-regulated protein
 221562_s_at sirtuin silent mating type information regulation 2 homolog 3 (S. cerevisiae)

- 221619_s_at ATP-binding cassette, sub-family D (ALD), member 1, pseudogene 1
- 221647_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 35
- 221689_s_at Down syndrome critical region gene 5
- 5 221699_s_at ganglioside-induced differentiation-associated protein 1-like 1 [BLAST]
- 221712_s_at protocadherin beta 17 pseudogene [BLAST]
- 221725_at WAS protein family, member 2
- 221741_s_at chromosome 20 open reading frame 21
- 10 221746_at ubiquitin-like 4
- 221759_at ribosomal protein S4-like 2
- 221766_s_at Consensus includes gb:AW246673 /FEA=EST /DB_XREF=gi:6589666 /DB_XREF=est:2821951.3prime /CLONE=IMAGE:2821951 /UG=Hs.10784 hypothetical protein FLJ20037
- 15 221786_at Consensus includes gb:BF197222 /FEA=EST /DB_XREF=gi:11085906 /DB_XREF=est:7m88b07.x1 /CLONE=IMAGE:3561949 /UG=Hs.12342 Homo sapiens clone 24538 mRNA sequence
- 221789_x_at solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21
- 20 221816_s_at ankyrin repeat and SOCS box-containing 3 [BLAST]
- 221827_at chromosome 20 open reading frame 18
- 221919_at heterogeneous nuclear ribonucleoprotein A1
- 221931_s_at chromosome 20 open reading frame 150
- 221932_s_at insulin-like growth factor 2, antisense
- 25 221989_at ribosomal protein L10
- 222010_at acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase)
- 222011_s_at acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase)
- 30 222037_at MCM4 minichromosome maintenance deficient 4 (S. cerevisiae)
- 222040_at heterogeneous nuclear ribonucleoprotein A1
- 222122_s_at retinoic acid induced 17 [BLAST]
- 222131_x_at solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21
- 35 222154_s_at golgi reassembly stacking protein 2, 55 kDa
- 222155_s_at chromosome 1 open reading frame 28
- 222206_s_at p21(CDKN1A)-activated kinase 6
- 222369_at ribosomal protein L36a
- 40

Table 2: genes up-regulated at day 5

	Gene Name	Gene Description
5	200000_s_at	PRP8 pre-mRNA processing factor 8 homolog (yeast)
	200023_s_at	eukaryotic translation initiation factor 3, subunit 5 (epsilon, 47kD)
	200044_at	splicing factor, arginine/serine-rich 9
	200047_s_at	YY1 transcription factor
10	200055_at	TAF10 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 30 kD
	200069_at	squamous cell carcinoma antigen recognised by T cells 3
	200071_at	sin3-associated polypeptide, 18kD
	200083_at	ubiquitin specific protease 22
15	31874_at	growth arrest-specific 2 like 1
	32137_at	jagged 2
	33132_at	cleavage and polyadenylation specific factor 1, 160kD subunit
	33322_i_at	stratifin
20	34764_at	activity-dependent neuroprotector
	36553_at	acetylserotonin O-methyltransferase-like
	37462_i_at	splicing factor 3a, subunit 2, 66kD
	37652_at	ribosomal protein L13a
	38157_at	dom-3 homolog 2 (C. elegans)
25	39248_at	aquaporin 3
	39729_at	peroxiredoxin 2 [BLAST]
	39835_at	SET binding factor 1
	40465_at	fatty acid desaturase 2
	40472_at	peroxisomal farnesylated protein
30	41047_at	chromosome 9 open reading frame 16
	41858_at	RAB30, member RAS oncogene family [BLAST]
	44111_at	vacuolar protein sorting 33B (yeast)
	44654_at	ribosomal protein S4-like 2
	44696_at	protocadherin beta 17 pseudogene
35	46665_at	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4C
	47069_at	Rho GTPase activating protein 8
	47083_at	prion protein interacting protein
	50314_i_at	chromosome 20 open reading frame 27
40	52164_at	chromosome 11 open reading frame 24
	53071_s_at	hypothetical protein FLJ22222
	59625_at	nucleolar protein 3 (apoptosis repressor with CARD domain)
	55872_at	solute carrier family 12, (potassium-chloride transporter) member 5
45	60474_at	chromosome 20 open reading frame 42
	64474_g_at	RNA binding motif protein 15
	65884_at	mannosidase, alpha, class 1B, member 1
	91703_at	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)
50	200593_s_at	gb:BC003621.1 /DEF=Homo sapiens, heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A), clone MGC:1992, mRNA, complete cds. /FEA=mRNA /PROD=heterogeneous nuclear ribonucleopro ...
55	200618_at	LIM and SH3 protein 1

- 200619_at splicing factor 3b, subunit 2, 145kD
 200637_s_at protein tyrosine phosphatase, receptor type, F
 200655_s_at calmodulin 1 (phosphorylase kinase, delta)
 200675_at CD81 antigen (target of antiproliferative antibody 1)
 5 200702_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 24 [BLAST]
 200707_at protein kinase C substrate 80K-H
 200710_at acyl-Coenzyme A dehydrogenase, very long chain
 200743_s_at ceroid-lipofuscinosis, neuronal 2, late infantile
 (Jansky-Bielschowsky disease)
 10 200747_s_at nuclear mitotic apparatus protein 1
 200766_at cathepsin D (lysosomal aspartyl protease)
 200810_s_at cold inducible RNA binding protein
 200816_s_at platelet-activating factor acetylhydrolase, isoform Ib,
 alpha subunit (45kD)
 15 200827_at procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine
 hydroxylase, Ehlers-Danlos syndrome type-VI)
 200864_s_at RAB11A, member RAS oncogene family
 200867_at zinc finger protein 313
 200875_s_at nucleolar protein 5A (56kD with KKE/D repeat)
 20 200884_at creatine kinase, brain
 200891_s_at signal sequence receptor, alpha (translocon-associated
 protein alpha)
 200903_s_at S-adenosylhomocysteine hydrolase
 200914_x_at kinectin 1 (kinesin receptor)
 25 200918_s_at signal recognition particle receptor ('docking protein')
 200950_at actin related protein 2/3 complex, subunit 1A (41 kD)
 200959_at fusion, derived from t(12;16) malignant liposarcoma
 200965_s_at actin binding LIM protein
 200967_at peptidylprolyl isomerase B (cyclophilin B)
 30 200968_s_at peptidylprolyl isomerase B (cyclophilin B)
 200980_s_at pyruvate dehydrogenase (lipoamide) alpha 1
 200990_at gb:NM_005762.1 /DEF=Homo sapiens KRAB-associated protein
 1 (TIF1B), mRNA. /FEA=mRNA /GEN=TIF1B /PROD=KRAB-associated protein 1
 /DB_XREF=gi:5032178 /UG=Hs.228059 KRAB-associated protein 1 /FL=gb:B
 35 ...
 201003_x_at gb:NM_003349.2 /DEF=Homo sapiens ubiquitin-conjugating
 enzyme E2 variant 1 (UBE2V1), transcript variant 2, mRNA. /FEA=mRNA
 /GEN=UBE2V1 /PROD=ubiquitin-conjugating enzyme E2 variant 1, isoform b
 / ...
 40 201008_s_at thioredoxin interacting protein
 201011_at ribophorin I
 201015_s_at junction plakoglobin
 201024_x_at Consensus includes gb:BG261322 /FEA=EST
 /DB_XREF=gi:12771138 /DB_XREF=est:602373079F1 /CLONE=IMAGE:4484563
 45 /UG=Hs.158688 KIAA0741 gene product /FL=gb:AB018284.1 gb:AF078035.1
 gb:NM_015904.1
 201034_at L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain
 201037_at phosphofructokinase, platelet
 201052_s_at proteasome (prosome, macropain) inhibitor subunit 1
 50 (PI31)
 201054_at heterogeneous nuclear ribonucleoprotein A0 [BLAST]
 201064_s_at poly(A) binding protein, cytoplasmic 4 (inducible form)
 201065_s_at general transcription factor II, i [BLAST]
 201074_at SWI/SNF related, matrix associated, actin dependent
 55 regulator of chromatin, subfamily c, member 1
 201079_at synaptogyrin 2
 201082_s_at dynactin 1 (p150, glued homolog, Drosophila)
 201102_s_at phosphofructokinase, liver
 201113_at Tu translation elongation factor, mitochondrial

- 201128_s_at ATP citrate lyase
 201129_at gb:NM_006276.2 /DEF=Homo sapiens splicing factor, arginineserine-rich 7 (35kD) (SFRS7), mRNA. /FEA=mRNA /GEN=SFRS7 /PROD=splicing factor, arginineserine-rich 7 (35kD)
 5 /DB XREF=gi:6857827 /UG=Hs. ...
 201160_s_at cold shock domain protein A
 201161_s_at cold shock domain protein A
 201176_s_at archain 1
 201188_s_at inositol 1,4,5-triphosphate receptor, type 3
 10 201189_s_at inositol 1,4,5-triphosphate receptor, type 3
 201198_s_at proteasome (prosome, macropain) 26S subunit, non-ATPase, 1
 201209_at histone deacetylase 1
 201244_s_at v-raf-1 murine leukemia viral oncogene homolog 1
 15 201247_at sterol regulatory element binding transcription factor 2
 201255_x_at HLA-B associated transcript 3
 201264_at coatomer protein complex, subunit epsilon
 201271_s_at RNA binding protein (autoantigenic, hnRNP-associated with lethal yellow)
 20 201296_s_at golgi associated, gamma adaptin ear containing, ARF binding protein 1
 201310_s_at Kruppel-like factor 4 (gut)
 201313_at gb:NM_001975.1 /DEF=Homo sapiens enolase 2, (gamma, neuronal) (ENO2), mRNA. /FEA=mRNA /GEN=ENO2 /PROD=enolase 2, (gamma, neuronal) /DB XREF=gi:5803010 /UG=Hs.146580 enolase 2, (gamma, neuronal) / ...
 25 201315_x_at interferon induced transmembrane protein 2 (1-8D)
 201331_s_at signal transducer and activator of transcription-6, interleukin-4 induced
 30 201356_at splicing factor 3a, subunit 1, 120kD
 201360_at cystatin C (amyloid angiopathy and cerebral hemorrhage)
 201362_at polymerase (RNA) III (DNA directed) polypeptide F (39 kD)
 201363_s_at polymerase (RNA) III (DNA directed) polypeptide F (39 kD)
 201373_at plectin 1, intermediate filament binding protein, 500kD
 35 201379_s_at tumor protein D52-like 2
 201413_at hydroxysteroid (17-beta) dehydrogenase 4
 201440_at fatty acid desaturase 2
 201448_at TIA1 cytotoxic granule-associated RNA binding protein
 201454_s_at Consensus includes gb:AW055008 /FEA=EST
 40 /DB XREF=gi:5920711 /DB XREF=est:wy98c09.x1 /CLONE=IMAGE:2556592 /UG=Hs.293007 aminopeptidase puromycin sensitive /FL=gb:NM_006310.1
 201459_at RuvB-like 2 (E. coli)
 201482_at quiescin Q6
 201489_at peptidylprolyl isomerase F (cyclophilin F)
 45 201498_at ubiquitin specific protease 7 (herpes virus-associated)
 201526_at ADP-ribosylation factor 5
 201545_s_at poly(A) binding protein, nuclear 1
 201555_at MCM3 minichromosome maintenance deficient 3 (S. cerevisiae)
 50 201564_s_at singed-like (fascin homolog, sea urchin) (Drosophila)
 201578_at podocalyxin-like
 201585_s_at splicing factor proline/glutamine rich (polypyrimidine tract binding protein associated)
 201586_s_at splicing factor proline/glutamine rich (polypyrimidine tract binding protein associated)
 55 201598_s_at inositol polyphosphate phosphatase-like 1
 201601_x_at interferon induced transmembrane protein 1 (9-27)
 201612_at aldehyde dehydrogenase 9 family, member A1
 201620_at membrane-bound transcription factor protease, site 1

- 201623_s_at aspartyl-tRNA synthetase
 201624_at aspartyl-tRNA synthetase
 201639_s_at cleavage and polyadenylation specific factor 1, 160kD subunit
- 5 201643_x_at chromosome 5 open reading frame 7
 201645_at tenascin C (hexabrachion)
 201650_at keratin 19
 201675_at A kinase (PRKA) anchor protein 1
 201679_at tripartite motif-containing 33
- 10 201689_s_at tumor protein D52
 201690_s_at tumor protein D52
 201697_s_at DNA (cytosine-5-)-methyltransferase 1
 201704_at ectonucleoside triphosphate diphosphohydrolase 6 (putative function)
- 15 201714_at tubulin, gamma 1
 201719_s_at erythrocyte membrane protein band 4.1-like 2
 201726_at ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R)
 201746_at tumor protein p53 (Li-Fraumeni syndrome)
- 20 201747_s_at scaffold attachment factor B
 201790_s_at 7-dehydrocholesterol reductase
 201795_at lamin B receptor
 201818_at brain and acute leukemia, cytoplasmic
 201828_x_at CAAX box 1
- 25 201833_at histone deacetylase 2
 201841_s_at heat shock 27kD protein 1
 201853_s_at cell division cycle 25B
 201885_s_at diaphorase (NADH) (cytochrome b-5 reductase) -
 201889_at family with sequence similarity 3, member C
- 30 201928_at plakophilin 4
 201937_s_at aspartyl aminopeptidase
 201970_s_at nuclear autoantigenic sperm protein (histone-binding)
 202039_at TGFBI-induced anti-apoptotic factor 1
 202043_s_at spermine synthase
- 35 202060_at Rho guanine nucleotide exchange factor (GEF) 10
 202066_at protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 1
 202097_at nucleoporin 153kD
 202104_s_at spastic paraplegia 7, paraplegin (pure and complicated autosomal recessive)
- 40 202115_s_at ATP-binding cassette, sub-family A (ABC1), member 12
 202119_s_at copine III
 202127_at myotubularin related protein 2
 202130_at sudD suppressor of bimD6 homolog (A. nidulans)
- 45 202133_at centaurin, beta 2
 202136_at S-adenosylhomocysteine hydrolase-like 1
 202139_at aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase)
- 50 202151_s_at CD2 antigen (cytoplasmic tail) binding protein 2
 202159_at phenylalanine-tRNA synthetase-like
 202161_at protein kinase C-like 1
 202171_at zinc finger protein 161
 202180_s_at major vault protein
 202182_at GCN5 general control of amino-acid synthesis 5-like 2
- 55 (yeast)
 202189_x_at polypyrimidine tract binding protein 1 [BLAST]
 202219_at solute carrier family 6 (neurotransmitter transporter, creatine), member 8
 202220_at calsyntenin 1

- 202228_s_at dynein, axonemal, intermediate polypeptide 1
 202230_s_at calcium homeostasis endoplasmic reticulum protein
 202240_at polo-like kinase (Drosophila)
 202241_at growth differentiation factor 11
 5 202251_at PRP4 pre-mRNA processing factor 4 homolog (yeast)
 202275_at glucose-6-phosphate dehydrogenase
 202289_s_at transforming, acidic coiled-coil containing protein 2
 202308_at sterol regulatory element binding transcription factor 1
 202320_at general transcription factor IIIC, polypeptide 1 (alpha
 10 subunit, 220kD)
 202344_at heat shock transcription factor 1
 202357_s_at B-factor, properdin [BLAST]
 202384_s_at Treacher Collins-Franceschetti syndrome 1
 202409_at insulin-like growth factor 2 (somatomedin A)
 15 202411_at interferon, alpha-inducible protein 27
 202424_at mitogen-activated protein kinase kinase 2
 202430_s_at phospholipid scramblase 1
 202446_s_at phospholipid scramblase 1
 202464_s_at 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3
 20 202478_at immunoglobulin kappa joining 1
 202510_s_at tumor necrosis factor, alpha-induced protein 2
 202534_x_at dihydrofolate reductase
 202536_at EGF-like-domain, multiple 6
 202540_s_at 3-hydroxy-3-methylglutaryl-Coenzyme A reductase
 25 202569_s_at MAP/microtubule affinity-regulating kinase 3
 202589_at thymidylate synthetase
 202605_at glucuronidase, beta
 202686_s_at AXL receptor tyrosine kinase
 202715_at carbamoyl-phosphate synthetase 2, aspartate
 30 transcarbamylase, and dihydroorotase
 202718_at insulin-like growth factor binding protein 2 (36kD)
 202757_at rotatin
 202804_at ATP-binding cassette, sub-family C (CFTR/MRP), member 1
 202809_s_at down-regulated in colon cancer 1
 35 202812_at glucosidase, alpha; acid (Pompe disease, glycogen storage
 disease type II)
 202836_s_at mannosidase, alpha, class 1A, member 2
 202853_s_at RYK receptor-like tyrosine kinase
 202870_s_at CDC20 cell division cycle 20 homolog (S. cerevisiae)
 40 202890_at Consensus includes gb:AW242297 /FEA=EST
 /DB_XREF=gi:6576051 /DB_XREF=est:xm96b11.x1 /CLONE=IMAGE:2692029
 /UG=Hs.146388 microtubule-associated protein 7 /FL=gb:NM_003980.1
 202917_s_at S100 calcium binding protein A8 (calgranulin A)
 202929_s_at D-dopachrome tautomerase
 45 202934_at hexokinase 2 [BLAST]
 202936_s_at SRY (sex determining region Y)-box 9 (campomelic
 dysplasia, autosomal sex-reversal)
 202951_at serine/threonine kinase 38
 202962_at kinesin family member 13B
 50 202979_s_at ras homolog gene family, member U
 202998_s_at lysyl oxidase-like 2
 203021_at secretory leukocyte protease inhibitor
 (antileukoprotease) [BLAST]
 203062_s_at heparan sulfate 2-O-sulfotransferase 1
 55 203065_s_at caveolin 1, caveolae protein, 22kD [BLAST]
 203067_at cysteine and glycine-rich protein 3 (cardiac LIM protein)
 203098_at chromodomain protein, Y chromosome-like
 203102_s_at mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-
 acetylglucosaminyltransferase

- 203103_s_at HIV TAT specific factor 1
 203108_at retinoic acid induced 3
 203124_s_at solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2
 5 203126_at inositol(myo)-1(or 4)-monophosphatase 2
 203137_at M-phase phosphoprotein 1
 203153_at interferon-induced protein with tetratricopeptide repeats 1
 203155_at SET domain, bifurcated 1
 10 203184_at fibrillin 2 (congenital contractural arachnodactyly)
 203189_s_at NADH dehydrogenase (ubiquinone) Fe-S protein 8 (23kD) (NADH-coenzyme Q reductase)
 203198_at cyclin-dependent kinase 9 (CDC2-related kinase) [BLAST]
 203219_s_at adenine phosphoribosyltransferase
 15 203224_at chromosome 20 open reading frame 38
 203234_at uridine phosphorylase
 203244_at peroxisome receptor 1
 203252_at gb:NM_005851.1 /DEF=Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R), mRNA. /FEA=mRNA /GEN=DOC-1R
 20 /PROD=tumor suppressor deleted in oral cancer-related1
 /DB_XREF=gi:503166 ...
 203262_s_at DNA segment on chromosome X (unique) 9928 expressed sequence
 203276_at lamin B1
 25 203282_at glucan (1,4-alpha-), branching enzyme 1 (glycogen branching enzyme, Andersen disease, glycogen storage disease type IV)
 203286_at Rho-related BTB domain containing 3
 203338_at protein phosphatase 2, regulatory subunit B (B56)-, epsilon isoform
 30 203386_at chromosome 21 open reading frame 108
 203391_at gb:NM_004470.1 /DEF=Homo sapiens FK506-binding protein 2 (13kD) (FKBP2), mRNA. /FEA=mRNA /GEN=FKBP2 /PROD=FK506-binding protein 2 (13kD) /DB_XREF=gi:4758381 /UG=Hs.227729 FK506-binding protein 2 ...
 35 203417_at microfibrillar-associated protein 2
 203439_s_at stanniocalcin 2
 203477_at collagen, type XV, alpha 1
 203482_at zinc finger protein 334
 203495_at syndecan 3 (N-syndecan)
 40 203552_at mitogen-activated protein kinase kinase kinase kinase 5 [BLAST]
 203564_at Fanconi anemia, complementation group G
 203612_at bystin-like [BLAST]
 203683_s_at vascular endothelial growth factor B
 45 203701_s_at chromosome 20 open reading frame 13
 203739_at zinc finger protein 217
 203767_s_at steroid sulfatase (microsomal), arylsulfatase C, isozyme S
 203775_at solute carrier family 25, member 13 (citrin)
 50 203802_x_at LUC7-like (S. cerevisiae)
 203818_s_at splicing factor 3a, subunit 3, 60kD
 203825_at bromodomain containing 3
 203828_s_at zinc finger protein 206
 203831_at [BLAST]
 55 203848_at A kinase (PRKA) anchor protein 8
 203867_s_at toll interacting protein
 203919_at transcription elongation factor A (SII), 2
 203955_at GRB2-associated binding protein 2
 203974_at synapsin III

- 203976_s_at chromatin assembly factor 1, subunit A (p150)
 204022_at abhydrolase domain containing 1
 204030_s_at schwannomin interacting protein 1
 204058_at malic enzyme 1, NADP(+)-dependent, cytosolic
 5 204133_at cyclin E2
 204136_at collagen, type VII, alpha 1 (epidermolysis bullosa, dystrophic, dominant and recessive)
 204142_at SRY (sex determining region Y)-box 6
 204143_s_at SRY (sex determining region Y)-box 6
 10 204178_s_at RNA binding motif protein 14
 204224_s_at GTP cyclohydrolase 1 (dopa-responsive dystonia)
 204238_s_at secretagogen, EF-hand calcium binding protein
 204274_at Consensus includes gb:AA812215 /FEA=EST
 /DB_XREF=gi:2881826 /DB_XREF=est:ob84g01.s1 /CLONE=IMAGE:1338096
 15 /UG=Hs.9222 estrogen receptor binding site associated, antigen, 9
 /FL=gb:BC005249.1 gb:AF0 ...
 204275_at small optic lobes homolog (Drosophila)
 204295_at surfeit 1
 204372_s_at KH-type splicing regulatory protein (FUSE binding protein 2)
 20 204383_at clathrin, heavy polypeptide-like 1
 204401_at potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4
 204409_s_at eukaryotic translation initiation factor 1A, Y chromosome
 25 204475_at matrix metalloproteinase 1 (interstitial collagenase)
 204480_s_at chromosome 9 open reading frame 16
 204520_x_at bromodomain containing 1
 204521_at cleavage and polyadenylation specific factor 1, 160kD subunit
 30 204531_s_at breast cancer 1, early onset
 204617_s_at aquaporin 9
 204698_at interferon stimulated gene (20kD)
 204717_s_at solute carrier family 29 (nucleoside transporters), member 2
 35 204808_s_at transmembrane protein 5
 204839_at membrane-bound transcription factor protease, site 2
 204849_at transcription factor-like 5 (basic helix-loop-helix)
 204857_at MAD1 mitotic arrest deficient-like 1 (yeast)
 204858_s_at endothelial cell growth factor 1 (platelet-derived)
 40 204875_s_at GDP-mannose 4,6-dehydratase
 204908_s_at B-cell CLL/lymphoma 3
 204990_s_at integrin, beta 4
 205000_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide, Y chromosome
 45 205053_at primase, polypeptide 1 (49kD)
 205068_s_at paternally expressed 10
 205155_s_at spectrin, beta, non-erythrocytic 2
 205199_at carbonic anhydrase IX
 205202_at protein-L-isoaspartate (D-aspartate) O-methyltransferase
 50 205353_s_at prostatic binding protein
 205382_s_at D component of complement (adipsin)
 205412_at acetyl-Coenzyme A acetyltransferase 1 (acetoacetyl Coenzyme A thiolase)
 205436_s_at H2A histone family, member X
 55 205449_at cleavage and polyadenylation specific factor 1, 160kD subunit
 205501_at phosphodiesterase 10A
 205516_x_at neuronal guanine nucleotide exchange factor
 205527_s_at gem (nuclear organelle) associated protein 4

- 205534_at BH-protocadherin (brain-heart) [BLAST]
 205546_s_at tyrosine kinase 2
 205552_s_at 2',5'-oligoadenylate synthetase 1 (40-46 kD)
 205565_s_at Friedreich ataxia
 5 205583_s_at NIMA (never in mitosis gene a)- related kinase 11
 205658_s_at small nuclear RNA activating complex, polypeptide 4, 190kD
 205780_at BCL2-interacting killer (apoptosis-inducing)
 205961_s_at gb:NM_004682.1 /DEF=Homo sapiens PC4 and SFRS1
 10 interacting protein 2 (PSIP2), mRNA. /FEA=mRNA /GEN=PSIP2 /PROD=PC4 and SFRS1 interacting protein 2 /DB_XREF=gi:4758869 /UG=Hs.306179 PC4 and SFRS1 ...
 206023_at neuromedin U
 206095_s_at gb:NM_006625.2 /DEF=Homo sapiens TLS-associated serine-arginine protein 1 (TASR1), mRNA. /FEA=mRNA /GEN=TASR1 /PROD=TLS-associated serine-arginine protein 1 /DB_XREF=gi:12056474 /UG=Hs.288038 TL ...
 15 206102_at tripartite motif-containing 14
 206200_s_at annexin A11
 20 206332_s_at interferon, gamma-inducible protein 16
 206499_s_at chromosome condensation 1
 206785_s_at killer cell lectin-like receptor subfamily C, member 2
 206809_s_at heterogeneous nuclear ribonucleoprotein A3
 207002_s_at pleiomorphic adenoma gene-like 1
 25 207076_s_at argininosuccinate synthetase [BLAST]
 207122_x at sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2
 207140_at alkaline phosphatase, intestinal
 207165_at hyaluronan-mediated motility receptor (RHAMM)
 30 207196_s at UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5
 207414_s at paired basic amino acid cleaving system 4
 207564_x at O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
 35 207622_s at ATP-binding cassette, sub-family F (GCN20), member 2
 207714_s at serine (or cysteine) proteinase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)
 207723_s at killer cell lectin-like receptor subfamily C, member 3
 207760_s at nuclear receptor co-repressor 2
 40 207761_s at component of oligomeric golgi complex 4
 207824_s at MYC-associated zinc finger protein (purine-binding transcription factor)
 207831_x at deoxyhypusine synthase
 207842_s at zyxin [BLAST]
 45 207847_s at mucin 1, transmembrane
 208072_s at diacylglycerol kinase, delta (130kD)
 208149_x at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, *S. cerevisiae*) [BLAST]
 208152_s at gb:NM_004728.1 /DEF=Homo sapiens DEADH (Asp-Glu-Ala-AspHis) box polypeptide 21 (DDX21), mRNA. /FEA=mRNA /GEN=DDX21 /PROD=DEADH (Asp-Glu-Ala-AspHis) box polypeptide 21 /DB_XREF=gi:13787208 /FL=gb ...
 50 208156_x at gb:NM_031308.1 /DEF=Homo sapiens epiplakin 1 (EPPK1), mRNA. /FEA=mRNA /GEN=EPPK1 /PROD=epiplakin 1 /DB_XREF=gi:13876385 /FL=gb:NM_031308.1
 55 208159_x at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, *S. cerevisiae*)
 208248_x at amyloid beta (A4) precursor-like protein 2
 208270_s at arginyl aminopeptidase (aminopeptidase B)

- 208313_s_at splicing factor 1
 208336_s_at glycoprotein, synaptic 2
 208407_s_at catenin (cadherin-associated protein), delta 1
 208436_s_at interferon regulatory factor 7
 5 208617_s_at protein tyrosine phosphatase type IVA, member 2
 208621_s_at villin 2 (ezrin)
 208625_s_at eukaryotic translation initiation factor 4 gamma, 1
 208636_at actinin, alpha 1
 208647_at farnesyl-diphosphate farnesyltransferase 1
 10 208655_at cyclin I
 208676_s_at chromosome 20 open reading frame 54
 208700_s_at transketolase (Wernicke-Korsakoff syndrome)
 208703_s_at amyloid beta (A4) precursor-like protein 2
 208713_at protein tyrosine phosphatase, non-receptor type 21
 15 208714_at NADH dehydrogenase (ubiquinone) flavoprotein 1 (51kD)
 208719_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17 (72kD)
 208729_x_at major histocompatibility complex, class I, B
 208774_at casein kinase 1, delta
 208794_s_at SWI/SNF related, matrix associated, actin dependent
 20 regulator of chromatin, subfamily a, member 4
 208804_s_at splicing factor, arginine/serine-rich 6
 208809_s_at gb:AL136632.1 /DEF=Homo sapiens mRNA; cDNA DKFZp564G182
 (from clone DKFZp564G182); complete cds. /FEA=mRNA /GEN=DKFZp564G182
 /PROD=hypothetical protein /DB_XREF=gi:12052789 /UG=Hs.173685 hypothe
 25 ...
 208820_at PTK2 protein tyrosine kinase 2
 208858_s_at WD repeat domain 7
 208863_s_at splicing factor, arginine/serine-rich 1 (splicing factor
 2, alternate splicing factor)
 30 208880_s_at chromosome 20 open reading frame 14
 208890_s_at plexin B2
 208891_at dual specificity phosphatase 6
 208892_s_at dual specificity phosphatase 6
 208906_at ligand of numb-protein X
 35 208912_s_at gb:BC001362.1 /DEF=Homo sapiens, 2,3-cyclic nucleotide 3
 phosphodiesterase, clone MGC:2262, mRNA, complete cds. /FEA=mRNA
 /PROD=2,3-cyclic nucleotide 3 phosphodiesterase /DB_XREF=gi:12655028
 /UG ...
 208923_at cytoplasmic FMR1 interacting protein 1
 40 208928_at P450 (cytochrome) oxidoreductase
 208930_s_at interleukin enhancer binding factor 3, 90kD
 208938_at papillary renal cell carcinoma (translocation-associated)
 208968_s_at aldo-keto reductase family 1, member B10 (aldose
 reductase)
 45 208978_at cysteine-rich protein 2
 208984_x_at RNA binding motif protein 10
 208998_at uncoupling protein 2 (mitochondrial, proton carrier)
 209007_s_at solute carrier family 17 (sodium-dependent inorganic
 phosphate cotransporter), member 7
 50 209029_at COP9 constitutive photomorphogenic homolog subunit 7A
 (Arabidopsis)
 209053_s_at Wolf-Hirschhorn syndrome candidate 1
 209054_s_at Wolf-Hirschhorn syndrome candidate 1
 209075_s_at bromodomain containing 4
 55 209118_s_at platelet-activating factor acetylhydrolase, isoform Ib,
 pseudogene 1
 209120_at nuclear receptor subfamily 2, group F, member 2
 209122_at adipose differentiation-related protein
 209140_x_at major histocompatibility complex, class I, B

- 209153_s_at transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)
- 209156_s_at collagen, type VI, alpha 2
- 209173_at anterior gradient 2 homolog (Xenopus laevis)
- 5 209215_at glycoprotein A33 (transmembrane)
- 209228_x_at zinc finger protein 212
- 209236_at solute carrier family 23 (nucleobase transporters), member 1
- 209262_s_at nuclear receptor subfamily 2, group F, member 6
- 10 209263_x_at transmembrane 4 superfamily member 7
- 209265_s_at thioredoxin interacting protein
- 209289_at nuclear factor I/B
- 209290_s_at nuclear factor I/B
- 209332_s_at MAX protein
- 15 209337_at gb:AF063020.1 /DEF=Homo sapiens lens epithelium-derived growth factor mRNA, complete cds. /FEA=mRNA /PROD=lens epithelium-derived growth factor /DB_XREF=gi:3283351 /UG=Hs.82110 PC4 and SFRS1 int ...
- 209341_s_at inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta
- 20 209407_s_at deformed epidermal autoregulatory factor 1 (Drosophila)
- 209409_at growth factor receptor-bound protein 10
- 209449_at chromosome 6 open reading frame 28
- 209496_at retinoic acid receptor responder (tazarotene induced) 2
- 25 209505_at nuclear receptor subfamily 2, group F, member 1
- 209581_at HRAS-like suppressor 3
- 209607_x_at sulfotransferase family, cytosolic, 1A, phenol-preferring, member 3
- 209623_at methylcrotonoyl-Coenzyme A carboxylase 2 (beta) [BLAST]
- 30 209630_s_at G protein-coupled receptor 37 (endothelin receptor type B-like)
- 209723_at serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 9
- 209729_at growth arrest-specific 2 like 1
- 35 209759_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 37
- 209784_s_at jagged 2
- 209873_s_at plakophilin 3
- 209899_s_at DnaJ (Hsp40) homolog, subfamily C, member 8 [BLAST]
- 210010_s_at solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1
- 40 210026_s_at succinate dehydrogenase complex, subunit D, integral membrane protein pseudogene 1
- 210028_s_at origin recognition complex, subunit 3-like (yeast)
- 210069_at carnitine palmitoyltransferase I, muscle
- 45 210095_s_at insulin-like growth factor binding protein 3
- 210105_s_at FYN oncogene related to SRC, FGR, YES
- 210111_s_at G protein-coupled receptor 61.
- 210150_s_at laminin, alpha 5
- 210208_x_at HLA-B associated transcript 3
- 50 210336_x_at zinc finger protein 42 (myeloid-specific retinoic acid-responsive)
- 210337_s_at ATP citrate lyase
- 210371_s_at retinoblastoma binding protein 4
- 210410_s_at mutS homolog 5 (E. coli)
- 55 210448_s_at purinergic receptor P2X, ligand-gated ion channel, 5
- 210802_s_at serine protease inhibitor, Kazal type 4
- 210878_s_at chromosome 5 open reading frame 7
- 210891_s_at general transcription factor II, i
- 211052_s_at tubulin-specific chaperone d [BLAST]

- 211060_x_at GPAA1P anchor attachment protein 1 homolog (yeast)
[BLAST]
- 211065_x_at phosphofructokinase, liver [BLAST]
- 5 211075_s_at gb:Z25521.1 /DEF=H.sapiens integrin associated protein
mRNA, complete CDS, . /FEA=mRNA /PROD=integrin associated protein
/DB_XREF=gi:396704 /FL=gb:Z25521.1
- 211270_x_at polypyrimidine tract binding protein 1
- 211284_s_at granulin
- 10 211300_s_at tumor protein p53 (Li-Fraumeni syndrome)
- 211358_s_at neuronal guanine nucleotide exchange factor
- 211375_s_at interleukin enhancer binding factor 3, 90kD
- 211385_x_at sulfotransferase family, cytosolic, 1A, phenol-
preferring, member 2
- 15 211529_x_at HLA-G histocompatibility antigen, class I, G
- 211564_s_at KH-type splicing regulatory protein (FUSE binding protein
2)
- 211596_s_at l(3)mbt-like (Drosophila) [BLAST]
- 211618_s_at gb:M31008.1 /DEF=Human intestinal alkaline phosphatase
mRNA, complete cds. /FEA=mRNA /GEN=ALPI /DB_XREF=gi:178443
- 20 /FL=gb:M31008.1
- 211678_s_at maternally expressed 3 [BLAST]
- 211911_x_at major histocompatibility complex, class I, B [BLAST]
- 211929_at heterogeneous nuclear ribonucleoprotein A3
- 211967_at F-box only protein 32 [BLAST]
- 25 211969_at heat shock 90kD protein 1, alpha
- 211986_at AHNAK nucleoprotein (desmoyokin)
- 212015_x_at polypyrimidine tract binding protein 1 [BLAST]
- 212028_at proline dehydrogenase (oxidase) 2
- 212030_at proline dehydrogenase (oxidase) 2
- 30 212032_s_at prostate tumor over expressed gene 1 [BLAST]
- 212033_at proline dehydrogenase (oxidase) 2
- 212037_at pinin, desmosome associated protein
- 212056_at MDN1, midasin homolog (yeast)
- 212062_at ATPase, Class II, type 9A
- 35 212067_s_at Consensus includes gb:AL573058 /FEA=EST
/DB_XREF=gi:12931931 /DB_XREF=est:AL573058 /CLONE=CS0DI014YC05 (3
prime) /UG=Hs.1279 complement component 1, r subcomponent
- 212068_s_at ATPase, Class V, type 10B
- 212069_s_at ATPase, Class V, type 10B
- 40 212124_at retinoic acid induced 17
- 212137_at ATP synthase mitochondrial F1 complex assembly factor 2
- 212139_at GCN1 general control of amino-acid synthesis 1-like 1
(yeast)
- 212143_s_at insulin-like growth factor binding protein 3
- 45 212159_x_at adaptor-related protein complex 2, alpha 2 subunit
- 212170_at RNA binding motif protein 12
- 212186_at acetyl-Coenzyme A carboxylase alpha
- 212203_x_at interferon induced transmembrane protein 3 (1-8U)
- 212218_s_at F-box only protein 9 [BLAST]
- 50 212231_at F-box only protein 21
- 212251_at nuclear autoantigenic sperm protein (histone-binding)
[BLAST]
- 212269_s_at MCM3 minichromosome maintenance deficient 3 (S.
cerevisiae) associated protein
- 55 212285_s_at agrin
- 212300_at Consensus includes gb:AL049795 /DEF=Human DNA sequence
from clone RP4-622L5 on chromosome 1p34.2-36.11. Contains the gene
for importin alpha 7 (karyopherin), up to six novel genes and the 5
end o ...

- 212307_s_at O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
- 212316_at Rho-related BTB domain containing 2
- 212319_at synaptosomal-associated protein, 91 kD homolog (mouse)
- 5 212361_s_at ATPase, Ca++ transporting, cardiac muscle, slow twitch 2 [BLAST]
- 212396_s_at golgi associated, gamma adaptin ear containing, ARF binding protein 2
- 212403_at solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21 [BLAST]
- 10 212414_s_at capicua homolog (Drosophila)
- 212429_s_at general transcription factor IIIC, polypeptide 2 (beta subunit, 110kD)
- 212456_at chromosome 21 open reading frame 80
- 15 212493_s_at chromosome 20 open reading frame 30
- 212498_at brain-specific angiogenesis inhibitor 3 [BLAST]
- 212499_s_at collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) [BLAST]
- 212520_s_at SWI/SNF related, matrix associated, actin dependent
- 20 regulator of chromatin, subfamily a, member 4
- 212547_at Consensus includes gb:N34842 /FEA=EST /DB_XREF=gi:1155984 /DB_XREF=est:yy45d11.s1 /CLONE=IMAGE:276501 /UG=Hs.6580 Homo sapiens cDNA: FLJ23227 fis, clone CAE00645, highly similar to AF052138 Homo sapiens
- 212561_at ATPase, Class VI, type 11A
- 212563_at block of proliferation 1
- 212566_at ret finger protein 2
- 212589_at related RAS viral (r-ras) oncogene homolog 2 -
- 212612_at REST corepressor
- 30 212630_at chromobox homolog 3 (HP1 gamma homolog, Drosophila)
- 212644_s_at collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) [BLAST]
- 212647_at related RAS viral (r-ras) oncogene homolog
- 212691_at SH3-domain GRB2-like endophilin B2 [BLAST]
- 35 212693_at MDN1, midasin homolog (yeast)
- 212747_at chromosome 17 open reading frame 31 [BLAST]
- 212752_at cytoplasmic linker associated protein 1
- 212761_at transcription factor 7-like 2 (T-cell specific, HMG-box) [BLAST]
- 40 212762_s_at transcription factor 7-like 2 (T-cell specific, HMG-box) [BLAST]
- 212770_at pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 4
- 212774_at zinc finger protein 238
- 45 212825_at PAX transcription activation domain interacting protein 1 like
- 212887_at Sec23 homolog A (S. cerevisiae)
- 212890_at integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)
- 50 212900_at SEC24 related gene family, member A (S. cerevisiae)
- 212919_at FGD1 family, member 3 [BLAST]
- 212929_s_at fatty-acid-Coenzyme A ligase, long-chain 6
- 212936_at neurocalcin delta [BLAST]
- 212955_s_at polymerase (RNA) II (DNA directed) polypeptide I (14.5kD)
- 55 212973_at Consensus includes gb:AI692341 /FEA=EST /DB_XREF=gi:4969681 /DB_XREF=est:wd85g04.x1 /CLONE=IMAGE:2338422 /UG=Hs.79886 ribose 5-phosphate isomerase A (ribose 5-phosphate epimerase)
- 212993_at G protein-coupled receptor kinase 7

- 213026_at APG12 autophagy 12-like (*S. cerevisiae*)
 213029_at son of sevenless homolog 1 (*Drosophila*) [BLAST]
 213032_at son of sevenless homolog 1 (*Drosophila*) [BLAST]
 5 213041_s_at ATP synthase, H⁺ transporting, mitochondrial F1 complex, delta subunit
 213050_at activity-regulated cytoskeleton-associated protein
 213051_at low voltage-activated T-type calcium channel alpha-1 subunit (CACNA1I)
 213057_at ATP synthase mitochondrial F1 complex assembly factor 2
 10 [BLAST]
 213089_at Consensus includes gb:AU158490 /FEA=EST /DB_XREF=gi:11020011 /DB_XREF=est:AU158490 /CLONE=PLACE3000042 /UG=Hs.303632 Human DNA sequence from clone RP11-110H4 on chromosome 5 Contains a pseudogene ...
 15 213145_at nucleoporin 133kD [BLAST]
 213182_x_at Consensus includes gb:R78668 /FEA=EST /DB_XREF=gi:854949 /DB_XREF=est:yi74c04.r1 /CLONE=IMAGE:144966 /UG=Hs.106070 cyclin-dependent kinase inhibitor 1C (p57, Kip2)
 213212_x_at F-box only protein 21
 20 213263_s_at mitogen-activated protein kinase kinase kinase 12
 213294_at aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)
 213313_at nucleoporin 62kD
 213318_s_at HLA-B associated transcript 3
 25 213338_at zinc finger protein 363
 213360_s_at chromosome 21 open reading frame 108
 213378_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, *S. cerevisiae*)
 213390_at chromosome 19 open reading frame 7
 30 213398_s_at mitochondrial ribosomal protein S22
 213400_s_at transducin (beta)-like 1X-linked [BLAST]
 213428_s_at collagen, type VI, alpha 1
 213505_s_at C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 1 (cartilage-derived)
 35 213518_at RNA binding motif protein 15
 213581_at chromosome 21 open reading frame 67
 213645_at Consensus includes gb:AF305057 /DEF=Homo sapiens RTS (RTS) gene, complete cds, alternatively spliced /FEA=mRNA_1 /DB_XREF=gi:11094017 /UG=Hs.180433 RTS beta protein
 40 213668_s_at Consensus includes gb:AI989477 /FEA=EST /DB_XREF=gi:5836358 /DB_XREF=est:ws25b11.x1 /CLONE=IMAGE:2498205 /UG=Hs.83484 SRY (sex determining region Y)-box 4
 213670_x_at chromosome 21 open reading frame 108
 213682_at Consensus includes gb:AL036344 /FEA=EST
 45 /DB_XREF=gi:5927743 /DB_XREF=est:DKFZp564A053_r1 /CLONE=DKFZp564A053 /UG=Hs.169329 DKFZP564A043 protein
 213704_at Rab geranylgeranyltransferase, beta subunit
 213720_s_at SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 [BLAST]
 50 213746_s_at filamin A, alpha (actin binding protein 280) [BLAST]
 213773_x_at LUC7-like (*S. cerevisiae*)
 213838_at RAN binding protein 9
 213842_x_at Williams Beuren syndrome chromosome region 22
 213887_s_at polymerase (RNA) II (DNA directed) polypeptide E (25kD)
 55 [BLAST]
 213892_s_at adenine phosphoribosyltransferase
 213923_at RAP2B, member of RAS oncogene family
 213947_s_at Rho-related BTB domain containing 2 [BLAST]
 213977_s_at neuronal guanine nucleotide exchange factor

- 213998_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17 (72kD)
 214022_s_at interferon induced transmembrane protein 1 (9-27)
 214035_x_at nuclear pore complex interacting protein
 214093_s_at RNA polymerase I associated factor, 53 kD
 5 214097_at ribosomal protein S21
 214100_x_at LUC7-like (*S. cerevisiae*)
 214113_s_at RNA binding motif protein 8A
 214149_s_at Consensus includes gb:AI252582 /FEA=EST
 /DB_XREF=gi:3849111 /DB_XREF=est:qv25b02.x1 /CLONE=IMAGE:1982571
 10 /UG=Hs.24322 ATPase, H⁺ transporting, lysosomal (vacuolar proton pump) 9kD
 214246_x_at cholinergic receptor, nicotinic, epsilon polypeptide
 214259_s_at aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase)
 15 214356_s_at pumilio homolog 2 (*Drosophila*)
 214484_s_at protease, serine, 16 (thymus)
 214500_at H2A histone family, member Y
 214531_s_at sorting nexin 1
 214581_x_at tumor necrosis factor receptor superfamily, member 21
 20 214657_s_at Consensus includes gb:AU134977 /FEA=EST
 /DB_XREF=gi:10995516 /DB_XREF=est:AU134977 /CLONE=PLACE1000926
 /UG=Hs.322149 Human clone 137308 mRNA, partial cds
 214679_x_at Consensus includes gb:AL110227.1 /DEF=Homo sapiens mRNA;
 cDNA DKFZp434J194 (from clone DKFZp434J194). /FEA=mRNA
 25 /DB_XREF=gi:5817165 /UG=Hs.323067 Homo sapiens mRNA; cDNA
 DKFZp434J194 (from clone ...
 214753_at Consensus includes gb:AW084068 /FEA=EST
 /DB_XREF=gi:6039220 /DB_XREF=est:xc26c06.x1 /CLONE=IMAGE:2585386
 /UG=Hs.110630 Human BRCA2 region, mRNA sequence CG006
 30 214911_s_at Consensus includes gb:S78771.1 /DEF=NAT=CpG island-
 associated gene human, mRNA, 1741 nt. /FEA=mRNA /DB_XREF=gi:244232
 /UG=Hs.75243 bromodomain-containing 2
 214919_s_at baculoviral IAP repeat-containing 6 (apollon)
 215001_s_at glutamate-ammonia ligase (glutamine synthase)
 35 215089_s_at Protein tyrosine phosphatase, receptor type, epsilon
 polypeptide
 215210_s_at dihydrolipoamide S-succinyltransferase (E2 component of
 2-oxo-glutarate complex)
 215245_x_at fragile X mental retardation 1 [BLAST]
 40 215313_x_at major histocompatibility complex, class I, A
 215464_s_at phosphoinositide-3-kinase, regulatory subunit 4, p150
 215482_s_at PRP31 pre-mRNA processing factor 31 homolog (yeast)
 215498_s_at mitogen-activated protein kinase kinase 3
 215690_x_at GPAA1P anchor attachment protein 1 homolog (yeast)
 45 215696_s_at aryl-hydrocarbon receptor nuclear translocator 2
 215731_s_at M-phase phosphoprotein 9
 215807_s_at plexin B1
 215823_x_at Consensus includes gb:U64661 /DEF=Human poly(A)-binding
 protein processed pseudogene3 /FEA=mRNA /DB_XREF=gi:1519214
 50 /UG=Hs.283767 poly(A)-binding protein, cytoplasmic, pseudogene 3
 215884_s_at ubiquitin 2
 216033_s_at chromosome 20 open reading frame 100
 216237_s_at MCM5 minichromosome maintenance deficient 5, cell
 division cycle 46 (*S. cerevisiae*) [BLAST]
 55 216264_s_at laminin, beta 2 (laminin S)
 216384_x_at Consensus includes gb:AF257099 /DEF=Homo sapiens
 prothymosin alpha (PTMA) gene, complete cds /FEA=CDS
 /DB_XREF=gi:8037944 /UG=Hs.283947 Homo sapiens prothymosin alpha
 (PTMA) gene, complete cds

- 216457_s_at pecanex-like 3 (Drosophila)
 216565_x_at Consensus includes gb:AL121994 /DEF=Human DNA sequence
 from clone RP4-781L3 on chromosome 1p34.3-36.11 Contains a pseudogene
 similar to IFITM3 (interferon induced transmembrane protein 3 (1-
 5 8U)), ...
 216620_s_at Rho guanine nucleotide exchange factor (GEF) 10
 216894_x_at Consensus includes gb:D64137 /DEF=Human KIP2 gene for
 Cdk-inhibitor p57KIP2, complete cds (exon1-4) /FEA=mRNA_4
 /DB_XREF=gi:992945 /UG=Hs.106070 cyclin-dependent kinase inhibitor 1C
 10 (p57, Kip2)
 216913_s_at Rho-related BTB domain containing 2 [BLAST]
 216952_s_at lamin B2
 217221_x_at RNA binding motif protein 10
 217301_x_at retinoblastoma binding protein 4
 15 217419_x_at Consensus includes gb:AK021586.1 /DEF=Homo sapiens cDNA
 FLJ11524 fis, clone HEMBA1002547, highly similar to Homo sapiens
 agrin precursor mRNA. /FEA=mRNA /DB_XREF=gi:10432794 /UG=Hs.273330
 Homo s ...
 217718_s_at mitochondrial ribosomal protein L42
 20 217749_at ring finger protein 12
 217751_at spastic paraplegia 3A (autosomal dominant)
 217755_at hematological and neurological expressed 1
 217759_at sperm associated antigen 10
 217767_at complement component 3
 25 217770_at tripartite motif-containing 33
 217779_s_at zinc finger, DHHC domain containing 7
 217794_at TAF7-like RNA polymerase II, TATA box binding protein
 (TBP)-associated factor, 50 kD
 217807_s_at glioma tumor suppressor candidate region gene 2
 30 217809_at G protein-coupled receptor kinase-interactor 1
 217836_s_at chromosome 20 open reading frame 44
 217906_at cyclin D-type binding-protein 1
 217914_at nucleoporin 54kD
 217918_at ORM1-like 2 (S. cerevisiae)
 35 217957_at ORM1-like 2 (S. cerevisiae)
 217969_at chromosome 11 open reading frame2
 217973_at hydroxyacid oxidase 2 (long chain)
 217983_s_at RTC domain containing 1
 217984_at RTC domain containing 1
 40 218001_at mitochondrial ribosomal protein S2 [BLAST]
 218010_x_at chromosome 20 open reading frame 149
 218035_s_at chromosome 20 open reading frame 16
 218059_at ribosomal protein L26-like 1
 218076_s_at solute carrier family 38, member 4
 45 218083_at prostaglandin E synthase 2
 218090_s_at gb:NM_018117.8 /DEF=Homo sapiens WD40 repeat domain 11
 protein (WDR11), mRNA. /FEA=mRNA /GEN=WDR11 /PROD=WD40 repeat domain
 11 protein /DB_XREF=gi:13324687 /UG=Hs.16677 WD repeat domain 15
 /FL=gb ...
 50 218096_at chromosome 20 open reading frame 46
 218112_at mitochondrial ribosomal protein S34
 218123_at chromosome 21 open reading frame 59
 218134_s_at LUC7-like (S. cerevisiae)
 218145_at chromosome 20 open reading frame 97
 55 218180_s_at RNA binding motif protein 15
 218205_s_at eukaryotic translation initiation factor 2 alpha kinase 4
 218220_at chromosome 12 open reading frame 10
 218228_s_at tankyrase, TRF1-interacting ankyrin-related ADP-ribose
 polymerase 2

- 218241_at golgi autoantigen, golgin subfamily a, 5
 218244_at FK506 binding protein 14 (22 kDa)
 218263_s_at ras homolog gene family, member U
 218294_s_at PRP31 pre-mRNA processing factor 31 homolog (yeast)
 5 218315_s_at chromosome 20 open reading frame 34
 218317_x_at ganglioside-induced differentiation-associated protein 1-like 1
 218323_at chromosome 15 open reading frame 12
 218328_at mitochondrial ribosomal protein S2
 10 218366_x_at WD repeat domain 13
 218379_at RNA binding motif protein 7
 218388_at 6-phosphogluconolactonase
 218391_at dual specificity phosphatase 12
 218415_at vacuolar protein sorting 33B (yeast)
 15 218437_s_at leucine zipper transcription factor-like 1
 218443_s_at DAZ associated protein 1
 218448_at chromosome 20 open reading frame 11
 218450_at heme binding protein 1
 218494_s_at SLC2A4 regulator
 20 218529_at toll-like receptor 7
 218592_s_at cat eye syndrome chromosome region, candidate 5 [BLAST]
 218652_s_at protein phosphatase 1, regulatory (inhibitor) subunit 14D
 218659_at chromosome 20 open reading frame 36
 218697_at G-2 and S-phase expressed 1
 25 218744_s_at protein kinase C and casein kinase substrate in neurons 3
 218755_at RAB6 interacting, kinesin-like (rabkinesin6)
 218756_s_at matrix metalloproteinase 28
 218767_at chromosome 12 open reading frame 5
 218773_s_at kinesin-associated protein 3
 30 218796_at chromosome 20 open reading frame 42
 218821_at aminopeptidase-like 1
 218839_at hairy/enhancer-of-split related with YRPW motif 1
 218848_at MEF2-interacting transcription repressor
 218856_at mitochondrial ribosomal protein L35
 35 218860_at hypothetical protein, clone MTA.D02.090
 218865_at ATP synthase mitochondrial F1 complex assembly factor 1
 218872_at chromosome 20 open reading frame 11
 218908_at alveolar soft part sarcoma chromosome region, candidate 1
 218921_at testicular cell adhesion molecule 1
 40 218983_at immediate early response 5
 218986_s_at aldehyde reductase (aldose reductase) like 6
 219007_at hypothetical protein FLJ13287
 219041_s_at pre-B lymphocyte gene 3
 219053_s_at epsin 3
 45 219066_at mitochondrial ribosomal protein S35
 219117_s_at FK506 binding protein 11 (19 kDa)
 219151_s_at general transcription factor IIE, polypeptide 1 (alpha subunit, 56kD)
 219165_at arachidonate lipoxygenase 3
 50 219166_at mitochondrial ribosomal protein S18A
 219188_s_at chromosome 20 open reading frame 40
 219192_at vacuolar protein sorting 11 (yeast)
 219203_at chromosome 20 open reading frame 45
 219357_at mitochondrial ribosomal protein S28
 55 219534_x_at cyclin-dependent kinase inhibitor 1C (p57, Kip2)
 219571_s_at G protein-coupled receptor, family C, group 1, member B
 219763_at zinc finger protein 317
 219764_at frizzled homolog 10 (Drosophila)
 219816_s_at zinc finger, DHHC domain containing 4

- 219880_at conserved intergenic sequence 2
 219911_s_at solute carrier family 21 (organic anion transporter), member 12
 219914_at endothelin converting enzyme-like 1
 5 220079_s_at pecanex-like 3 (*Drosophila*)
 220212_s_at neuromedin U
 220597_s_at bridging integrator 3
 220690_s_at EGF-like-domain, multiple 6
 220748_s_at serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 10
 10 220925_at transgene insertion A2, Pierre Coulombe
 221050_s_at GTP binding protein 2
 221203_s_at hypoxia-inducible factor 1, alpha subunit inhibitor
 221264_s_at Alpha1,2-fucosyltransferase a [BLAST]
 15 221269_s_at SH3 domain binding glutamic acid-rich protein like 3 [BLAST]
 221501_x_at nuclear pore complex interacting protein
 221509_at density-regulated protein
 221562_s_at sirtuin silent mating type information regulation 2 homolog 3 (*S. cerevisiae*)
 20 221647_s_at DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 35
 221689_s_at Down syndrome critical region gene 5
 221699_s_at ganglioside-induced differentiation-associated protein 1-like 1 [BLAST]
 25 221712_s_at protocadherin beta 17 pseudogene [BLAST]
 221725_at WAS protein family, member 2
 221750_at Consensus includes gb:BG035985 /FEA=EST
 /DB_XREF=gi:12430666 /DB_XREF=est:602326096F1 /CLONE=IMAGE:4414319
 /UG=Hs.77910 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1
 30 (soluble)
 221766_s_at Consensus includes gb:AW246673 /FEA=EST
 /DB_XREF=gi:6589666 /DB_XREF=est:2821951.3prime /CLONE=IMAGE:2821951
 /UG=Hs.10784 hypothetical protein FLJ20037
 221786_at Consensus includes gb:BF197222 /FEA=EST
 35 /DB_XREF=gi:11085906 /DB_XREF=est:7m88b07.x1 /CLONE=IMAGE:3561949
 /UG=Hs.12342 Homo sapiens clone 24538 mRNA sequence
 221789_x_at solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21
 221816_s_at ankyrin repeat and SOCS box-containing 3 [BLAST]
 40 221827_at chromosome 20 open reading frame 18
 221918_at PCTAIRE protein kinase 2
 221919_at heterogeneous nuclear ribonucleoprotein A1
 221931_s_at chromosome 20 open reading frame 150
 221932_s_at insulin-like growth factor 2, antisense
 45 221989_at ribosomal protein L10
 222010_at acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase)
 222011_s_at acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase)
 50 222037_at MCM4 minichromosome maintenance deficient 4 (*S. cerevisiae*)
 222040_at heterogeneous nuclear ribonucleoprotein A1
 222122_s_at retinoic acid induced 17 [BLAST]
 222131_x_at solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21
 55 222154_s_at golgi reassembly stacking protein 2, 55 kDa
 222155_s_at chromosome 1 open reading frame 28
 222206_s_at p21(CDKN1A)-activated kinase 6
 222369_at ribosomal protein L36a

Table 3: genes down-regulated at day 2

	Gene Name	Gene Description
5	1316_at	thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian)
	35150_at	tumor necrosis factor receptor superfamily, member 5
	36829_at	period homolog 1 (Drosophila)
	37793_r_at	RAD51-like 3 (S. cerevisiae)
10	47571_at	zinc finger protein 236
	49327_at	sirtuin silent mating type information regulation 2 homolog 3 (S. cerevisiae)
	48612_at	tubulin, beta polypeptide 4, member Q
	58900_at	Kruppel-like factor 13
15	200706_s_at	fragile X mental retardation, autosomal homolog 2
	200915_x_at	kinectin 1 (kinesin receptor)
	200976_s_at	Tax1 (human T-cell leukemia virus type I) binding protein 1
20	201057_s_at	golgi autoantigen, golgin subfamily b, macrogolgin (with transmembrane signal), 1
	201070_x_at	splicing factor 3b, subunit 1, 155kD
	201140_s_at	RAB5C, member RAS oncogene family
	201278_at	disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)
25	201386_s_at	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 15
	201567_s_at	golgi autoantigen, golgin subfamily a, 4
	201686_x_at	apoptosis inhibitor 5
	201878_at	ariadne homolog, ubiquitin-conjugating enzyme E2 binding protein, 1 (Drosophila)
30	201884_at	carcinoembryonic antigen-related cell adhesion molecule 5
	201971_s_at	ATPase, H ⁺ transporting, lysosomal 70kD, V1 subunit A, isoform 1
	202037_s_at	secreted frizzled-related protein 1
	202071_at	syndecan 4 (amphiglycan, ryudocan)
35	202122_s_at	glycoprotein A33 (transmembrane)
	202224_at	Consensus includes gb:BF304695 /FEA=EST /DB_XREF=gi:11251580 /DB_XREF=est:601888248F1 /CLONE=IMAGE:4122466 /UG=Hs.306088 v-crk avian sarcoma virus CT10 oncogene homolog /FL=gb:D10656.1 gb:NM_016823.1
40	202340_x_at	nuclear receptor subfamily 4, group A, member 1
	202488_s_at	FXD domain-containing ion transport regulator 3
	202604_x_at	a disintegrin and metalloproteinase domain 10
	202668_at	ephrin-B2
	202709_at	fibromodulin
45	202840_at	gb:NM_003487.1 /DEF=Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, N, 68kD (RNA-binding protein 56) (TAF2N), mRNA. /FEA=mRNA /GEN=TAF2N /PROD=TATA box binding ...
	202861_at	period homolog 1 (Drosophila)
50	202873_at	ATPase, H ⁺ transporting, lysosomal 42kD, V1 subunit C, isoform 1
	202902_s_at	cathepsin S
	202921_s_at	ankyrin 2, neuronal
	203134_at	phosphatidylinositol binding clathrin assembly protein
55	203243_s_at	transducin (beta)-like 3

- 203319_s_at zinc finger protein 148 (pHZ-52)
 203395_s_at hairy homolog (Drosophila)
 203511_s_at potassium large conductance calcium-activated channel, subfamily M beta member 3
 5 203512_at potassium large conductance calcium-activated channel, subfamily M beta member 3
 203666_at stromal cell-derived factor 1
 203758_at cathepsin O
 203788_s_at sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C
 10 203875_at SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1
 203887_s_at thrombomodulin
 203922_s_at cytochrome b-245, beta polypeptide (chronic granulomatous disease)
 15 203933_at sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3E
 203963_at carbonic anhydrase XII
 204042_at WAS protein family, member 3
 20 204230_s_at solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7
 204232_at Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide
 204243_at rearranged L-myc fusion sequence
 25 204312_x_at cAMP responsive element binding protein 1
 204421_s_at gb:M27968.1 /DEF=Human basic fibroblast growth factor (FGF) mRNA, complete cds. /FEA=mRNA /GEN=FGF2 /DB_XREF=gi:182562 /UG=Hs.284244 fibroblast growth factor 2 (basic) /FL=gb:M27968.1 gb:NM_002006.1
 30 204670_x_at major histocompatibility complex, class II, DR beta 1
 204762_s_at guanine nucleotide binding protein (G protein), alpha activating activity polypeptide 0
 204802_at Ras-related associated with diabetes
 204842_x_at sperm autoantigenic protein 17
 35 204906_at ribosomal protein S6 kinase, 90kD, polypeptide 2
 204923_at chromosome X open reading frame 9
 205046_at centromere protein E (312kD)
 205097_at solute carrier family 26 (sulfate transporter), member 2
 205166_at calpain 5
 40 205232_s_at platelet-activating factor acetylhydrolase 2 (40kD)
 205235_s_at M-phase phosphoprotein 1
 205312_at spleen focus forming virus (SFFV) proviral integration oncogene spil
 205328_at claudin 10
 45 205359_at A kinase (PRKA) anchor protein 6
 205370_x_at dihydrolipoamide branched chain transacylase (E2 component of branched chain keto acid dehydrogenase complex; maple syrup urine disease)
 205381_at mesothelin
 50 205431_s_at bone morphogenetic protein 5
 205520_at striatin, calmodulin binding protein
 205525_at gb:NM_018495.3 /DEF=Homo sapiens NAG22 protein (LOC55873), mRNA. /FEA=mRNA /GEN=LOC55873 /PROD=NAG22 protein /DB_XREF=gi:13236500 /UG=Hs.283080 NAG22 protein /FL=gb:AF247820.3 gb:NM_018495.3
 55 205595_at desmoglein 3 (pemphigus vulgaris antigen)
 205608_s_at angiopoietin 1
 205636_at SH3-domain GRB2-like 3 [BLAST]
 205729_at oncostatin M receptor

- 205752_s_at glutathione S-transferase M5
 205879_x_at ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease)
 205949_at carbonic anhydrase I
 5 205981_s_at inhibitor of growth family, member 1-like
 206096_at zinc finger protein 35 (clone HF.10)
 206169_x_at MCF.2 cell line derived transforming sequence-like
 206212_at carboxypeptidase A2 (pancreatic)
 206263_at flavin containing monooxygenase 4
 10 206291_at neurotensin
 206323_x_at oligophrenin 1
 206388_at phosphodiesterase 3A, cGMP-inhibited
 206389_s_at phosphodiesterase 3A, cGMP-inhibited
 206456_at gamma-aminobutyric acid (GABA) A receptor, alpha 5
 15 206551_x_at transient receptor potential cation channel, subfamily M, member 4
 206586_at cannabinoid receptor 2 (macrophage)
 206766_at integrin, alpha 10
 206825_at oxytocin receptor
 20 206910_x_at H factor (complement)-like 3
 206936_x_at chromosome 20 open reading frame 110
 207041_at mannan-binding lectin serine protease 2
 207064_s_at amine oxidase, copper containing 2 (retina-specific)
 207131_x_at gamma-glutamyltransferase 1
 25 207152_at neurotrophic tyrosine kinase, receptor, type 2
 207300_s_at coagulation factor VII (serum prothrombin conversion accelerator)
 207347_at excision repair cross-complementing rodent repair deficiency; complementation group 6
 30 207365_x_at kinetochore associated 1
 207389_at glycoprotein Ib (platelet), alpha polypeptide
 207408_at organic cationic transporter-like 4
 207608_x_at cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 2
 35 207730_x_at chromosome 20 open reading frame 11
 207732_s_at discs, large (Drosophila) homolog 3 (neuroendocrine-dlg)
 207734_at elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 2
 207755_at chromosome 20 open reading frame 48
 40 207908_at keratin 2A (epidermal ichthyosis bullosa of Siemens)
 207936_x_at ret finger protein-like 3
 207938_at protease inhibitor 15
 207953_at Consensus includes gb:AF010144.1 /DEF=Homo sapiens neuronal thread protein AD7c-NTP mRNA, complete cds. /FEA=mRNA
 45 /PROD=neuronal thread protein AD7c-NTP /DB_XREF=gi:3002526 /UG=Hs.129735 neuronal ...
 207969_x_at acrosomal vesicle protein 1 [BLAST]
 208120_x_at gb:NM_031221.1 /DEF=Homo sapiens hypothetical protein FKSG63 (FKSG63), mRNA. /FEA=mRNA /GEN=FKSG63 /PROD=hypothetical
 50 protein FKSG63 /DB_XREF=gi:13654297 /FL=gb:NM_031221.1
 208124_s_at sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4F
 208137_x_at gb:NM_030972.1 /DEF=Homo sapiens hypothetical protein MGC5384 (MGC5384), mRNA. /FEA=mRNA /GEN=MGC5384 /PROD=hypothetical
 55 protein MGC5384 /DB_XREF=gi:13775165 /FL=gb:NM_030972.1
 208138_at gastrin
 208185_x_at Consensus includes gb:NM_016415.1 /DEF=Homo sapiens clone FLB3816 (LOC51216), mRNA. /FEA=mRNA /GEN=LOC51216 /PROD=clone FLB3816

/DB_XREF=gi:10047109 /UG=Hs.277887 clone FLB3816 /FL=gb:NM_016415.1
 ...
 208238_x_at protocadherin beta 1
 208246_x_at protein phosphatase 1, regulatory (inhibitor) subunit 12C
 5 208306_x_at major histocompatibility complex, class II, DR beta 4
 208351_s_at mitogen-activated protein kinase 1
 208360_s_at gb:NM_015870.1 /DEF=Homo sapiens endogenous retrovirus H
 D1 leader region integrase-derived ORF1, ORF2, and putative envelope
 protein (HSU88895), mRNA. /FEA=mRNA /GEN=HSU88895 /PROD=endogenous
 10 re ...
 208382_s_at DMC1 dosage suppressor of mck1 homolog, meiosis-specific
 homologous recombination (yeast)
 208447_s_at phosphoribosyl pyrophosphate synthetase 1
 208486_at cytochrome P450, subfamily IVA, polypeptide 11 [BLAST]
 15 208520_at olfactory receptor, family 10, subfamily H, member 3
 208730_x_at RAB2, member RAS oncogene family
 208763_s_at delta sleep inducing peptide, immunoreactor
 208860_s_at alpha thalassemia/mental retardation syndrome X-linked
 (RAD54 homolog, S. cerevisiae)
 20 208868_s_at GABA(A) receptor-associated protein like 1
 208869_s_at GABA(A) receptor-associated protein like 1
 209312_x_at gb:U65585.1 /DEF=Homo sapiens MHC class II antigen (HLA-
 DRB1) mRNA, HLA-DRB1*PBL allele, complete cds. /FEA=mRNA /GEN=HLA-
 DRB1 /PROD=MHC class II antigen /DB_XREF=gi:5478215 /UG=Hs.180255
 25 major ...
 209436_at spondin 1, (f-spondin) extracellular matrix protein
 209535_s_at LIM and SH3 protein 1
 209701_at desmin [BLAST]
 209703_x_at component of oligomeric golgi complex 4
 30 209790_s_at caspase 6, apoptosis-related cysteine protease [BLAST]
 209875_s_at secreted phosphoprotein 1 (osteopontin, bone sialoprotein
 I, early T-lymphocyte activation 1)
 209882_at Ric-like, expressed in many tissues (Drosophila)
 209913_x_at synaptosomal-associated protein, 91 kD homolog (mouse)
 35 210048_at N-ethylmaleimide-sensitive factor attachment protein,
 gamma
 210226_at nuclear receptor subfamily 4, group A, member 1
 210412_at glutamate receptor, ionotropic, N-methyl D-aspartate 2B
 210686_x_at gb:BC001407.1 /DEF=Homo sapiens, Similar to cytochrome c-
 40 like antigen, clone MGC:2960, mRNA, complete cds. /FEA=mRNA
 /PROD=Similar to cytochrome c-like antigen /DB_XREF=gi:12655110
 /UG=Hs.253070 ...
 210739_x_at solute carrier family 4, sodium bicarbonate
 cotransporter, member 4
 45 210757_x at disabled homolog 2, mitogen-responsive phosphoprotein
 (Drosophila)
 210796_x at sialic acid binding Ig-like lectin 6
 210836_x at phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3
 dunce homolog, Drosophila)
 50 210837_s at phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3
 dunce homolog, Drosophila)
 210912_x at glutathione S-transferase M4
 210923_at chromosome 20 open reading frame 82
 210944_s at calpain 3, (p94)
 55 210962_s at A kinase (PRKA) anchor protein (yotiao) 9
 211014_s at promyelocytic leukemia
 211026_s at monoglyceride lipase [BLAST]

- 211040_x_at gb:BC006325.1 /DEF=Homo sapiens, G-2 and S-phase expressed 1, clone MGC:12560, mRNA, complete cds. /FEA=mRNA /PROD=G-2 and S-phase expressed 1 /DB_XREF=gi:13623450 /FL=gb:BC006325.1
- 211071_s_at chromosome 12 open reading frame 8 [BLAST]
- 5 211074_at gb:AF000381.1 /DEF=Homo sapiens non-functional folate binding protein mRNA, complete cds. /FEA=mRNA /PROD=non-functional folate binding protein /DB_XREF=gi:2565195 /FL=gb:AF000381.1
- 211096_at pre-B-cell leukemia transcription factor 2
- 211113_s_at ATP-binding cassette, sub-family G (WHITE), member 1
- 10 211139_s_at NGFI-A binding protein 1 (EGR1 binding protein 1)
- 211277_x_at amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)
- 211316_x_at CASP8 and FADD-like apoptosis regulator
- 211323_s_at inositol 1,4,5-triphosphate receptor, type 1
- 15 211328_x_at hemochromatosis
- 211364_at methylthioadenosine phosphorylase
- 211416_x_at gamma-glutamyltransferase 1
- 211452_x_at leucine rich repeat (in FLII) interacting protein 1 [BLAST]
- 20 211460_at testis-specific transcript, Y-linked 9
- 211464_x_at caspase 6, apoptosis-related cysteine protease
- 211504_x_at Rho-associated, coiled-coil containing protein kinase 2
- 211574_s_at membrane cofactor protein (CD46, trophoblast-lymphocyte cross-reactive antigen)
- 25 211657_at carcinoembryonic antigen-related cell adhesion molecule 6 (non-specific cross reacting antigen) [BLAST]
- 211685_s_at neurocalcin delta [BLAST]
- 211693_at [BLAST]
- 211713_x_at histone deacetylase 4 [BLAST]
- 30 211768_at gb:BC006080.1 /DEF=Homo sapiens, Williams-Beuren syndrome chromosome region 5, clone MGC:12566, mRNA, complete cds. /FEA=mRNA /PROD=Williams-Beuren syndrome chromosome region 5 /DB_XREF=gi:13543
- ...
- 211769_x_at tumor differentially expressed 1 [BLAST]
- 35 211781_x_at gb:BC006164.1 /DEF=Homo sapiens, clone MGC:13219, mRNA, complete cds. /FEA=mRNA /PROD=Unknown (protein for MGC:13219) /DB_XREF=gi:13544062 /FL=gb:BC006164.1
- 211801_x_at hypoxia-inducible factor 1, alpha subunit inhibitor
- 211810_s_at galactosylceramidase (Krabbe disease)
- 40 211814_s_at cyclin E2
- 211918_x_at placenta-specific 3 [BLAST]
- 212196_at tumor necrosis factor receptor superfamily, member 19-like [BLAST]
- 212233_at chromosome 1 open reading frame 2
- 45 212514_x_at Consensus includes gb:R60068 /FEA=EST /DB_XREF=gi:830763 /DB_XREF=est:yh12h07.s1 /CLONE=IMAGE:43138 /UG=Hs.147916 DEADH (Asp-Glu-Ala-AspHis) box polypeptide 3
- 212736_at Consensus includes gb:BE299456 /FEA=EST
- /DB_XREF=gi:9183204 /DB_XREF=est:600944717T1 /CLONE=IMAGE:2960548
- 50 /UG=Hs.6349 Human Chromosome 16 BAC clone CIT987SK-A-362G6
- 212876_at UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4
- 212884_x_at apolipoprotein E [BLAST]
- 213109_at myelin transcription factor 1-like
- 55 213193_x_at T cell receptor beta locus
- 213270_at membrane protein, palmitoylated 2 (MAGUK p55 subfamily member 2) [BLAST]
- 213297_at nucleolar protein family A, member 2 (H/ACA small nucleolar RNPs)

- 213307_at Consensus includes gb:AF131790.1 /DEF=Homo sapiens clone
24903 mRNA sequence. /FEA=mRNA /DB_XREF=gi:4406618 /UG=Hs.12696
cortactin SH3 domain-binding protein
- 213406_at golgi associated, gamma adaptin ear containing, ARF
5 binding protein 1
- 213486_at retinoic acid induced 17 [BLAST]
- 213816_s_at met proto-oncogene (hepatocyte growth factor receptor)
- 213936_x_at surfactant, pulmonary-associated protein B
- 214007_s_at protein tyrosine kinase 9 [BLAST]
- 10 214336_s_at coatomer protein complex, subunit alpha
- 214421_x_at cytochrome P450, subfamily IIC (mephenytoin 4-
hydroxylase), polypeptide 9 [BLAST]
- 214558_at G protein-coupled receptor 12
- 214594_x_at ATPase, Class I, type 8B, member 1
- 15 214656_x_at myosin IC
- 214698_at Consensus includes gb:AW190873 /FEA=EST
/DB_XREF=gi:6465353 /DB_XREF=est:xl66a01.x1 /CLONE=IMAGE:2679624
/UG=Hs.145078 regulator of differentiation (in *S. pombe*) 1
- 214707_x_at Alstrom syndrome 1
- 20 214715_x_at Consensus includes gb:AK024789.1 /DEF=Homo sapiens cDNA:
FLJ21136 fis, clone CAS07469. /FEA=mRNA /DB_XREF=gi:10437175
/UG=Hs.206882 Homo sapiens mRNA for FLJ00032 protein, partial cds
- 214720_x_at Consensus includes gb:BF981643 /FEA=EST
/DB_XREF=gi:12384455 /DB_XREF=est:602305961F1 /CLONE=IMAGE:4397295
- 25 /UG=Hs.79844 DKFZP564M1416 protein
- 214849_at Consensus includes gb:AW500220 /FEA=EST
/DB_XREF=gi:7112628 /DB_XREF=est:UI-HF-BN0-akd-c-02-0-UI.r1
/CLONE=IMAGE:3076610 /UG=Hs.332496 Human DNA sequence from clone
108K11 on chromosome 6p21 Cont ...
- 30 214902_x_at Consensus includes gb:AL080232.1 /DEF=Homo sapiens mRNA;
cDNA DKFZp586A061 (from clone DKFZp586A061). /FEA=mRNA
/DB_XREF=gi:5262725 /UG=Hs.220696 Homo sapiens mRNA; cDNA
DKFZp586A061 (from clone ...
- 214906_x_at ATPase, H⁺ transporting, lysosomal 31kD, V1 subunit E
35 isoform 2
- 214923_at Consensus includes gb:AK001155.1 /DEF=Homo sapiens cDNA
FLJ10293 fis, clone NT2RM1000280, highly similar to VACUOLAR ATP
SYNTHASE SUBUNIT D (EC 3.6.1.34). /FEA=mRNA /DB_XREF=gi:7022230
/UG=Hs.30 ...
- 40 214933_at calcium channel, voltage-dependent, P/Q type, alpha 1A
subunit
- 214951_at UDP-N-acetyl-alpha-D-galactosamine:(N-acetylneuraminy)-
galactosylglucosylceramide N-acetylgalactosaminyltransferase (GalNAc-
T)
- 45 214953_s_at amyloid beta (A4) precursor protein (protease nexin-II,
Alzheimer disease)
- 215032_at nudix (nucleoside diphosphate linked moiety X)-type motif
11
- 215067_x_at chromosome 20 open reading frame 48
- 50 215178_x_at N-acylsphingosine amidohydrolase (acid ceramidase)-like
- 215179_x_at carboxypeptidase N, polypeptide 1, 50kD
- 215236_s_at phosphatidylinositol binding clathrin assembly protein
- 215366_at sorting nexin 6
- 215373_x_at chromosome 20 open reading frame 48
- 55 215383_x_at Consensus includes gb:AL137312.1 /DEF=Homo sapiens mRNA;
cDNA DKFZp761K23121 (from clone DKFZp761K23121). /FEA=mRNA
/DB_XREF=gi:6807797 /UG=Hs.293681 Homo sapiens mRNA; cDNA
DKFZp761K23121 (from ...
- 215404_x_at prostate tumor over expressed gene 1

- 215439_x_at F-box and leucine-rich repeat protein 11
 215467_x_at empty spiracles homolog 1 (Drosophila)
 215479_at immunoglobulin superfamily, member 9 [BLAST]
 215511_at Consensus includes gb:U19345.1 /DEF=Homo sapiens AR1
 5 (TCF20) mRNA, partial cds. /FEA=mRNA /GEN=TCF20 /PROD=AR1
 /DB_XREF=gi:2924754 /UG=Hs.201668 transcription factor 20 (AR1)
 215529_x_at RecQ protein-like (DNA helicase Q1-like)
 215553_x_at chromosome 6 open reading frame 22
 215587_x_at chromosome 20 open reading frame 48
 10 215588_x_at Consensus includes gb:AK024958.1 /DEF=Homo sapiens cDNA:
 FLJ21305 fis, clone COL02124. /FEA=mRNA /DB_XREF=gi:10437382
 /UG=Hs.287658 Homo sapiens cDNA: FLJ21305 fis, clone COL02124
 215604_x_at optic atrophy 3 (autosomal recessive, with chorea and
 spastic paraplegia)
 15 215609_at Consensus includes gb:AK023895.1 /DEF=Homo sapiens cDNA
 FLJ13833 fis, clone THYR01000676. /FEA=mRNA /DB_XREF=gi:10435969
 /UG=Hs.296745 Homo sapiens cDNA FLJ13833 fis, clone THYR01000676
 215628_x_at Consensus includes gb:AL049285.1 /DEF=Homo sapiens mRNA;
 cDNA DKFZp564M193 (from clone DKFZp564M193). /FEA=mRNA
 20 /DB_XREF=gi:4500045 /UG=Hs.302053 Homo sapiens mRNA; cDNA
 DKFZp564M193 (from clone ...
 215766_at Consensus includes gb:AL096729.1 /DEF=Homo sapiens mRNA;
 cDNA DKFZp434D044 (from clone DKFZp434D044). /FEA=mRNA
 /DB_XREF=gi:5419863 /UG=Hs.146581 Homo sapiens mRNA; cDNA
 25 DKFZp434D044 (from clone ...
 215825_at Consensus includes gb:AF070579.1 /DEF=Homo sapiens clone
 24487 mRNA sequence. /FEA=mRNA /DB_XREF=gi:3387951 /UG=Hs.283819 Homo
 sapiens clone 24487 mRNA sequence
 215856_at Consensus includes gb:AK025833.1 /DEF=Homo sapiens cDNA:
 30 FLJ22180 fis, clone HRC00936. /FEA=mRNA /DB_XREF=gi:10438467
 /UG=Hs.287692 Homo sapiens cDNA: FLJ22180 fis, clone HRC00936
 215910_s_at carbohydrate (chondroitin) synthase 1
 215978_x_at Consensus includes gb:AK021514.1 /DEF=Homo sapiens cDNA
 FLJ11452 fis, clone HEMBA1001435. /FEA=mRNA /DB_XREF=gi:10432710
 35 /UG=Hs.148598 Homo sapiens cDNA FLJ11452 fis, clone HEMBA1001435
 216051_x_at Consensus includes gb:AK022045.1 /DEF=Homo sapiens cDNA
 FLJ11983 fis, clone HEMBB1001337. /FEA=mRNA /DB_XREF=gi:10433364
 /UG=Hs.193162 Homo sapiens cDNA FLJ11983 fis, clone HEMBB1001337
 216061_x_at platelet-derived growth factor beta polypeptide (simian
 40 sarcoma viral (v-sis) oncogene homolog)
 216159_s_at prostate tumor over expressed gene 1
 216187_x_at Consensus includes gb:AF222691.1 /DEF=Homo sapiens Alu
 repeat (LNK1) mRNA sequence. /FEA=mRNA /DB_XREF=gi:12655850
 /UG=Hs.307008 Homo sapiens Alu repeat (LNK1) mRNA sequence
 45 216196_at chromosome 20 open reading frame 136 [BLAST]
 216220_s_at adenosine A1 receptor
 216229_x_at Consensus includes gb:X81001.1 /DEF=H. sapiens HCG II
 mRNA. /FEA=mRNA /DB_XREF=gi:531407 /UG=Hs.69707 HCGII-7 protein
 216292_at Consensus includes gb:AK024455.1 /DEF=Homo sapiens mRNA
 50 for FLJ00047 protein, partial cds. /FEA=mRNA /GEN=FLJ00047
 /PROD=FLJ00047 protein /DB_XREF=gi:10440423 /UG=Hs.287753 Homo
 sapiens mRNA for ...
 216294_s_at ubiquitin specific protease 24
 216374_at Consensus includes gb:AC006986 /DEF=Homo sapiens BAC
 55 clone RP11-155J5 from Y /FEA=CDS /DB_XREF=gi:4753246 /UG=Hs.283908
 Homo sapiens BAC clone RP11-155J5 from Y
 216453_at chromosome 20 open reading frame 4 [BLAST]
 216459_x_at Consensus includes gb:AL137624.1 /DEF=Homo sapiens mRNA;
 cDNA DKFZp434M1812 (from clone DKFZp434M1812). /FEA=mRNA

- /DB_XREF=gi:6808420 /UG=Hs.306476 Homo sapiens mRNA; cDNA
DKFZp434M1812 (from clo ...
216524_x_at Consensus includes gb:AL049260.1 /DEF=Homo sapiens mRNA;
cDNA DKFZp564E233 (from clone DKFZp564E233). /FEA=mRNA
- 5 /DB_XREF=gi:4500007 /UG=Hs.302050 Homo sapiens mRNA; cDNA
DKFZp564E233 (from clone ...
216661_x_at cytochrome P450, subfamily IIC (mephenytoin 4-
hydroxylase), polypeptide 9
216735_x_at prostate tumor over expressed gene 1 [BLAST]
- 10 216745_x_at Consensus includes gb:AK024606.1 /DEF=Homo sapiens cDNA:
FLJ20953 fis, clone ADSE01979. /FEA=mRNA /DB_XREF=gi:10436920
/UG=Hs.306697 Homo sapiens cDNA: FLJ20953 fis, clone ADSE01979
216791_at lysyl oxidase-like 4 [BLAST]
216859_x_at Consensus includes gb:AL080112.1 /DEF=Homo sapiens mRNA;
- 15 cDNA DKFZp586H0722 (from clone DKFZp586H0722). /FEA=mRNA
/DB_XREF=gi:5262539 /UG=Hs.332731 Homo sapiens mRNA; cDNA
DKFZp586H0722 (from clo ...
216873_s_at ATPase, Class I, type 8B, member 2
216936_at Consensus includes gb:X81637.1 /DEF=H.sapiens clathrin
light chain b gene. /FEA=mRNA /DB_XREF=gi:963046 /UG=Hs.73919
- 20 clathrin, light polypeptide (Lcb)
216993_s_at Consensus includes gb:U32169 /DEF=Human pro-a2 chain of
collagen type XI (COL11A2) gene, complete cds /FEA=mRNA_3
/DB_XREF=gi:1000744 /UG=Hs.121509 collagen, type XI, alpha 2
- 25 217020_at retinoic acid receptor, beta
217052_x_at Consensus includes gb:AK024108.1 /DEF=Homo sapiens cDNA
FLJ14046 fis, clone HEMBA1006461. /FEA=mRNA /DB_XREF=gi:10436406
/UG=Hs.142677 Homo sapiens cDNA FLJ14046 fis, clone HEMBA1006461
217117_x_at Consensus includes gb:AF007194.1 /DEF=Homo sapiens mucin
(MUC3) mRNA, partial cds. /FEA=mRNA /GEN=MUC3 /PROD=mucin
- 30 /DB_XREF=gi:2853300 /UG=Hs.129782 mucin 3A, intestinal
217189_s_at chromosome 1 open reading frame 16
217269_s_at protease, serine, 7 (enterokinase)
217315_s_at kallikrein 13
- 35 217377_x_at ets variant gene 6 (TEL oncogene)
217446_x_at Consensus includes gb:AL080160.1 /DEF=Homo sapiens mRNA;
cDNA DKFZp434M054 (from clone DKFZp434M054). /FEA=mRNA
/DB_XREF=gi:5262622 /UG=Hs.274517 Homo sapiens mRNA; cDNA
DKFZp434M054 (from clone ...
- 40 217457_s_at RAP1, GTP-GDP dissociation stimulator 1
217465_at NCK-associated protein 1 [BLAST]
217480_x_at G protein-coupled receptor 2
217579_x_at activity-distance traveled 4
217629_at chromosome 22 open reading frame 20
- 45 217643_x_at Consensus includes gb:AA443771 /FEA=EST
/DB_XREF=gi:2156446 /DB_XREF=est:zw95f08.s1 /CLONE=IMAGE:784743
/UG=Hs.270138 ESTs
217679_x_at N-acetylglucosamine kinase
217703_x_at Consensus includes gb:AA401963 /FEA=EST
- 50 /DB_XREF=gi:2055965 /DB_XREF=est:zu53c08.s1 /CLONE=IMAGE:741710
/UG=Hs.194107 ESTs, Moderately similar to ALU7_HUMAN ALU SUBFAMILY SQ
SEQUENCE CONTAMINATION ...
217713_x_at chromosome 20 open reading frame 43
217715_x_at thymidine kinase 2, mitochondrial
- 55 217787_s_at UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-
acetylglactosaminyltransferase 2 (GalNAc-T2)
217859_s_at synaptojanin 2 binding protein
217862_at protein inhibitor of activated STAT, 1

- 217878_s_at Consensus includes gb:AI203880 /FEA=EST
/DB_XREF=gi:3756486 /DB_XREF=est:qf77g07.x1 /CLONE=IMAGE:1756092
/UG=Hs.172405 cell division cycle 27 /FL=gb:NM_001256.1
- 5 218155_x_at zinc finger protein 334
218211_s_at transgene insertion 202, William Muller
218554_s_at solute carrier family 22 (organic anion/cation transporter), member 11
218820_at LIM homeobox 9
218949_s_at chromosome 15 open reading frame 12
- 10 219014_at toll-like receptor 8
219183_s_at pleckstrin homology, Sec7 and coiled/coil domains 4
219194_at sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4G
219206_x_at mitochondrial ribosomal protein L48
- 15 219221_at engulfment and cell motility 3 (ced-12 homolog, C. elegans)
219228_at chromosome Y open reading frame 14
219290_x_at dual adaptor of phosphotyrosine and 3-phosphoinositides
219398_at zinc finger protein 338
- 20 219472_at matrix metalloproteinase 28
219508_at glucosaminyl (N-acetyl) transferase 3, mucin type
219677_at UDP-glucuronate decarboxylase 1
219679_s_at gb:NM_018604.1 /DEF=Homo sapiens hypothetical protein PRO1741 (PRO1741), mRNA. /FEA=mRNA /GEN=PRO1741 /PROD=hypothetical
- 25 protein PRO1741 /DB_XREF=gi:8924074 /UG=Hs.306067 hypothetical protein PRO ...
219702_at placenta-specific 1
219860_at chromosome 6 open reading frame 20 -
219910_at coronin, actin binding protein, 1A
- 30 219977_at aryl hydrocarbon receptor interacting protein-like 1
220071_x_at fidgetin
220113_x_at lysyl oxidase-like 4
220115_s_at gb:NM_006727.1 /DEF=Homo sapiens cadherin 10, type 2 (T2-cadherin) (CDH10), mRNA. /FEA=mRNA /GEN=CDH10 /PROD=cadherin 10, type 2
- 35 2 (T2-cadherin) /DB_XREF=gi:5802995 /UG=Hs.92489 cadherin 10, type 2 ...
220232_at chromosome 20 open reading frame 39
220252_x_at optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)
- 40 220287_at a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 9
220352_x_at gb:NM_024305.1 /DEF=Homo sapiens hypothetical protein MGC4278 (MGC4278), mRNA. /FEA=mRNA /GEN=MGC4278 /PROD=hypothetical
- 45 protein MGC4278 /DB_XREF=gi:13236535 /UG=Hs.318780 hypothetical protein MG ...
220398_at matrix metalloproteinase 28
220446_s_at carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 4
220452_x_at gb:NM_021031.1 /DEF=Homo sapiens cytochrome c-like antigen (CYCL), mRNA. /FEA=mRNA /GEN=CYCL /PROD=cytochrome c-like
- 50 antigen /DB_XREF=gi:10518341 /UG=Hs.262219 cytochrome c-like antigen /FL=gb:NM ...
220560_at chromosome 11 open reading frame 21
220574_at chromosome 20 open reading frame 48
220591_s_at optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)
- 55 220671_at CCR4 carbon catabolite repression 4-like (S. cerevisiae)
220684_at T-box 21
220720_x_at tubulin, alpha 4
220725_x_at UDP-glucuronate decarboxylase 1

- 220776_at potassium inwardly-rectifying channel, subfamily J, member 14
- 220796_x_at brain and acute leukemia, cytoplasmic
- 220800_s_at tropomodulin 3 (ubiquitous)
- 5 220833_at myosin XVA
- 220838_at chromosome 20 open reading frame 21
- 220853_at Kruppel-like factor 15
- 220944_at RAB25, member RAS oncogene family
- 221078_s_at LUC7-like (S. cerevisiae)
- 10 221107_at cholinergic receptor, nicotinic, alpha polypeptide 9
- 221155_x_at DnaJ (Hsp40) homolog, subfamily A, member 4
- 221192_x_at matrix metalloproteinase 28
- 221220_s_at hypoxia-inducible factor 1, alpha subunit inhibitor
- 221419_s_at gb:NM_013307.1 /DEF=Homo sapiens non-functional folate binding protein (HSAF000381), mRNA. /FEA=CDS /GEN=HSAF000381
- 15 /PROD=non-functional folate binding protein /DB_XREF=gi:7019412 /FL=gb:NM_013307.1
- 221443_x_at protease inhibitor 15
- 221460_at olfactory receptor, family 2, subfamily C, member 1
- 20 221473_x_at tumor differentially expressed 1
- 221541_at espin
- 221695_s_at mitogen-activated protein kinase kinase kinase 2 [BLAST]
- 221717_at G protein-coupled receptor 52
- 221757_at chromosome 20 open reading frame 54
- 25 221832_s_at cysteine and tyrosine-rich 1 [BLAST]
- 221917_s_at G-rich RNA sequence binding factor 1
- 221997_s_at Ca<2+>dependent activator protein for secretion [BLAST]
- 222252_x_at chromosome 1 open reading frame 6
- 222368_at Consensus includes gb:AW972351 /FEA=EST
- 30 /DB_XREF=gi:8162197 /DB_XREF=est:EST384442 /UG=Hs.293451 ESTs
- 222370_x_at RAS, guanyl releasing protein 4

Table 4: genes down-regulated at day 5

	Gene Name	Gene Description
5	1316_at	thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian)
	35150_at	tumor necrosis factor receptor superfamily, member 5
	36829_at	period homolog 1 (Drosophila)
	37793_r_at	RAD51-like 3 (S. cerevisiae)
10	47571_at	zinc finger protein 236
	49327_at	sirtuin silent mating type information regulation 2 homolog 3 (S. cerevisiae)
	48612_at	tubulin, beta polypeptide 4, member Q
	58900_at	Kruppel-like factor 13
15	200706_s_at	fragile X mental retardation, autosomal homolog 2
	200776_s_at	syndecan 3 (N-syndecan)
	200915_x_at	kinectin 1 (kinesin receptor)
	200976_s_at	Tax1 (human T-cell leukemia virus type I) binding protein 1
20	201041_s_at	dual specificity phosphatase 1
	201044_x_at	dual specificity phosphatase 1
	201057_s_at	golgi autoantigen, golgin subfamily b, macrogolgin (with transmembrane signal), 1
	201070_x_at	splicing factor 3b, subunit 1, 155kD
25	201140_s_at	RAB5C, member RAS oncogene family
	201278_at	disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)
	201502_s_at	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha
30	201567_s_at	golgi autoantigen, golgin subfamily a, 4
	201686_x_at	apoptosis inhibitor 5
	201876_at	paraoxonase 2
	201878_at	ariadne homolog, ubiquitin-conjugating enzyme E2 binding protein, 1 (Drosophila)
35	201884_at	carcinoembryonic antigen-related cell adhesion molecule 5
	201971_s_at	ATPase, H ⁺ transporting, lysosomal 70kD, V1 subunit A, isoform 1
	202037_s_at	secreted frizzled-related protein 1
	202071_at	syndecan 4 (amphiglycan, ryudocan)
40	202122_s_at	glycoprotein A33 (transmembrane)
	202224_at	Consensus includes gb:BF304695 /FEA=EST /DB_XREF=gi:11251580 /DB_XREF=est:601888248F1 /CLONE=IMAGE:4122466 /UG=Hs.306088 v-crk avian sarcoma virus CT10 oncogene homolog /FL=gb:D10656.1 gb:NM_016823.1
45	202488_s_at	FXRD domain-containing ion transport regulator 3
	202604_x_at	a disintegrin and metalloproteinase domain 10
	202709_at	fibromodulin
	202840_at	gb:NM_003487.1 /DEF=Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, N, 68kD (RNA-binding protein 56) (TAF2N), mRNA. /FEA=mRNA /GEN=TAF2N /PROD=TATA box binding ...
50	202861_at	period homolog 1 (Drosophila)
	202873_at	ATPase, H ⁺ transporting, lysosomal 42kD, V1 subunit C, isoform 1
55	202902_s_at	cathepsin S

- 202921_s at ankyrin 2, neuronal
 203134_at phosphatidylinositol binding clathrin assembly protein
 203243_s at transducin (beta)-like 3
 203319_s at zinc finger protein 148 (pHZ-52)
 5 203395_s at hairy homolog (Drosophila)
 203511_s at potassium large conductance calcium-activated channel, subfamily M beta member 3
 203512_at potassium large conductance calcium-activated channel, subfamily M beta member 3
 10 203666_at stromal cell-derived factor 1
 203758_at cathepsin O
 203788_s at sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C
 203887_s at thrombomodulin
 15 203922_s at cytochrome b-245, beta polypeptide (chronic granulomatous disease)
 203933_at sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3E
 203963_at carbonic anhydrase XII
 20 204042_at WAS protein family, member 3
 204230_s at solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7
 204232_at Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide
 25 204243_at rearranged L-myc fusion sequence
 204312_x at cAMP responsive element binding protein 1
 204360_s at N-acetylglucosaminidase, alpha- (Sanfilippo disease IIIB)
 204421_s at gb:M27968.1 /DEF=Human basic fibroblast growth factor (FGF) mRNA, complete cds. /FEA=mRNA /GEN=FGF2 /DB_XREF=gi:182562
 30 /UG=Hs.284244 fibroblast growth factor 2 (basic) /FL=gb:M27968.1
 gb:NM_002006.1
 204670_x at major histocompatibility complex, class II, DR beta 1
 204762_s at guanine nucleotide binding protein (G protein), alpha activating activity polypeptide 0
 35 204802_at Ras-related associated with diabetes
 204842_x at sperm autoantigenic protein 17
 205046_at centromere protein E (312kD)
 205097_at solute carrier family 26 (sulfate transporter), member 2
 205232_s at platelet-activating factor acetylhydrolase 2 (40kD)
 40 205235_s at M-phase phosphoprotein 1
 205328_at claudin 10
 205359_at A kinase (PRKA) anchor protein 6
 205381_at mesothelin
 205431_s at bone morphogenetic protein 5
 45 205520_at striatin, calmodulin binding protein
 205525_at gb:NM_018495.3 /DEF=Homo sapiens NAG22 protein (LOC55873), mRNA. /FEA=mRNA /GEN=LOC55873 /PROD=NAG22 protein /DB_XREF=gi:13236500 /UG=Hs.283080 NAG22 protein /FL=gb:AF247820.3
 gb:NM_018495.3
 50 205595_at desmoglein 3 (pemphigus vulgaris antigen)
 205608_s at angiopoietin 1
 205636_at SH3-domain GRB2-like 3 [BLAST]
 205729_at oncostatin M receptor
 205752_s at glutathione S-transferase M5
 55 205879_x at ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease)
 206096_at zinc finger protein 35 (clone HF.10)
 206212_at carboxypeptidase A2 (pancreatic)
 206263_at flavin containing monooxygenase 4

- 206291_at neurotensin
 206388_at phosphodiesterase 3A, cGMP-inhibited
 206389_s_at phosphodiesterase 3A, cGMP-inhibited
 206456_at gamma-aminobutyric acid (GABA) A receptor, alpha 5
 5 206586_at cannabinoid receptor 2 (macrophage)
 206766_at integrin, alpha 10
 206825_at oxytocin receptor
 206910_x_at H factor (complement)-like 3
 206936_x_at chromosome 20 open reading frame 110
 10 207041_at mannan-binding lectin serine protease 2
 207064_s_at amine oxidase, copper containing 2 (retina-specific)
 207131_x_at gamma-glutamyltransferase 1
 207347_at excision repair cross-complementing rodent repair
 deficiency, complementation group 6
 15 207408_at organic cationic transporter-like 4
 207608_x_at cytochrome P450, subfamily I (aromatic compound-
 inducible), polypeptide 2
 207732_s_at discs, large (Drosophila) homolog 3 (neuroendocrine-dlg)
 207755_at chromosome 20 open reading frame 48
 20 207908_at keratin 2A (epidermal ichthyosis bullosa of Siemens)
 207936_x_at ret finger protein-like 3
 207938_at protease inhibitor 15
 207969_x_at acrosomal vesicle protein 1 [BLAST]
 208124_s_at sema domain, immunoglobulin domain (Ig), transmembrane
 25 domain (TM) and short cytoplasmic domain, (semaphorin) 4F
 208138_at gastrin
 208185_x_at Consensus includes gb:NM_016415.1 /DEF=Homo sapiens clone
 FLB3816 (LOC51216), mRNA. /FEA=mRNA /GEN=LOC51216 /PROD=clone FLB3816
 /DB_XREF=gi:10047109 /UG=Hs.277887 clone FLB3816 /FL=gb:NM_016415.1
 30 ...
 208351_s_at mitogen-activated protein kinase 1
 208360_s_at gb:NM_015870.1 /DEF=Homo sapiens endogenous retrovirus H
 D1 leader region integrase-derived ORF1, ORF2, and putative envelope
 protein (HSU88895), mRNA. /FEA=mRNA /GEN=HSU88895 /PROD=endogenous
 35 re ...
 208382_s_at DMCL dosage suppressor of mck1 homolog, meiosis-specific
 homologous recombination (yeast)
 208447_s_at phosphoribosyl pyrophosphate synthetase 1
 208486_at cytochrome P450, subfamily IVA, polypeptide 11 [BLAST]
 40 208679_s_at actin related protein 2/3 complex, subunit 2 (34 kD)
 208730_x_at RAB2, member RAS oncogene family
 208763_s_at delta sleep inducing peptide, immunoreactor
 208860_s_at alpha thalassemia/mental retardation syndrome X-linked
 (RAD54 homolog, S. cerevisiae)
 45 208868_s_at GABA(A) receptor-associated protein like 1
 208869_s_at GABA(A) receptor-associated protein like 1
 208937_s_at inhibitor of DNA binding 1, dominant negative helix-loop-
 helix protein
 209312_x_at gb:U65585.1 /DEF=Homo sapiens MHC class II antigen (HLA-
 50 DRB1) mRNA, HLA-DRB1*PBL allele, complete cds. /FEA=mRNA /GEN=HLA-
 DRB1 /PROD=MHC class II antigen /DB_XREF=gi:5478215 /UG=Hs.180255
 major ...
 209436_at spondin 1, (f-spondin) extracellular matrix protein
 209535_s_at LIM and SH3 protein 1
 55 209701_at desmin [BLAST]
 209703_x_at component of oligomeric golgi complex 4
 209790_s_at caspase 6, apoptosis-related cysteine protease [BLAST]
 209882_at Ric-like, expressed in many tissues (Drosophila)

- 210048_at N-ethylmaleimide-sensitive factor attachment protein, gamma
- 210191_s_at putative homeodomain transcription factor 1
- 210226_at nuclear receptor subfamily 4, group A, member 1
- 5 210412_at glutamate receptor, ionotropic, N-methyl D-aspartate 2B
- 210639_s_at APG5 autophagy 5-like (*S. cerevisiae*)
- 210739_x_at solute carrier family 4, sodium bicarbonate cotransporter, member 4
- 210757_x_at disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)
- 10 210796_x_at sialic acid binding Ig-like lectin 6
- 210830_s_at paraoxonase 2
- 210836_x_at phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3 duncce homolog, Drosophila)
- 15 210837_s_at phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3 duncce homolog, Drosophila)
- 210912_x_at glutathione S-transferase M4
- 210923_at chromosome 20 open reading frame 82
- 210944_s_at calpain 3, (p94)
- 20 210962_s_at A kinase (PRKA) anchor protein (yotiao) 9
- 211014_s_at promyelocytic leukemia
- 211026_s_at monoglyceride lipase [BLAST]
- 211040_x_at gb:BC006325.1 /DEF=Homo sapiens, G-2 and S-phase expressed 1, clone MGC:12560, mRNA, complete cds. /FEA=mRNA /PROD=G-2 and S-phase expressed 1 /DB_XREF=gi:13623450 /FL=gb:BC006325.1
- 25 211071_s_at chromosome 12 open reading frame 8 [BLAST]
- 211074_at gb:AF000381.1 /DEF=Homo sapiens non-functional folate binding protein mRNA, complete cds. /FEA=mRNA /PROD=non-functional folate binding protein /DB_XREF=gi:2565195 /FL=gb:AF000381.1
- 30 211096_at pre-B-cell leukemia transcription factor 2
- 211113_s_at ATP-binding cassette, sub-family G (WHITE), member 1
- 211139_s_at NGFI-A binding protein 1 (EGRI binding protein 1)
- 211277_x_at amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)
- 35 211316_x_at CASP8 and FADD-like apoptosis regulator
- 211328_x_at hemochromatosis
- 211364_at methylthioadenosine phosphorylase
- 211416_x_at gamma-glutamyltransferase 1
- 211460_at testis-specific transcript, Y-linked 9
- 40 211464_x_at caspase 6, apoptosis-related cysteine protease
- 211504_x_at Rho-associated, coiled-coil containing protein kinase 2
- 211574_s_at membrane cofactor protein (CD46, trophoblast-lymphocyte cross-reactive antigen)
- 211657_at carcinoembryonic antigen-related cell adhesion molecule 6 (non-specific cross reacting antigen) [BLAST]
- 45 211685_s_at neurocalcin delta [BLAST]
- 211713_x_at histone deacetylase 4 [BLAST]
- 211769_x_at tumor differentially expressed 1 [BLAST]
- 211781_x_at gb:BC006164.1 /DEF=Homo sapiens, clone MGC:13219, mRNA, complete cds. /FEA=mRNA /PROD=Unknown (protein for MGC:13219) /DB_XREF=gi:13544062 /FL=gb:BC006164.1
- 50 211801_x_at hypoxia-inducible factor 1, alpha subunit inhibitor
- 211810_s_at galactosylceramidase (Krabbe disease)
- 211814_s_at cyclin E2
- 55 211918_x_at placenta-specific 3 [BLAST]
- 212196_at tumor necrosis factor receptor superfamily, member 19-like [BLAST]
- 212233_at chromosome 1 open reading frame 2

- 212514_x_at Consensus includes gb:R60068 /FEA=EST /DB_XREF=gi:830763 /DB_XREF=est:yhl2h07.s1 /CLONE=IMAGE:43138 /UG=Hs.147916 DEADH (Asp-Glu-Ala-AspHis) box polypeptide 3
- 212736_at Consensus includes gb:BE299456 /FEA=EST
- 5 /DB_XREF=gi:9183204 /DB_XREF=est:600944717T1 /CLONE=IMAGE:2960548 /UG=Hs.6349 Human Chromosome 16 BAC clone CIT987SK-A-362G6
- 212876_at UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4
- 212884_x_at apolipoprotein E [BLAST]
- 10 213139_at snail homolog 2 (Drosophila)
- 213193_x_at T cell receptor beta locus
- 213297_at nucleolar protein family A, member 2 (H/ACA small nucleolar RNPs)
- 213307_at Consensus includes gb:AF131790.1 /DEF=Homo sapiens clone
- 15 24903 mRNA sequence. /FEA=mRNA /DB_XREF=gi:4406618 /UG=Hs.12696 cortactin SH3 domain-binding protein
- 213406_at golgi associated, gamma adaptin ear containing, ARF binding protein 1
- 213486_at retinoic acid induced 17 [BLAST]
- 20 213816_s_at met proto-oncogene (hepatocyte growth factor receptor)
- 213936_x_at surfactant, pulmonary-associated protein B
- 214007_s_at protein tyrosine kinase 9 [BLAST]
- 214336_s_at coatomer protein complex, subunit alpha
- 214421_x_at cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 9 [BLAST]
- 25 214656_x_at myosin IC
- 214698_at Consensus includes gb:AW190873 /FEA=EST /DB_XREF=gi:6465353 /DB_XREF=est:x166a01.x1 /CLONE=IMAGE:2679624 /UG=Hs.145078 regulator of differentiation (in S. pombe) 1
- 30 214720_x_at Consensus includes gb:BF981643 /FEA=EST /DB_XREF=gi:12384455 /DB_XREF=est:602305961F1 /CLONE=IMAGE:4397295 /UG=Hs.79844 DKFZP564M1416 protein
- 214849_at Consensus includes gb:AW500220 /FEA=EST /DB_XREF=gi:7112628 /DB_XREF=est:UI-HF-BN0-akd-c-02-0-UI.r1
- 35 /CLONE=IMAGE:3076610 /UG=Hs.332496 Human DNA sequence from clone 108K11 on chromosome 6p21 Cont ...
- 214906_x_at ATPase, H⁺ transporting, lysosomal 31kD, V1 subunit E isoform 2
- 214923_at Consensus includes gb:AK001155.1 /DEF=Homo sapiens cDNA
- 40 FLJ10293 fis, clone NT2RM1000280, highly similar to VACUOLAR ATP SYNTHASE SUBUNIT D (EC 3.6.1.34). /FEA=mRNA /DB_XREF=gi:7022230 /UG=Hs.30 ...
- 214933_at calcium channel, voltage-dependent, P/Q type, alpha 1A subunit
- 45 214951_at UDP-N-acetyl-alpha-D-galactosamine:(N-acetylneuraminy)-galactosylglucosylceramide N-acetylgalactosaminyltransferase (GalNAc-T)
- 214953_s_at amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)
- 50 215032_at nudix (nucleoside diphosphate linked moiety X)-type motif 11
- 215178_x_at N-acylsphingosine amidohydrolase (acid ceramidase)-like
- 215236_s_at phosphatidylinositol binding clathrin assembly protein
- 215366_at sorting nexin 6
- 55 215439_x_at F-box and leucine-rich repeat protein 11
- 215479_at immunoglobulin superfamily, member 9 [BLAST]
- 215588_x_at Consensus includes gb:AK024958.1 /DEF=Homo sapiens cDNA: FLJ21305 fis, clone COL02124. /FEA=mRNA /DB_XREF=gi:10437382 /UG=Hs.287658 Homo sapiens cDNA: FLJ21305 fis, clone COL02124

- 215609_at Consensus includes gb:AK023895.1 /DEF=Homo sapiens cDNA
FLJ13833 fis, clone THYRO1000676. /FEA=mRNA /DB_XREF=gi:10435969
/UG=Hs.296745 Homo sapiens cDNA FLJ13833 fis, clone THYRO1000676
- 215758_x_at zinc finger protein 253
- 5 215766_at Consensus includes gb:AL096729.1 /DEF=Homo sapiens mRNA;
cDNA DKFZp434D044 (from clone DKFZp434D044). /FEA=mRNA
/DB_XREF=gi:5419863 /UG=Hs.146581 Homo sapiens mRNA; cDNA
DKFZp434D044 (from clone ...
- 215825_at Consensus includes gb:AF070579.1 /DEF=Homo sapiens clone
10 24487 mRNA sequence. /FEA=mRNA /DB_XREF=gi:3387951 /UG=Hs.283819 Homo
sapiens clone 24487 mRNA sequence
- 215856_at Consensus includes gb:AK025833.1 /DEF=Homo sapiens cDNA:
FLJ22180 fis, clone HRC00936. /FEA=mRNA /DB_XREF=gi:10438467
/UG=Hs.287692 Homo sapiens cDNA: FLJ22180 fis, clone HRC00936
- 15 215910_s_at carbohydrate (chondroitin) synthase 1
- 216061_x_at platelet-derived growth factor beta polypeptide (simian
sarcoma viral (v-sis) oncogene homolog)
- 216159_s_at prostate tumor over expressed gene 1
- 216196_at chromosome 20 open reading frame 136 [BLAST]
- 20 216220_s_at adenosine A1 receptor
- 216292_at Consensus includes gb:AK024455.1 /DEF=Homo sapiens mRNA
for FLJ00047 protein, partial cds. /FEA=mRNA /GEN=FLJ00047
/PROD=FLJ00047 protein /DB_XREF=gi:10440423 /UG=Hs.287753 Homo
sapiens mRNA for ...
- 25 216294_s_at ubiquitin specific protease 24
- 216374_at Consensus includes gb:AC006986 /DEF=Homo sapiens BAC
clone RP11-155J5 from Y /FEA=CDS /DB_XREF=gi:4753246 /UG=Hs.283908
Homo sapiens BAC clone RP11-155J5 from Y
- 216661_x_at cytochrome P450, subfamily IIC (mephenytoin 4-
30 hydroxylase), polypeptide 9
- 216735_x_at prostate tumor over expressed gene 1 [BLAST]
- 216745_x_at Consensus includes gb:AK024606.1 /DEF=Homo sapiens cDNA:
FLJ20953 fis, clone ADSE01979. /FEA=mRNA /DB_XREF=gi:10436920
/UG=Hs.306697 Homo sapiens cDNA: FLJ20953 fis, clone ADSE01979
- 35 216791_at lysyl oxidase-like 4 [BLAST]
- 216859_x_at Consensus includes gb:AL080112.1 /DEF=Homo sapiens mRNA;
cDNA DKFZp586H0722 (from clone DKFZp586H0722). /FEA=mRNA
/DB_XREF=gi:5262539 /UG=Hs.332731 Homo sapiens mRNA; cDNA
DKFZp586H0722 (from clo ...
- 40 216873_s_at ATPase, Class I, type 8B, member 2
- 216936_at Consensus includes gb:X81637.1 /DEF=H.sapiens clathrin
light chain b gene. /FEA=mRNA /DB_XREF=gi:963046 /UG=Hs.73919
clathrin, light polypeptide (Lcb)
- 216993_s_at Consensus includes gb:U32169 /DEF=Human pro-a2 chain of
45 collagen type XI (COL11A2) gene, complete cds /FEA=mRNA_3
/DB_XREF=gi:1000744 /UG=Hs.121509 collagen, type XI, alpha 2
- 217020_at retinoic acid receptor, beta
- 217117_x_at Consensus includes gb:AF007194.1 /DEF=Homo sapiens mucin
(MUC3) mRNA, partial cds. /FEA=mRNA /GEN=MUC3 /PROD=mucin
- 50 /DB_XREF=gi:2853300 /UG=Hs.129782 mucin 3A, intestinal
- 217189_s_at chromosome 1 open reading frame 16
- 217269_s_at protease, serine, 7 (enterokinase)
- 217315_s_at kallikrein 13
- 217377_x_at ets variant gene 6 (TEL oncogene)
- 55 217457_s_at RAP1, GTP-GDP dissociation stimulator 1
- 217465_at NCK-associated protein 1 [BLAST]
- 217480_x_at G protein-coupled receptor 2
- 217703_x_at Consensus includes gb:AA401963 /FEA=EST
/DB_XREF=gi:2055965 /DB_XREF=est:zu53c08.s1 /CLONE=IMAGE:741710

- /UG=Hs.194107 ESTs, Moderately similar to ALU7_HUMAN ALU SUBFAMILY SQ
SEQUENCE CONTAMINATIO ...
- 217787_s_at UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-
acetylglactosaminyltransferase 2 (GalNAc-T2)
- 5 217859_s_at synaptojanin 2 binding protein
217862_at protein inhibitor of activated STAT, 1
217878_s_at Consensus includes gb:AI203880 /FEA=EST
/DB_XREF=gi:3756486 /DB_XREF=est:qf77g07.x1 /CLONE=IMAGE:1756092
/UG=Hs.172405 cell division cycle 27 /FL=gb:NM_001256.1
- 10 218211_s_at transgene insertion 202, William Muller
218554_s_at solute carrier family 22 (organic anion/cation
transporter), member 11
218949_s_at chromosome 15 open reading frame 12
219014_at toll-like receptor 8
- 15 219032_x_at opsin 3 (encephalopsin, panopsin)
219183_s_at pleckstrin homology, Sec7 and coiled/coil domains 4
219194_at sema domain, immunoglobulin domain (Ig), transmembrane
domain (TM) and short cytoplasmic domain, (semaphorin) 4G
219221_at engulfment and cell motility 3 (ced-12 homolog, C.
elegans)
- 20 219228_at chromosome Y open reading frame 14
219398_at zinc finger protein 338
219472_at matrix metalloproteinase 28
219677_at UDP-glucuronate decarboxylase 1
- 25 219679_s_at gb:NM_018604.1 /DEF=Homo sapiens hypothetical protein
PRO1741 (PRO1741), mRNA. /FEA=mRNA /GEN=PRO1741 /PROD=hypothetical
protein PRO1741 /DB_XREF=gi:8924074 /UG=Hs.306067 hypothetical
protein PRO ...
219702_at placenta-specific 1
- 30 219757_s_at chromosome 20 open reading frame 21
219860_at chromosome 6 open reading frame 20
219910_at coronin, actin binding protein, 1A
219977_at aryl hydrocarbon receptor interacting protein-like 1
220115_s_at gb:NM_006727.1 /DEF=Homo sapiens cadherin 10, type 2 (T2-
cadherin) (CDH10), mRNA. /FEA=mRNA /GEN=CDH10 /PROD=cadherin 10, type
2 (T2-cadherin) /DB_XREF=gi:5802995 /UG=Hs.92489 cadherin 10, type 2
...
- 35 220287_at a disintegrin-like and metalloprotease (reprolysin type)
with thrombospondin type 1 motif, 9
- 40 220398_at matrix metalloproteinase 28
220446_s_at carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 4
220560_at chromosome 11 open reading frame 21
220574_at chromosome 20 open reading frame 48
220725_x_at UDP-glucuronate decarboxylase 1
- 45 220776_at potassium inwardly-rectifying channel, subfamily J,
member 14
220800_s_at tropomodulin 3 (ubiquitous)
220833_at myosin XVA
220838_at chromosome 20 open reading frame 21
- 50 220853_at Kruppel-like factor 15
220944_at RAB25, member RAS oncogene family
221078_s_at LUC7-like (S. cerevisiae)
221107_at cholinergic receptor, nicotinic, alpha polypeptide 9
221220_s_at hypoxia-inducible factor 1, alpha subunit inhibitor
- 55 221460_at olfactory receptor, family 2, subfamily C, member 1
221473_x_at tumor differentially expressed 1
221541_at espin
221695_s_at mitogen-activated protein kinase kinase kinase 2 [BLAST]
221717_at G protein-coupled receptor 52

- 221757_at chromosome 20 open reading frame 54
221832_s_at cysteine and tyrosine-rich 1 [BLAST]
221917_s_at G-rich RNA sequence binding factor 1
221997_s_at Ca²⁺-dependent activator protein for secretion [BLAST]
5 222368_at Consensus includes gb:AW972351 /FEA=EST
/DB_XREF=gi:8162197 /DB_XREF=est:EST384442 /UG=Hs.293451 ESTs
222370_x_at RAS, guanyl releasing protein 4

Claims

1. Use of a composition as prepared by a method comprising (a) comminuting rhizomes of *Fagopyrum*
5 *dibotrys*; (b) extracting the comminuted material with a solvent comprising a C₁-C₄ alcohol to produce a liquid extract; and (c) removing solvent from the liquid extract to produce a dried or concentrated material; and optionally (d) fractionating the dried or concentrated
10 material in the manufacture of a composition for treatment or prevention of a cancer selected from breast cancer, liver cancer and melanoma.
2. Use according to claim 1 wherein the cancer is
15 breast cancer.
3. Use according to claim 1 wherein the cancer is liver cancer.
- 20 4. Use according to any preceding claim wherein said solvent comprises ethanol.
5. Use according to any preceding claim wherein an excipient is added to the liquid extract and step (c)

comprises drying under reduced pressure to produce a dry material.