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Pathway enrichment of up-regulated genes

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1

Pathway name: Jak-STAT signaling pathway

Adjusted p-value: 6.47E-03

Differentially expressed genes in pathway: IL11; IL15RA; IL4R; IL6R; OSMR; PIK3R5; SPRED1; SPRED2; SPRED3; SPRY2; SPRY4;

The number of differentially expressed genes in pathway: 11

The total number of genes in pathway: 158

Pathway database: KEGG

2

Pathway name: Osteoclast differentiation

Adjusted p-value: 1.67E-02

Differentially expressed genes in pathway: FHL2; FOS; FOSB; FOSL1; JUNB; NFKB2; PIK3R5; RELB; TGFB1;

The number of differentially expressed genes in pathway: 9

The total number of genes in pathway: 133

Pathway database: KEGG

3

Pathway name: MAPK signaling pathway

Adjusted p-value: 1.77E-02

Differentially expressed genes in pathway: DUSP1; DUSP4; DUSP5; DUSP6; FLNA; FOS; GADD45B; NFKB2; NR4A1; PRKCB; RASGRF2; RELB; TGFB1;

The number of differentially expressed genes in pathway: 13

The total number of genes in pathway: 257

Pathway database: KEGG

4

Pathway name: ECM-receptor interaction

Adjusted p-value: 2.05E-02

Differentially expressed genes in pathway: CD44; ITGA7; LAMA4; LAMB3; LAMC2; SDC4; TNC;

The number of differentially expressed genes in pathway: 7

The total number of genes in pathway: 88

Pathway database: KEGG

5

Pathway name: Focal adhesion

Adjusted p-value: 2.62E-02

Differentially expressed genes in pathway: CAV1; FLNA; FLT1; ITGA7; LAMA4; LAMB3; LAMC2; PIK3R5; PRKCB; TNC; ZYX;

The number of differentially expressed genes in pathway: 11

The total number of genes in pathway: 210

Pathway database: KEGG

6

Pathway name: Pathways in cancer

Adjusted p-value: 3.36E-02
Differentially expressed genes in pathway: CCNA1; CDH1; EPAS1; FOS; LAMA4;
LAMB3; LAMC2; MMP2; NFKB2; PIK3R5; PRKCB; RUNX1; TGFB1; WNT3A;
The number of differentially expressed genes in pathway: 14
The total number of genes in pathway: 329
Pathway database: KEGG

7
Pathway name: Amoebiasis
Adjusted p-value: 4.39E-02
Differentially expressed genes in pathway: LAMA4; LAMB3; LAMC2; PIK3R5; PRKCB;
SERPINB9; TGFB1;
The number of differentially expressed genes in pathway: 7
The total number of genes in pathway: 109
Pathway database: KEGG

8
Pathway name: RAF-independent MAPK1/3 activation
Adjusted p-value: 7.43E-03
Differentially expressed genes in pathway: DUSP1;DUSP4;DUSP5;DUSP6;IL6R;DUSP8
The number of differentially expressed genes in pathway: 7
The total number of genes in pathway: 28
Pathway database: Reactome

9
Pathway name: Hepatic Fibrosis / Hepatic Stellate Cell Activation
Adjusted p-value: 1.29E-02
Differentially expressed genes in pathway:
IGF2;IL4R;CTGF;FLT1;TGFB1;COL12A1;NGFR;IL6R;MMP13;MMP2;NFKB2
The number of differentially expressed genes in pathway: 11
The total number of genes in pathway: 183
Pathway database: IPA

10
Pathway name: NF- κ B Signaling
Adjusted p-value: 1.86E-02
Differentially expressed genes in pathway:
FLT1;CARD10;BCL10;NGFR;RELB;TLR6;PIK3R5;TNFAIP3;NFKB2;PRKCB
The number of differentially expressed genes in pathway: 10
The total number of genes in pathway: 180
Pathway database: IPA

11
Pathway name: Role of Tissue Factor in Cancer
Adjusted p-value: 1.86E-02
Differentially expressed genes in pathway:
CTGF;F2RL1;EGR1;PIK3R5;PLAUR;MMP13;HBEGF;CYR61
The number of differentially expressed genes in pathway: 8
The total number of genes in pathway: 122
Pathway database: IPA

12

Pathway name: Hepatic Cholestasis
Adjusted p-value: 1.86E-02
Differentially expressed genes in pathway:
ABCB1;TJP2;ABCB4;TGFB1;NGFR;NFkB2;ADCY7;IL11;PRKCB
The number of differentially expressed genes in pathway: 9
The total number of genes in pathway: 159
Pathway database: IPA

13
Pathway name: ILK Signaling
Adjusted p-value: 1.86E-02
Differentially expressed genes in pathway:
FOS;CDH1;FBLIM1;FLNA;SNAI1;PIK3R5;PPP2R2C;KRT18;NFkB2;TMSB10/TMSB4X
The number of differentially expressed genes in pathway: 10
The total number of genes in pathway: 196
Pathway database: IPA

14
Pathway name: PI3K Signaling in B Lymphocytes
Adjusted p-value: 1.86E-02
Differentially expressed genes in pathway:
FOS;IL4R;C3;CARD10;BCL10;PLEKHA4;NFkB2;PRKCB
The number of differentially expressed genes in pathway: 8
The total number of genes in pathway: 128
Pathway database: IPA

15
Pathway name: Colorectal Cancer Metastasis Signaling
Adjusted p-value: 2.57E-02
Differentially expressed genes in pathway:
FOS;CDH1;WNT3A;TGFB1;IL6R;TLR6;PIK3R5;MMP13;MMP2;NFkB2;ADCY7
The number of differentially expressed genes in pathway: 11
The total number of genes in pathway: 247
Pathway database: IPA

16
Pathway name: Protein Kinase A Signaling
Adjusted p-value: 3.55E-02
Differentially expressed genes in pathway:
DUSP5;DUSP8;FLNA;DUSP1;TGFB1;PDE10A;NGFR;DUSP6;UBASH3B;DUSP4;NFkB2;SFN;ADCY7;PRK
CB
The number of differentially expressed genes in pathway: 14
The total number of genes in pathway: 390
Pathway database: IPA

17
Pathway name: G-Protein Coupled Receptor Signaling
Adjusted p-value: 4.07E-02
Differentially expressed genes in pathway:
HRH1;DUSP1;PDE10A;DUSP6;PIK3R5;DUSP4;NFkB2;ADCY7;CHRM3;ADORA2A;PRKCB
The number of differentially expressed genes in pathway: 11
The total number of genes in pathway: 270
Pathway database: IPA

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Pathway enrichment of down-regulated genes

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1

Pathway name: Stearate Biosynthesis I (Animals)

Adjusted p-value: 2.40E-02

Differentially expressed genes in pathway: ACOT2;SRD5A3;ACOT1

The number of differentially expressed genes in pathway: 3

The total number of genes in pathway: 36

Pathway database: IPA

2

Pathway name: Acyl-CoA Hydrolysis

Adjusted p-value: 4.47E-02

Differentially expressed genes in pathway: ACOT2;ACOT1

The number of differentially expressed genes in pathway: 2

The total number of genes in pathway: 12

Pathway database: IPA