**Attached file for Figure 2: Differentially transcribed genes**

# Differential response of Mono Mac 6-, BEAS-2B- and Jurkat- cells to indoor dust

Herbert Riechelmann, Tom Deutschle, Ariane Grabow, Birger Heinzow, Werner Butte, Rudolf Reiter

## Mono Mac 6-cells upregulated genes

| Gene Name | Ratio | UniGene ID | Refseq ID | Description |
|---|---|---|---|---|
| **CCL4** | 6.94 | Hs.75703 | NM_002984.2 | Chemokine (C-C motif) ligand 4 |
| **CCL3** | 6.88 | Hs.514107 | NM_002983.1 | Chemokine (C-C motif) ligand 3 |
| **SERPINB2** | 6.78 | Hs.594481 | NM_002575.1 | Serpin peptidase inhibitor, clade B (ovalbumin), member 2 |
| **IL1B** | 6.15 | Hs.126256 | NM_000576.2 | Interleukin 1, beta |
| **IL8** | 5.93 | Hs.624 | NM_000584.2 | Interleukin 8 |
| **MT1L** | 4.45 | Hs.647358 | NM_002450 | Metallothionein 1L (pseudogene) |
| **SOD2** | 4.32 | Hs.487046 | NM_000636.2 | Superoxide dismutase 2, mitochondrial |
| **MT1E** | 4.32 | Hs.534330 | NM_175617.3 | Metallothionein 1E (functional) |
| **MT1A** | 4.28 | Hs.513626 | NM_005946.2 | Metallothionein 1A (functional) |
| **MT1G** | 3.81 | Hs.433391 | NM_005950.1 | Metallothionein 1G |
| **UGT2B4** | 3.41 | Hs.285887 | NM_021139.1 | UDP glucuronosyltransferase 2 family, polypeptide B4 |
| **IL23A** | 3.34 | Hs.98309 | NM_016584.2 | Interleukin 23, alpha subunit p19 |
| **IER3** | 2.94 | Hs.591785 | NM_003897.2 | Immediate early response 3 |
| **BCL2A1** | 2.81 | Hs.227817 | NM_004049.2 | BCL2-related protein A1 |
| **RGS1** | 2.74 | Hs.75256 | NM_002922.3 | Regulator of G-protein signalling 1 |
| **MT1H** | 2.72 | Hs.438462 | NM_005951.1 | Metallothionein 1H |
| **NFKBIA** | 2.49 | Hs.81328 | NM_020529.1 | Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha |
| **PTGS2** | 2.33 | Hs.196384 | NM_000963.1 | Prostaglandin-endoperoxide synthase 2 |
| **TNFAIP3** | 2.32 | Hs.591338 | NM_006290.2 | Tumor necrosis factor, alpha-induced protein 3 |
| **CDKN1A** | 2.29 | Hs.370771 | NM_078467.1 | Cyclin-dependent kinase inhibitor 1A (p21, Cip1) |
| **TRAF1** | 2.19 | Hs.531251 | NM_005658.3 | TNF receptor-associated factor 1 |
| **CCL1** | 2.14 | Hs.72918 | NM_002981.1 | Chemokine (C-C motif) ligand 1 |
| **CSF2** | 2.08 | Hs.1349 | NM_000758.2 | Colony stimulating factor 2 (granulocyte-macrophage) |
| **FTH1** | 2.06 | Hs.524910 | NM_002204.1 | Ferritin, heavy polypeptide 1 |
| **CD48** | 2.03 | Hs.243564 | NM_001778.2 | CD48 molecule |
| **NQO1** | 2.01 | Hs.406515 | NM_001025434.1 | NAD(P)H dehydrogenase, quinone 1 |
| **MMP9** | 1.84 | Hs.297413 | NM_004994.2 | Matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase) |
| **PLAUR** | 1.83 | Hs.466871 | NM_001005376.1 | Plasminogen activator, urokinase receptor |
| **CYP1B1** | 1.81 | Hs.154654 | NM_000104.2 | Cytochrome P450, family 1, subfamily B, polypeptide 1 |
| **UGT2B10** | 1.78 | Hs.201634 | NM_001075.2 | UDP glucuronosyltransferase 2 family, polypeptide B10 |
| **TNFAIP2** | 1.75 | Hs.525607 | NM_006291.2 | Tumor necrosis factor, alpha-induced protein 2 |
| **BTG2** | 1.73 | Hs.519162 | NM_006763.2 | BTG family, member 2 |
| **THBS1** | 1.67 | Hs.164226 | NM_003246.2 | Thrombospondin 1 |

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|---|---|---|---|---|
| **CXCL1** | 1.65 | Hs.789 | NM_001511.1 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| **CCL20** | 1.55 | Hs.75498 | NM_004591.1 | Chemokine (C-C motif) ligand 20 |
| **TNF** | 1.51 | Hs.241570 | NM_000594.2 | Tumor necrosis factor (TNF superfamily, member 2) |
| **CD83** | 1.46 | Hs.484703 | NM_001040280.1 | CD83 molecule |
| **FGR** | 1.45 | Hs.1422 | NM_001042729.1 | Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog |
| **IFNGR2** | 1.44 | Hs.634632 | NM_005534.2 | Interferon gamma receptor 2 (interferon gamma transducer 1) |
| **DUSP1** | 1.40 | Hs.171695 | NM_004417.2 | Dual specificity phosphatase 1 |
| **TNFAIP6** | 1.39 | Hs.437322 | NM_007115.2 | Tumor necrosis factor, alpha-induced protein 6 |
| **RIPK2** | 1.35 | Hs.103755 | NM_003821.5 | Receptor-interacting serine-threonine kinase 2 |
| **IGFBP3** | 1.33 | Hs.450230 | NM_001013398.1 | Insulin-like growth factor binding protein 3 |
| **CCL7** | 1.31 | Hs.251526 | NM_006273.2 | Chemokine (C-C motif) ligand 7 |
| **ADAM17** | 1.29 | Hs.404914 | NM_003183.4 | ADAM metallopeptidase domain 17 (tumor necrosis factor, alpha, converting enzyme) |
| **TNFRSF1B** | 1.28 | Hs.256278 | NM_001066.2 | Tumor necrosis factor receptor superfamily, member 1B |
| **DAF** | 1.22 | Hs.408864 | NM_000574 | Complemet decay-accelaratig factor |
| **MMP14** | 1.22 | Hs.2399 | NM_004995.2 | Matrix metallopeptidase 14 (membrane-inserted) |
| **ICAM1** | 1.16 | Hs.643447 | NM_000201.1 | Intercellular adhesion molecule 1 (CD54), human rhinovirus receptor |
| **PSCDBP** | 1.15 | Hs.270 | NM_004288.3 | Pleckstrin homology, Sec7 and coiled-coil domains, binding protein |
| **ANXA5** | 1.13 | Hs.480653 | NM_001154.2 | Annexin A5 |
| **TANK** | 1.03 | Hs.556496 | NM_133484.1 | TRAF family member-associated NFKB activator |
| **HLA-F** | 1.03 | Hs.519972 | NM_018950 | Major histocompatibility complex, class I, F |
| **JUND** | 1.00 | Hs.2780 | NM_005354.3 | Jun D proto-oncogene |
| **NFKB2** | 0.99 | Hs.73090 | NM_001077493.1 | Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) |
| **NFKB1** | 0.98 | Hs.431926 | NM_003998.2 | Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (p105) |
| **TNIP1** | 0.96 | Hs.543850 | NM_006058.3 | TNFAIP3 interacting protein 1 |
| **CASP1** | 0.96 | Hs.2490 | NM_001007232.1 | Caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase) |
| **GGT1** | 0.91 | Hs.595809 | NM_001032364.1 | Gamma-glutamyltransferase 1 |
| **PBEF** | 0.88 | Hs. 293464 | NM_005746 | Pre B cell enhancing factor precursor |
| **HSPA1A** | 0.87 | Hs.405994 | NM_005346.3 | Heat shock 70kDa protein 1A |
| **GSTM3** | 0.86 | Hs.2006 | NM_000849.3 | Glutathione S-transferase M3 (brain) |
| **BIRC3** | 0.80 | Hs.127799 | NM_182962.1 | Baculoviral IAP repeat-containing 3 |
| **CD14** | 0.79 | Hs.163867 | NM_001040021.1 | CD14 molecule |
| **CXCL2** | 0.79 | Hs.590921 | NM_002089.1 | Chemokine (C-X-C motif) ligand 2 |
| **SAT** | 0.76 | Hs.28491 | NM_002970 | Spermidine acetyltransferase |
| **CCL2** | 0.73 | Hs.303649 | NM_002982.3 | Chemokine (C-C motif) ligand 2 |
| **CCR5** | 0.69 | Hs.450802 | NM_000579.1 | Chemokine (C-C motif) receptor 5 |
| **GADD45A** | 0.69 | Hs.80409 | NM_001924.2 | Growth arrest and DNA-damage-inducible, alpha |
| **LIF** | 0.68 | Hs.2250 | NM_002309.2 | Leukemia inhibitory factor (cholinergic differentiation factor) |

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|---|---|---|---|---|
| **PMAIP1** | 0.67 | Hs.96 | NM_021127.1 | Phorbol-12-myristate-13-acetate-induced protein 1 |
| **RASSF2** | 0.66 | Hs.631504 | NM_170774.1 | Ras association (RalGDS/AF-6) domain family 2 |
| **TMSB4X** | 0.65 | Hs.522584 | NM_021109.2 | Thymosin, beta 4, X-linked |
| **HLA-E** | 0.64 | Hs.118354 | NM_005516.4 | Major histocompatibility complex, class I, E |
| **FCAR** | 0.64 | Hs.631534 | NM_133273.1 | Fc fragment of IgA, receptor for |
| **ADAMDEC1** | 0.62 | Hs.521459 | NM_014479.2 | ADAM-like, decysin 1 |
| **DUSP5** | 0.60 | Hs.2128 | NM_004419.3 | Dual specificity phosphatase 5 |
| **CSF3** | 0.59 | Hs.2233 | NM_172220.1 | Colony stimulating factor 3 (granulocyte) |
| **CXCL10** | 0.59 | Hs.632586 | NM_001565.1 | Chemokine (C-X-C motif) ligand 10 |
| **CD44** | 0.57 | Hs.502328 | NM_001001391.1 | CD44 molecule (Indian blood group) |
| **HLA-A** | 0.56 | Hs.181244 | NM_002127.1 | Major histocompatibility complex, class I, A |
| **PLEKHC1** | 0.53 | Hs.509343 | NM_006832.1 | Pleckstrin homology domain containing, family C (with FERM domain) member 1 |
| **CCL19** | 0.53 | Hs.50002 | NM_006274.2 | Chemokine (C-C motif) ligand 19 |
| **CXCL3** | 0.50 | Hs.89690 | NM_002090.2 | Chemokine (C-X-C motif) ligand 3 |
| **CCL5** | 0.50 | Hs.514821 | NM_002985.2 | Chemokine (C-C motif) ligand 5 |
| **GCLC** | 0.49 | Hs.271264 | NM_001498.2 | Glutamate-cysteine ligase, catalytic subunit |
| **RCN1** | 0.49 | Hs.97887 | NM_002901.1 | Reticulocalbin 1, EF-hand calcium binding domain |
| **IL10** | 0.49 | Hs.193717 | NM_000572.2 | Interleukin 10 |
| **JUN** | 0.46 | Hs.525704 | NM_002228.3 | Jun oncogene |
| **POR** | 0.43 | Hs.354056 | NM_000941.2 | P450 (cytochrome) oxidoreductase |

## Mono Mac 6-cells downregulated genes

| Gene Name | Ratio | UniGene ID | Refseq ID | Description |
|---|---|---|---|---|
| **RNASE6** | -2.32 | Hs.23262 | NM_005615.2 | Ribonuclease, RNase A family, k6 |
| **CXCR4** | -1.85 | Hs.593413 | NM_001008540.1 | Chemokine (C-X-C motif) receptor 4 |
| **PP** | -1.75 | Hs. 184011 | NM_021129 | Pyrophosphatase (inorganic) |
| **AMHR2** | -1.26 | Hs. 123014 | NM_020547 | Anti-Mullerian hormone receptor, type II |
| **PDCD4** | -1.21 | Hs.232543 | NM_145341.2 | Programmed cell death 4 (neoplastic transformation inhibitor) |
| **PTMS** | -1.19 | Hs.504613 | NM_002824.4 | Parathymosin |
| **HSPD1** | -1.19 | Hs.595053 | NM_199440.1 | Heat shock 60kDa protein 1 (chaperonin) |
| **CDK4** | -1.19 | Hs.95577 | NM_000075.2 | Cyclin-dependent kinase 4 |
| **PGAM1** | -1.18 | Hs.592599 | NM_001029891.2 | Phosphoglycerate mutase 1 (brain) |
| **BNIP3** | -1.15 | Hs.144873 | NM_004052.2 | BCL2/adenovirus E1B 19kDa interacting protein 3 |
| **CD164** | -1.15 | Hs.520313 | NM_0060163 | CD 164 molecule, sialomurin |
| **DEFB1** | -1.15 | Hs.32949 | NM_005218.3 | Defensin, beta 1 |
| **FGF7** | -1.15 | Hs.567268 | NM_002009.2 | Fibroblast growth factor 7 (keratinocyte growth factor) |
| **CCT4** | -1.11 | Hs.421509 | NM_006430.2 | Chaperonin containing TCP1, subunit 4 (delta) |
| **LDHA** | -1.09 | Hs.2795 | NM_005566.1 | Lactate dehydrogenase A |
| **RNH** | -1.09 | Hs. 75108 | NM_002939 | Ribonuclease/angiogenin inhibitor |
| **HSPE1** | -1.08 | Hs.1197 | NM_002157.1 | Heat shock 10kDa protein 1 (chaperonin 10) |
| **NME4** | -1.07 | Hs. 9235 | NM_005009 | Non-metastatic cells 4, protein expressed i |
| **RNASE3** | -1.06 | Hs.73839 | NM_002935.2 | Ribonuclease, RNase A family, 3 (eosinophil cationic protein) |
| **CCT2** | -1.04 | Hs.189772 | NM_006431.2 | Chaperonin containing TCP1, subunit 2 (beta) |
| **CCNA2** | -1.03 | Hs.58974 | NM_001237.2 | Cyclin A2 |
| **AMH** | -1.01 | Hs.112432 | NM_000479.2 | Anti-Mullerian hormone |
| **IFNGR1** | -1.00 | Hs.520414 | NM_000416.1 | Interferon gamma receptor 1 |
| **SCARB1** | -1.00 | Hs.298813 | NM_005505.3 | Scavenger receptor class B, member 1 |
| **RPS15** | -0.96 | Hs.406683 | NM_001018.3 | Ribosomal protein S15 |
| **CYP2A7** | -0.94 | Hs.250615 | NM_000764.2 | Cytochrome P450, family 2, subfamily A, polypeptide 7 |
| **SOAT2** | -0.90 | Hs. 3347 | NM_003578 | Sterol O-acyltransferase 2 |
| **NTHL1** | -0.90 | Hs.66196 | NM_002528.4 | Nth endonuclease III-like 1 (E. coli) |
| **RPLP1** | -0.89 | Hs.356502 | NM_213725.1 | Ribosomal protein, large, P1 |
| **MGMT** | -0.88 | Hs.501522 | NM_002412.2 | O-6-methylguanine-DNA methyltransferase |
| **PCNA** | -0.88 | Hs.147433 | NM_002592.2 | Proliferating cell nuclear antigen |
| **EIF3S10** | -0.87 | Hs. 198899 | NM_003750 | Eukaryotic translation initiation factor 3, subunit 10 (theta, 150/170kD) |

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|---|---|---|---|---|
| **CREB3L3** | -0.86 | Hs.247744 | NM_032607.1 | CAMP responsive element binding protein 3-like 3 |
| **MRPS28** | -0.85 | Hs.521124 | NM_014018.2 | Mitochondrial ribosomal protein S28 |
| **CAT** | -0.84 | Hs.502302 | NM_001752.2 | Catalase |
| **BAG1** | -0.82 | Hs.377484 | NM_004323.3 | BCL2-associated athanogene |
| **FUS** | -0.80 | Hs.513522 | NM_001010850.1 | Fusion (involved in t(12;16) in malignant liposarcoma) |
| **GDF1** | -0.79 | Hs. 92614 | NM_001492 | Growth differentiation factor 1 |
| **CD81** | -0.78 | Hs.54457 | NM_004356.3 | CD81 molecule |
| **TCERG1** | -0.78 | Hs.443465 | NM_006706.3 | Transcription elongation regulator 1 |
| **PTDSS1** | -0.77 | Hs.292579 | NM_014754.1 | Phosphatidylserine synthase 1 |
| **CCNI** | -0.76 | Hs.648010 | NM_006835.2 | Cyclin I |
| **ALDH2** | -0.76 | Hs.632733 | NM_000690.2 | Aldehyde dehydrogenase 2 family (mitochondrial) |
| **CCNF** | -0.76 | Hs.1973 | NM_001761.1 | Cyclin F |
| **EPHX1** | -0.75 | Hs.89649 | NM_000120.2 | Epoxide hydrolase 1, microsomal (xenobiotic) |
| **MCP** | -0.74 | Hs. 83532 | NM_172361 | Membrane cofactor protein (CD46, trophoblast-lymphocyte cross-reactive antigen) |
| **COMT** | -0.73 | Hs.370408 | NM_007310.1 | Catechol-O-methyltransferase |
| **MGST2** | -0.72 | Hs.81874 | NM_002413.3 | Microsomal glutathione S-transferase 2 |
| **FOSL1** | -0.72 | Hs.283565 | NM_005438.2 | FOS-like antigen 1 |
| **XRCC5** | -0.71 | Hs.388739 | NM_021141.2 | X-ray repair complementing defective repair in Chinese hamster cells 5 |
| **PIM1** | -0.71 | Hs.81170 | NM_002648.2 | Pim-1 oncogene |
| **TP53** | -0.71 | Hs.408312 | NM_000546.2 | Tumor protein p53 (Li-Fraumeni syndrome) |
| **CDKN2B** | -0.70 | Hs.72901 | NM_004936.3 | Cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) |
| **AGTRAP** | -0.70 | Hs.464438 | NM_001040194.1 | Angiotensin II receptor-associated protein |
| **NPM1** | -0.70 | Hs.557550 | NM_001037738.1 | Nucleophosmin (nucleolar phosphoprotein B23, numatrin) |
| **CDKN2C** | -0.69 | Hs.525324 | NM_001262.2 | Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4) |
| **ODC1** | -0.69 | Hs.467701 | NM_002539.1 | Ornithine decarboxylase 1 |
| **NTRK3** | -0.68 | Hs.410969 | NM_001007156.1 | Neurotrophic tyrosine kinase, receptor, type 3 |
| **ARF1** | -0.67 | Hs.286221 | NM_001024226.1 | ADP-ribosylation factor 1 |
| **TCP1** | -0.66 | Hs.363137 | NM_001008897.1 | T-complex 1 |
| **CCNB1** | -0.66 | Hs.23960 | NM_031966.2 | Cyclin B1 |
| **TIAF1** | -0.65 | Hs. 75822 | NM_078471 | TGFB1-induced anti-apoptotic factor 1 |
| **ACAT1** | -0.64 | Hs.232375 | NM_000019.2 | Acetyl-Coenzyme A acetyltransferase 1 (acetoacetyl Coenzyme A thiolase) |
| **ITGA2B** | -0.63 | Hs.411312 | NM_000419.3 | Integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41) |
| **EIF4A2** | -0.63 | Hs.599481 | NM_001967.3 | Eukaryotic translation initiation factor 4A, isoform 2 |
| **PSME2** | -0.61 | Hs.434081 | NM_002818.2 | Proteasome (prosome, macropain) activator subunit 2 (PA28 beta) |
| **FCGR1A** | -0.58 | Hs.77424 | NM_000566.2 | Fc fragment of IgG, high affinity Ia, receptor (CD64) |
| **CD63** | -0.58 | Hs.445570 | NM_001780.4 | CD63 molecule |
| **ACVR1B** | -0.58 | Hs.438918 | NM_020327.2 | Activin A receptor, type IB |

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|---|---|---|---|---|
| **MAPK14** | -0.54 | Hs.588289 | NM_001315.1 | Mitogen-activated protein kinase 14 |
| **CAPNS1** | -0.52 | Hs.515371 | NM_001003962.1 NM_001749.2 | Calpain, small subunit 1 |
| **KRT7** | -0.52 | Hs.411501 | NM_005556.3 | Keratin 7 |
| **PSMB3** | -0.51 | Hs.82793 | NM_002795.2 | Proteasome (prosome, macropain) subunit, beta type, 3 |
| **PTHLH** | -0.50 | Hs.591159 | NM_198966.1 | Parathyroid hormone-like hormone |
| **TUBG1** | -0.50 | Hs.279669 | NM_001070.3 | Tubulin, gamma 1 |
| **ACY1** | -0.49 | Hs.334707 | NM_000666.1 | Aminoacylase 1 |
| **CRIP1** | -0.47 | Hs.70327 | NM_001311.3 | Cysteine-rich protein 1 (intestinal) |
| **HMGCS1** | -0.47 | Hs.397729 | NM_002130.4 | 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 (soluble) |
| **PLAU** | -0.44 | Hs.77274 | NM_002658.2 | Plasminogen activator, urokinase |
| **MT2A** | -0.43 | Hs.647371 | NM_005953.2 | Metallothionein 2A |
| **ECGF1** | -0.41 | Hs.592212 | NM_001953.2 | Endothelial cell growth factor 1 (platelet-derived) |

## BEAS-2B-cells upregulated genes

| Gene Name | Ratio | UniGene ID | Refseq ID | Description |
|---|---|---|---|---|
| **HSPCB** | 0.45 | Hs. 74335 | NM_007355 | Heat shock 90kD protein 1, beta |
| **PLAU** | 0.48 | Hs.77274 | NM_002658.2 | Plasminogen activator, urokinase |
| **CSF1** | 0.52 | Hs.591402 | NM_172212.1 | Colony stimulating factor 1 (macrophage) |
| **TNFAIP3** | 0.52 | Hs.591338 | NM_006290.2 | Tumor necrosis factor, alpha-induced protein 3 |
| **IL6** | 0.66 | Hs.512234 | NM_000600.1 | Interleukin 6 (interferon, beta 2) |
| **CYP1B1** | 0.69 | Hs.154654 | NM_000104.2 | Cytochrome P450, family 1, subfamily B, polypeptide 1 |
| **CITED1** | 0.71 | Hs.40403 | NM_004143.2 | Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 1 |
| **HSPA1A** | 0.72 | Hs.405994 | NM_005346.3 | Heat shock 70kDa protein 1A |
| **FTH1** | 0.73 | Hs.524910 | NM_002032.2 | Ferritin, heavy polypeptide 1 |
| **CCL2** | 0.78 | Hs.303649 | NM_002982.3 | Chemokine (C-C motif) ligand 2 |
| **GADD45A** | 0.80 | Hs.80409 | NM_001924.2 | Growth arrest and DNA-damage-inducible, alpha |
| **NK4 (IL23)** | 0.82 | Hs. 943 | NM_004221 | Interleuin 32 |
| **SOD2** | 0.95 | Hs.487046 | NM_001024466.1 | Superoxide dismutase 2, mitochondrial |
| **CSF3** | 0.97 | Hs.2233 | NM_172220.1 | Colony stimulating factor 3 (granulocyte) |
| **BMPR1A** | 1.14 | Hs.524477 | NM_004329. | Bone morphogenetic protein receptor, type IA |
| **IER3** | 1.17 | Hs.591785 | NM_003897.2 | Immediate early response 3 |
| **MYST2** | 1.19 | Hs.21907 | NM_007067.3 | MYST histone acetyltransferase 2 |
| **IL8** | 1.54 | Hs.624 | NM_000584.2 | Interleukin 8 |
| **CHST1** | 1.60 | Hs.104576 | NM_003654.2 | Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1 |
| **CCL24** | 1.90 | Hs.247838 | NM_002991.2 | Chemokine (C-C motif) ligand 24 |
| **UGT2B10** | 1.99 | Hs.201634 | NM_001075.2 | UDP glucuronosyltransferase 2 family, polypeptide B10 |
| **MT1H** | 2.51 | Hs.438462 | NM_005951.1 | Metallothionein 1H |
| **MT1E** | 2.53 | Hs.534330 | NM_175617.3 | Metallothionein 1E (functional) |
| **MT1A** | 2.84 | Hs.513626 | NM_005946.2 | Metallothionein 1A (functional) |
| **UGT2B4** | 2.91 | Hs.285887 | NM_021139.1 | UDP glucuronosyltransferase 2 family, polypeptide B4 |
| **SERPINB2** | 3.00 | Hs.594481 | NM_002575.1 | Serpin peptidase inhibitor, clade B (ovalbumin), member 2 |
| **MT1G** | 3.09 | Hs.433391 | NM_005950.1 | Metallothionein 1G |
| **MT1L** | 3.21 | Hs.647358 | NM_002450 | Metallothionein 1L (pseudogene) |

## BEAS-2B-cells downregulated genes

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|---|---|---|---|---|
| **IRF7** | -0.57 | Hs. 166120 | NM_004031 | Interferon regulatory factor 7 |

## Jurkat-cells upregulated genes

| Gene Name | Ratio | UniGene ID | Refseq ID | Description |
|---|---|---|---|---|
| **MT1A** | 4.27 | Hs.513626 | NM_005946.2 | Metallothionein 1A (functional) |
| **MT1E** | 4.16 | Hs.534330 | NM_175617.3 | Metallothionein 1E (functional) |
| **MT1L** | 4.12 | Hs.647358 | NM_002450 | Metallothionein 1L (pseudogene) |
| **UGT2B4** | 3.83 | Hs.285887 | NM_021139.1 | UDP glucuronosyltransferase 2 family, polypeptide B4 |
| **MT1G** | 3.81 | Hs.433391 | NM_005950.1 | Metallothionein 1G |
| **UGT2B10** | 2.09 | Hs.201634 | NM_001075.2 | UDP glucuronosyltransferase 2 family, polypeptide B10 |
| **MT1H** | 2.02 | Hs.438462 | NM_005951.1 | Metallothionein 1H |
| **JUND** | 1.86 | Hs.2780 | NM_005354.3 | Jun D proto-oncogene |
| **HLA-F** | 1.46 | Hs.519972 | NM_018950 | Major histocompatibility complex, class I, F |
| **CHST1** | 1.45 | Hs.104576 | NM_003654.2 | Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1 |
| **DUSP2** | 1.39 | Hs.1183 | NM_004418.2 | Dual specificity phosphatase 2 |
| **IER3** | 1.24 | Hs.591785 | NM_003897.2 | Immediate early response 3 |
| **MYST2** | 1.04 | Hs.21907 | NM_007067.3 | MYST histone acetyltransferase 2 |
| **TNFAIP3** | 1.02 | Hs.591338 | NM_006290.2 | Tumor necrosis factor, alpha-induced protein 3 |
| **NFKB2** | 0.99 | Hs.73090 | NM_001077493.1 | Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) |
| **HSPA6** | 0.97 | Hs. 3268 | NM_002155 | Heat shock 70kD protein 6 (HSP70B') |
| **HSPA5** | 0.96 | Hs.605502 | NM_005347.2 | Heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa) |
| **DUSP5** | 0.80 | Hs.2128 | NM_004419.3 | Dual specificity phosphatase 5 |
| **HSPA1B** | 0.79 | Hs.274402 | NM_005346.3 | Heat shock 70kDa protein 1B |
| **TRAF4** | 0.76 | Hs.8375 | NM_145751.1 | TNF receptor-associated factor 4 |
| **HLA-A** | 0.69 | Hs.181244 | NM_002116.5 | Major histocompatibility complex, class I, A |
| **GATA3** | 0.67 | Hs.524134 | NM_001002295.1 | GATA binding protein 3 |
| **GSS** | 0.60 | Hs.82327 | NM_000178.2 | Glutathione synthetase |
| **TRA1** | 0.60 | Hs. 82689 | NM_003299 | Tumor rejection antigen (gp96) 1 |
| **ADAMDEC1** | 0.59 | Hs.521459 | NM_014479.2 | ADAM-like, decysin 1 |
| **CD83** | 0.56 | Hs.484703 | NM_001040280.1 | CD83 molecule |
| **TNFRSF1A** | 0.52 | Hs.279594 | NM_001065.2 | Tumor necrosis factor receptor superfamily, member 1A |
| **CSF1** | 0.47 | Hs.591402 | NM_172212.1 | Colony stimulating factor 1 (macrophage) |
| **GADD45A** | 0.45 | Hs.80409 | NM_001924.2 | Growth arrest and DNA-damage-inducible, alpha |
| **CSF3** | 0.41 | Hs.2233 | NM_172219.1 | Colony stimulating factor 3 (granulocyte) |

**Jurkat-cells downregulated genes**

| Gene Name | Ratio | UniGene ID | Refseq ID | Description |
|---|---|---|---|---|
| **HMGCS1** | -1.45 | Hs. 397729 | NM_002130 | Hydroxymethylglutaryl-Coenzyme A Synthase 1 |
| **K-ALPHA-1** | -0.86 | Hs. 334842 | NM_006082 | Tubulin, alpha, ubiquitous |

All gene information were available by UniGene

Legend: Ratio = dual logarithm of the Cy3/Cy5 intensity (mRNA from stimulated/unstimulated cells)

Stimulation: Indoor dust [500µg/ml for 6 h].