Supplementary materials and methods

Cell Lines

GL261 cells were purchased from the National Cancer Institute-Frederick Cancer Research Tumor Repository and were maintained in Dulbecco's modified Eagles medium (DMEM) (Sigma) supplemented with 10% fetal bovine serum (Hyclone) and 1% penicillin and streptomycin (Sigma)¹. Cells were grown as a monolayer and subcultured by trypsinization once they were 70%-80% confluent. Cell lines U87, D54, and U251 were obtained from the American Type Culture Collection and maintained in DMEM containing 10% fetal bovine serum (Hyclone) and 1% penicillin and streptomycin (Sigma). Glioblastoma stem cells (GSCs) (17, 8-11, 6-27, 7-2, and 20) were provided by Dr. Frederick Lang at MD Anderson Cancer Center (Houston, TX) and cultured in DMEM/F12 supplemented with B-27 (1:50, Gibco), L-Glutamine (1:100, Sigma), epidermal growth factor (EGF, 20 ng/ml, Sigma), basic fibroblast growth factor (bFGF, 20 ng/ml, Sigma), and penicillin/streptomycin (1%, Sigma). These cells were grown as spheres, fed every 2 days, and subcultured using accutase (Sigma) once the spheres attained a diameter of 100µm. All cell lines were maintained in an atmosphere that was 95% air/5% CO2 at 37°C, and were confirmed to be mycoplasma negative. Cell lines were authenticated annually by the Characterized Cell Line Core (CCLC) of MD Anderson.

Macrophage Polarization and Small Interfering RNA Transfection

Because monocytes and macrophages predominantly assume a phenotype in the continuum of M0 to M2 within the GBM microenvironment^{2,3}, for the purposes of this analysis, these phenotypes were the study focus. Buffy coat fractions of human blood (after density-gradient centrifugation) were obtained from the Gulf Coast Regional Blood Center at Houston for CD14⁺ monocyte isolation. M1 and M2 macrophages were obtained after 7 days of culturing human CD14⁺ monocytes in RPMI 1640 medium with L-glutamine (Mediatech) supplemented with 10% heat-inactivated FBS (Sigma-Aldrich) and granulocyte macrophage

colony-stimulating factor (GM-CSF, 50 ng/ml for M1) or macrophage colony-stimulating factor (M-CSF, 100 ng/ml for M2; Peprotech, Rocky Hill, New Jersey). M0 (unpolarized) macrophages were generated by culturing monocytes in medium with GM-CSF and harvesting on day 4. For M1- or M2-polarization of macrophages, on day 5, additional monocyte medium with GM-CSF, 100 ng/ml lipopolysaccharides from Escherichia coli 055:B5 (LPS, Sigma-Aldrich), 50 ng/ml interferon-gamma (IFN- γ), and 20 ng/ml tumor necrosis factor-alpha (TNF- α , Peprotech) were added for M1 polarization, and M-CSF, 10 ng/ml interleukin-10 (IL-10), and transforming growth factor beta-1 (TGF β 1, Peprotech) were added for M2 polarization. When the M0 and M2 macrophages were transfected with small interfering RNA (siRNA) for OPN knockdown, OPN siRNA – lipofectamine 2000 mixtures were added on day 5 prior to the addition of IL-10 and TGF β 1, and the transfected cells were harvested for RNA extraction on day 7.

Proliferation assay

GL261 cell proliferation was measured using BrdU incorporation assay (Cat. No 11647229001, Roche) according to manufacturer's instructions. Briefly, 3000 cells/well was plated in a 96-well plate and allowed to recover overnight at 37°C. The BrdU reagent was added and allowed to incubate for 24 hours followed by fixing the cells and denaturing the DNA. The fixed cells were further incubated with an anti-BrdU-POD antibody and substrate. The amount of incorporated BrdU was measured at 492nm using the CLARIOstar plate reader.

OPN Immunofluorescent Staining and Immunoblotting

Human GBM or murine GL261 brain tumors were used for immunofluorescent staining. For human specimens, frozen section slides were allowed to come to room temperature (~30min), rinsed in PBS for 5 min, fixed for 5 min in 4% paraformaldehyde, and then washed with PBS. For murine specimens, paraffin-fixed slides were deparaffinized in xylene and rehydrated through a graded ethanol series (100%, 95% and 70%). Antigen retrieval was carried out using DAKO solution (pH 6.0) for 30 minutes in a steam bath. Nonspecific protein binding was blocked on the slides with 10% normal donkey or horse serum for 60

minutes, and they were then stained with the primary goat-anti-murine OPN mAb at 1:100 dilution (R&D Systems, AF808) or rabbit anti-human OPN Ab at 1:200 dilution (Abcam, ab8448). The secondary antibody was an Alexa Fluor[®] 488 donkey anti-goat antibody or donkey anti-rabbit antibody at 1:1000 dilution. Counterstaining was performed with DAPI (1:5000, in PBS) for 5 min followed by standard PBS washing steps and mounting. To determine the correlation between OPN expression with glioblastoma tumor cells and macrophages, embedded tissues were costained for OPN, SOX2 (Abcam ab97959, 1:1000), or Iba1 (Millipore, 1:1000) followed by the matched Alexa Fluor® 568 donkey secondary antibody. Anti-CD3 (Abcam ab16669, 1:100), anti-CD4 (Abcam ab183685, 1:1000) and anti-CD8 (Cell Signaling #98941, 1:400) antibodies were used to detect T cells in the brain tumor tissue of the mice treated with the aptamers. For immunoblotting, GSCs, GIMs, and macrophages were pelleted by centrifugation, rinsed with ice-cold PBS, and then lysed for 15 min in ice-cold RIPA buffer (Sigma, St. Louis, MO) containing phosphatase and protease inhibitors (Sigma-Aldrich). The lysates were centrifuged at 14,000-rcf for 10 min at 4°C, the supernatants were collected, and the protein concentration was quantified. Equal amounts of protein were electrophoretically fractionated in 8% sodium dodecyl sulfate (SDS)-polyacrylamide gels, transferred to nitrocellulose membranes, and subjected to immunoblot analysis with specific antibodies against OPN (Abcam, ab8448), αV, β3, and β5 integrins, STAT3, p-STAT3 (Tyr705), and tubulin (Cell Signaling Technology, Inc., Denvers, MA). Autoradiography of the membranes was performed using a SuperSignal® West Pico Chemiluminescent Substrate kit (Thermo Scientific, Rockford, IL).

OPN ELISA

Secreted OPN from *ex vivo* glioblastoma tissue, human glioma cell lines, GSCs, and polarized macrophages was measured using the ELISA Duo set kit (R&D Systems). Supernatants were collected from 1×10^6 cells after 48 hours in culture and stored at -20° C for the assay. The plates were coated with mouse anti-human OPN overnight followed by blocking in reagent diluent (1% BSA in PBS). The supernatants and the standards were added in triplicate and incubated for 2 hours at room temperature followed by a wash and incubation with the detection antibody and then with the horseradish peroxidase (HRP)-conjugated

secondary antibody. Finally, the plates were incubated with the substrate solution, and the absorbance was measured at 450nm and 540nm. (Spectra Max 190; Molecular Devices). A similar ELISA procedure was used to detect murine OPN generated from the murine glioma cell line GL261 (murine OPN ELISA Duo set kit from R&D Systems).

RNA Preparation, cDNA Synthesis, and Quantitative Real-Time RT-PCR

RNA was extracted from the cells and tumor tissues using the mirVana miRNA isolation kit (Life Technologies) and quantified using a NanoDropTM 2000c spectrophotometer (Thermo Scientific), as described ⁴. cDNA synthesis was carried out using SuperScript III Reverse Transcriptase (Invitrogen). RT-PCR assays were performed with SYBR Green PCR Master Mix on a 7500HT thermal cycler. Three-step amplification was performed (95°C 15 s, 60°C 15 s, and 72°C 30 s) for 45 cycles. For data analysis, GAPDH was used as the internal standard and "fold" changes of gene expression levels in target cells were calculated.

nCounter miRGE Assay

Macrophage RNA (200 ng) at a concentration of 40 ng/ μ l in a total volume of 5 μ l was prepared for the nCounter miRGE assay. Our custom-made CodeSet detects 99 M1-M2 associated gene mRNAs ². Sample preparation and hybridization were performed for the miRGE assay according to the manufacturer's instructions (NanoString Technologies, Inc.). Briefly, RNA samples were prepared by ligating a specific DNA tag (miR-tag) onto the 3' end of each mature miRNA, and excess tags were removed via restriction enzyme digestion at 37°C. After processing with the miRNA sample preparation kit, the entire 10- μ l reaction volume containing mRNA and tagged miRNAs was hybridized with a 10- μ l reporter CodeSet, 10 μ l of hybridization buffer, and a 5- μ l capture ProbeSet (for a total reaction volume of 35 μ l) at 65°C for 16-20 hours. Excess probes were removed using two-step magnetic bead-based purification with an nCounter Prep Station. The specific target molecules were quantified using an nCounter Digital Analyzer by counting the individual fluorescent barcodes to assess target molecules. The data were collected using the nCounter

Digital Analyzer after obtaining images of the immobilized fluorescent reporters in the sample cartridge using a charge-coupled device camera. The data were visualized using the ggplot2 graphing package in heat maps of log2 expression values scaled for each gene across samples. Plots of enriched gene sets or pathways were also generated with ggplot2.

Multiplex Cytokine/Chemokine Array

Cytokine/chemokine profiles of GSC OPN knockout and control line supernatants were measured by Quantibody Human Multiplex Array (RayBiotech, Norcross, GA), which permitted detection of 1000 immune factors (the complete list is summarized in **Supplementary Table 1**). The protein array slides spotted by specific capture antibodies were incubated with thawed samples, washed, and incubated with a cocktail of antibodies biotinylated by the manufacturer. Then the slides with bound biotin were incubated with streptavidin-conjugated Hylite Plus 555 fluor. Relative fluorescence strength was detected by a microarray scanner. The protein concentration was obtained by plotting against the standardized curve.

Phagocytosis Assay

The macrophages cocultured with GSC supernatants were plated in a 96-well plate at a concentration of 10^5 cells/well and incubated at 37°C in a humidified atmosphere containing 95% air/5% CO2 for 1 hour to allow the cells to adhere. The cells were then incubated with pHrodo *Escherichia coli* BioParticles (Invitrogen) suspended in PBS for 2 hours at 37° C and atmospheric CO₂ levels. The supernatant containing the bioparticles was then removed, and the cells were incubated for 15 minutes with DAPI (Vector Laboratories) at room temperature in order to identify the nuclei. The fluorescence plate reader (ClarioStar, BMG Labtech) was used to quantify the fluorescence intensity of the bead conjugates phagocytosed by the cells at the 590 nm emission wavelength.

Syngeneic Intracranial Glioma Model

To induce intracerebral tumors in WT and $Opn^{-/-}$ mice, GL261 non-targeting (NT) control or OPN shRNA cells were collected in logarithmic growth phase, washed twice with PBS, mixed with an equal volume of 10% methylcellulose in Improved Modified Eagle's Zinc Option medium, and loaded into a 25-µl syringe (Hamilton, Reno, NV) with an attached 25-gauge needle. The needle was positioned 2 mm to the right of bregma and 4 mm below the surface of the skull at the coronal suture using a stereotactic instrument (Stoelting Co., Wood Dale, IL) (GL261 glioma cell i.c. injection for in vivo survival experiment was performed without a stereotactic instrument). The intracerebral tumorigenic dose for GL261 cells is 5×10^4 in a total volume of 2 µl. GL261 NT cells or OPN shRNA cells were implanted in WT or *Opn-/-* mice (n=10/group, equal number of males and females). When the mice showed signs of neurological deficit (lethargy, failure to ambulate, lack of feeding, or loss of > 20% body weight), they were compassionately euthanized. These symptoms typically occurred within 48 hours before death.

In vivo localization analyses of the 4-1BB-OPN-aptamer in the glioma

 5×10^4 GL261 cell were intracranially implanted into C57BL6/J mice to induce syngeneic glioma. On day 9 after tumor implantation, 100pmol of the 4-1BB-OPN aptamer or the non-targeting control 4-1BB-PSMA aptamer were infused intravenously once. After 1 hour, the mice were euthanized and the brain tumor tissue was collected for frozen sections for the *in situ* hybridization. In parallel, GL261 glioma cells were transduced with green fluorescent protein (GFP) using lentiviral infection and selection, which were then implanted into the brain of C57BL6/J mice to visualize the tumor area. On the day 9 after tumor cell implantation, 100pmol of either the Alexa FluorTM 647 labeled 4-1BB-OPN aptamer or the non-targeting tumor control 4-1BB-PSMA were infused intravenously once. After 2 hours, the mice were euthanized and the brain tumor tissue was collected for frozen sections for image analysis of aptamer localization in the tumor microenvironment.

Ex Vivo Analysis of Infiltration of Myeloid Cell and T Cell Function by Multicolor FACS

The same groups of mice (2 WT groups and 2 *Opn-/-* groups, 8 mice/group) were intracranially implanted with GL261 NT cells or OPN shRNA cells. On the day 14 after tumor implantation, they were euthanized for *ex vivo* immune analysis. The brains, spleen, and blood were collected from half of each group (n = 4) for flow cytometry, and the remainder were used for immunohistochemistry studies (n = 4). Tumor-infiltrating lymphocytes (TILs) and peripheral blood mononuclear cells (PBMCs) were isolated from the brain tumor and blood, respectively, and were purified using Percoll or Ficoll gradient centrifugation. Single-cell splenocyte suspensions were obtained using mechanical dissociation of the spleen followed by RBC lysis. CD4⁺ and CD8⁺ T cells were gated from CD3⁺ T cells, and CD206⁺ and F4/80⁺ macrophages were gated from CD11b⁺ cells. For intracellular cytokine staining, cells were stimulated for 6 hours in the presence of 50 ng/ml phorbol myristate acetate, 500 ng/ml ionomycin (Sigma-Aldrich), and 2 μ M monensin (GolgiStop, BD Sciences). For the subgroup histology analysis, the brains were removed, fixed with 4% paraformaldehyde, and embedded in paraffin for Iba-1 histology staining.

References

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	tumor model for experimental glioblastoma therapy. Cancer Sci. 2006;97(6):546-553.

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Supplementary Figure 1. A) The mRNA expression of macrophage cell markers S100A9, CD68, CD14, and CD163 correlates with OPN expression levels in the GBM tissue (n = 166, TCGA RNA seq data analyzed in cbioportal.org). λ value of Spearman's correlation is noted in each panel. B) Representative FACS histograms of 2 independent experiments show positive intracellular SOX2 expression in glioblastoma stem cells (GSCs) and glioma cell lines (gray shaded peak: isotype; blue shaded peak: SOX2).



Supplementary Figure 2. A) Bromodeoxyuridine (BrdU) incorporation assay to measure proliferation of OPN shRNA or shNT GL261 cell lines. Data indicate mean \pm SD and are representative of 2 independent experiments. B) 5-ethynyl-2'-deoxyuridine Edu incorporation assay to measure proliferation of OPN shRNA or shNT glioblastoma cancer stem cells (GSCs). Data indicate mean \pm SD and are representative of 2 independent experiments.







Supplementary Figure 3. Alteration of T effector cells and Tregs in glioma-bearing mice. A) The percentages of TNF α +CD4+ and TNF α +CD8+ T cells in the spleen (the left panel), peripheral blood mononuclear cells (PBMCs) (middle panel), and tumor (right panel). B) The percentages of IL-2+CD4+ T cells and IL-2+CD8+ T cells in the spleen (left panel) and PBMCs (right panel). C) The percentages of CD4+FoxP3+ Tregs in the spleen (left panel) and tumor (right panel). Data indicate mean ± SD of 4 different animals per group in one experiment. *P*-values were calculated based on two-tailed two sample *t* test with Bonferroni correction. ** denotes *P* < 0.01, and *** denotes *P* < 0.001.



Supplementary Figure 4. The cell count changes of macrophages and effector T cells in the OPN deficient tumor microenvironment. A) The absolute cell counts of CD206+CD11b+ macrophages in the spleen (the left panel) and F4/80+CD11b+ macrophages in the brain tumor (right panel). B) The cell counts of IFN γ + CD4+ T cells and IFN γ + CD8+ T cells in the spleen (left panel), peripheral blood mononuclear cells (PBMCs) (the middle panel), and tumor (right panel). C) The cell counts of IL-2+ CD4+ T cells (left panel) and IL-2+ CD8+ T cells (right panel) in the tumor. D) The cell counts of CD4+FoxP3+ Tregs in PBMCs. 100,000 alive cells were acquired per mouse for the splenocytes and PBMCs, and 10,000 alive cells were acquired per mouse for the isolated tumor infiltrating lymphocytes. Data indicate mean \pm SD of 4 different animals per group in one experiment. Pvalues were calculated based on two-tailed two sample t test with Bonferroni correction.* denotes P < 0.05 ** denotes P <0.01, and *** denotes P < 0.001.





Supplementary Figure 5. The absence of OPN in glioblastoma cancer stem (GSCs) does not impact their conditioned medium-mediated immunosuppression on T cells. A) CD3+ T-cell proliferation was detected by flow cytometry analysis with Carboxyfluorescein succinimidyl ester (CFSE) staining after 3 days of treatment with medium alone, GSC20-non-targeting control cell transfected conditioned medium, or the conditioned media from two OPN KO GSC20 clones induced by CRISPR-Cas9. The number in each histogram represents the percentage of T cells undergoing division. B) T-cell apoptosis was measured by the percentage of annexin V+7-AAD+ cells. C) Tregs were analyzed on the basis of CD4 and FoxP3 expression levels by flow cytometry analysis. The number in the upper right quadrant denotes the percentage of CD4+FoxP3+ Tregs. Representative FACS data are shown from two independent experiments.



Supplementary Figure 6. OPN deficiency renders glioma cells more sensitive to T-cell killing. A) CD8+ T cells were isolated from splenocytes from C57BL/6 wild-type mice and activated with anti-CD3/CD28 Dynabeads for 3 days. Activated CD8+ T cells were co-cultured with non-targeting control GL261 cells or OPN shRNA GL261 cells at the ratios of 1:2, 1:1, 2:1, 5:1, and 10:1. The target GL261 cell number was fixed at 50 thousand cells per condition. GL261 cell death was measured using the Promega CytoTox96 nonradioactive cytotoxicity kit. Data indicate mean \pm SD and are representative of 2 independent experiments. B) CD8+ T cells from C57BL/6 mice mixed with GL261 cells (NT or OPN shRNA, ratios at 5:1 and 10:1) were cultured for 3 days in the presence of anti-CD3/CD28 Dynabeads, and the percentage of cells expressing intracellular IFN- γ and TNF α was determined by flow cytometry. The number in the rectangle box indicates the percentage of CD8+IFN γ + and CD8+TNF α + cells. Representative FACS data are shown from two independent experiments.



Supplementary Figure 7. A) Transwell migration assays of M0, M1 and M2 skewed macrophages exposed to 10ng/ml recombinant OPN at 48 hours. B) Transwell migration assay of M0 and M2 skewed macrophages pretreated with ITG $\alpha\nu\beta5$ -blocking antibody or its matched isotype antibody (10 µg/ml) and then exposed to 10 ng/ml OPN or 10 ng/ml CCL2. Data indicate mean ± SD and are representative of 2 independent experiments. *P*-values were calculated based on two-tailed two sample *t* test with Bonferroni correction.* denotes *P* < 0.05, and *** denotes *P* < 0.001.



Supplementary Figure 8

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Supplementary Figure 8. Construction of OPN knockout glioblastoma cancer stem cells (GSCs) by CRISPR-Cas9 genome editing. A) The genome sequence of the OPN gene exon 7 is shown with the two single guide (sg) RNAs targeting sites highlighted in red. B) The alignment of the genome sequences containing the intermediate sequence and the sgRNA targeting sites at the 5' and 3' end are shown. The dashed lines indicate the fragment deletion in the OPN gene exon 7 from three CRISPR-Cas9-induced GSC20 clones. C) ELISA results of soluble OPN in the conditioned medium from CRISPR-Cas9 GSC20 clones and their parent line. D) ELISA results of soluble OPN in the conditioned medium from additional GSCs, including the non-targeting control and two OPN sgRNA clones (72-hour culture with GSC initial seeding concentration at 500k/ml). Data indicate mean \pm SD and are representative of 3 independent experiments.



Supplementary Figure 9. A) Ex vivo intracranial GL261 tumor was immunofluorescently stained for expression of OPN (green) and macrophages as denoted by Iba1 expression (red). Nuclei were stained with DAPI (blue). Arrows denote macrophages that are expressing OPN. Magnification is $400 \times$ (scale bar: 10 µm). B) Brain tumor tissue from the control or OPN aptamer treated GL261 glioma bearing mice was stained with H&E to outline the tumor region (left panel), the OPN probe to stain OPN mRNA (middle panel), and its anti-sense probe as a non-specific control (right panel). Magnification is $100 \times$ (scale bar: 10 µm).



Supplementary Figure 10. OPN does not induce M1 or M2 skewing. CD14+ monocytes (M0 macrophage precursors) from healthy donors were incubated with 10, 50, or 100 ng/m1 recombinant OPN or transfected with OPN siRNA. The cells were harvested after 48 hours for M1/M2 associated marker expression via FACS. The experiments were repeated on 3 donors. A) Representative over layed histograms of CD86, CD163, CD204, CSF1R, and MHCII expression on the treated macrophages are shown. B) Representative over layed histograms of B7-H1, B7-H2, B7-H3, B7-H4, 4-1BBL, and CD39 expression are shown.



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Supplementary Figure 11. OPN aptamer or antibody alone is insufficient to prolong GL261 glioma mice survival however the therapeutically efficacious 4-1BB-OPN aptamer localizes to the tumor. A) C57BL/6J mice were implanted with GL261 intracranially and were subsequently treated with OPN-R3 or with an OPN antagonistic antibody per the schema. In neither case, was there therapeutic activity (P > 0.05). B) C57BL/6J mice were implanted with green fluorescently protein (GFP) labeled GL261 cells intracranially and then treated on day 9 with either Alexa 647 labelled 4-1BB-OPN- or the non-tumor specific control 4-1BB-PMSA aptamer conjugate. The mice were euthanized 2 hours after intravenous administration and the frozen section were prepared of the brain tumor tissue. The confocal images were taken at 400 × magnification and the cell nuclei were counter-stained with 4',6-diamidino-2-phenylindole (DAPI). Scale bars: 20 µm. C) Summary graphs of the treatment groups in Figure 8B in which the CD4+ and CD8+ T cell numbers were quantified within the intracerebral glioma (4-1BB-OPN aptamer conjugate relative to other groups; P < 0.05). Data indicate mean ± SD from 5 different animals per group in a single experiment. *P*-values were calculated based on log-rank test for Panel A, and two-tailed two sample *t*-test for Panel C.

Supplemental Table 1. Experimental Result

(pg/ml)	GSC20 NT	GSC20 sg OPN #3	GSC17 NT	GSC17 sgOPN 2E6
6Ckine	1.2	0.0	0.0	0.0
AxI	0.0	0.0	18.2	0.0
BTC	0.0	0.0	0.0	0.0
CCL28	0.0	0.0	0.0	0.0
CTACK	0.0	0.0	4.5	0.0
CXCL16	1,539.2	1,021.5	1,315.6	2,544.4
ENA-78	3.0	0.0	0.0	1.5
Eotaxin-3	0.0	0.0	0.0	0.0
GCP-2	0.0	0.0	0.0	0.0
GRO	0.0	0.0	13.9	13.8
HCC-1	0.0	0.0	0.0	0.0
HCC-4	0.0	0.0	0.0	0.0
IL-9	0.0	0.0	0.0	0.0
IL-17F	0.0	0.0	0.0	0.0
IL-18 BPa	0.0	1.5	0.0	0.0
IL-28A	0.0	0.1	0.7	0.0
IL-29	0.0	0.0	36.4	0.0
IL-31	7.4	4.5	10.2	0.0
IP-10	0.6	0.0	1.6	0.0
I-TAC	0.0	0.0	3.7	0.0
LIF	0.0	0.0	138.1	0.0
LIGHT	12.8	7.5	25.5	15.6
Lymphotactin	0.0	0.0	1.7	0.0
MCP-2	0.1	0.0	0.2	0.2
MCP-3	0.3	0.5	0.0	0.6
MCP-4	0.0	0.0	0.2	0.0
MDC	0.0	0.6	1.5	0.0
MIF	2,157.5	2,602.2	842.0	673.5
MIP-3a	0.1	0.1	0.1	0.1
MIP-3b	0.0	0.0	0.0	0.0
MPIF-1	0.0	0.0	7.3	3.3
MSP	0.0	0.0	0.0	35.9
NAP-2	0.0	0.0	1.3	0.0
OPN	2,752.6	0.0	13,388.2	0.0
PARC	1.8	0.0	1.8	0.0
PF4	0.0	0.0	57.2	0.0
SDF-1a	0.0	1.0	0.4	0.5
TARC	0.0	0.0	0.5	0.0
TECK	0.0	0.0	0.0	0.0
TSLP	1.3	0.2	0.1	0.0
Activin A	0.0	0.0	1,248.6	68.3
AgRP	0.0	0.0	3.0	3.2
Angiogenin	540.1	520.6	599.4	576.3
ANG-1	3,285.4	2,609.8	1,304.8	4,571.1

Angiostatin	0.0	0.0	620.3	1.854.2
Cathepsin S	169.6	208.0	200.1	263.9
CD40	0.0	0.0	0.0	10.8
Cripto-1	0.0	0.0	5.5	7.6
DAN	0.0	0.0	0.0	159.1
DKK-1	2.1	0.0	35.0	135.2
E-Cadherin	0.0	0.0	0.0	116.8
EpCAM	3.3	13.4	8.0	15.1
FAS L	0.0	0.0	2.3	2.9
Fcg RIIBC	0.0	2.6	0.0	23.8
Follistatin	0.3	6.4	13.9	10.3
Galectin-7	11.3	22.9	12.4	82.5
ICAM-2	66.6	80.7	93.0	339.4
IL-13 R1	0.0	0.0	10.7	4.4
IL-13 R2	14.5	43.4	18.8	37.9
IL-17B	1,704.1	1,844.0	1,807.4	3,590.0
IL-2 Ra	22.3	7.2	14.0	48.0
IL-2 Rb	279.5	474.4	346.3	619.7
IL-23	117.5	112.8	575.2	1,123.4
LAP(TGFb1)	404.6	470.6	731.7	984.4
NrCAM	0.0	23.9	32.0	48.1
PAI-1	0.0	1.5	307.1	224.2
PDGF-AB	0.0	0.0	11.5	15.0
Resistin	104.9	203.3	213.3	484.9
SDF-1b	0.0	0.0	0.7	5.7
gp130	3,135.7	2,737.0	1,132.6	1,485.7
Shh-N	0.0	0.0	2.1	0.8
Siglec-5	0.0	0.0	17.6	19.6
ST2	0.0	0.0	11.7	9.3
TGFb2	0.0	0.0	0.0	44.0
Tie-2	0.0	0.0	6.4	30.1
TPO	158.0	197.7	216.4	341.2
TRAIL R4	0.0	0.0	0.0	21.0
TREM-1	5.2	0.0	15.6	69.3
VEGF-C	0.0	2.6	0.0	4.8
VEGF R1	4.1	1.0	0.0	67.7
Adiponectin	0.0	7.3	0.0	0.0
Adipsin	81.3	67.8	9.1	53.3
AFP	0.0	0.0	0.0	0.0
ANGPTL4	0.0	0.0	0.2	0.0
B2M	1,266.8	1,041.0	1,221.7	1,274.3
BCAM	0.0	79.7	42.0	39.0
CA125	0.0	0.0	0.0	103.2
CA15-3	0.0	0.0	0.0	0.0
CEA	0.0	0.0	0.0	0.0
CRP	0.0	0.0	0.0	8.7
ErbB2	0.0	0.0	0.0	1.4

Ferritin	122.3	74.5	975.0	476.9
FSH	0.0	0.0	0.0	3.4
GROa	0.0	0.0	0.0	87.7
hCGb	413.3	305.4	0.0	0.0
IGF-1R	0.0	0.0	10.8	92.1
IL-1 RII	0.0	0.6	0.0	3.3
IL-3	7.7	0.0	0.0	0.0
IL-18 Rb	1.1	0.0	0.0	0.0
IL-21	89.1	91.9	0.0	83.7
Leptin	51.4	60.9	45.0	49.5
MMP-1	0.0	0.0	148.7	0.0
MMP-2	52.8	511.5	1,236.4	0.0
MMP-3	0.0	0.0	0.0	19.5
MMP-8	0.0	6.3	12.4	20.7
MMP-9	11.5	30.4	58.2	0.0
MMP-10	23.0	25.2	1,426.2	120.7
MMP-13	357.5	193.7	902.3	363.9
NCAM-1	4,807.2	4,314.6	1,742.1	2,637.8
Nidogen-1	13,919.6	15,579.3	12,685.2	20,787.6
NSE	46.9	396.3	46.9	53.3
OSM	1.6	0.0	2.1	1.2
Procalcitonin	0.0	0.0	0.0	0.0
Prolactin	0.0	0.0	0.0	205.7
PSA-free	0.0	0.0	0.0	12.7
Siglec-9	0.0	0.0	0.0	6.1
TACE	172.0	96.6	165.0	181.9
Thyroglobulin	0.0	0.0	0.0	0.0
TIMP-4	4.9	0.0	0.0	10.4
TSH	63.8	18.5	52.2	67.0
2B4	0.0	0.0	0.0	0.0
ADAM9	2.6	1.6	0.4	1.0
ANG-2	138.0	0.0	50.6	83.2
APRIL	0.0	0.0	0.0	0.0
BMP-2	0.0	0.0	0.0	0.0
BMP-9	0.0	0.0	0.0	0.0
C5a	0.0	6.1	2.9	0.0
Cathepsin L	1,282.3	639.5	1,004.3	794.2
CD200	0.0	0.0	0.0	0.0
CD97	0.0	0.0	0.0	0.0
Chemerin	0.0	0.0	0.0	0.0
DcR3	0.0	0.5	0.0	0.0
FABP2	0.0	20.9	5.4	0.0
FAP	14.6	32.6	43.3	31.7
FGF-19	996.9	1,452.2	813.2	1,381.9
Galectin-3	918.2	1,836.1	1,178.5	722.2
HGF R	66.9	111.0	44.4	90.3
IFNab R2	0.0	22.9	0.0	0.0

IGF-2	69.3	11.7	22.6	94.7
IGF-2R	1,099.3	770.8	685.4	606.3
IL-1 R6	0.0	0.0	0.0	0.0
IL-24	0.0	5.0	0.0	0.0
IL-33	0.0	1.2	0.0	0.1
Kallikrein 14	5.0	3.1	2.9	3.2
Legumain	5,252.3	5,792.9	4,963.2	3,985.8
LOX-1	0.0	0.0	0.0	0.1
MBL	0.1	0.0	0.1	0.1
Neprilysin	5.7	2.6	0.0	0.0
Notch-1	0.0	1.2	0.0	0.0
NOV	1,301.4	1,445.5	1,747.5	1,849.1
Osteoactivin	0.0	1.4	0.5	0.0
PD-1	129.8	159.3	13.9	27.8
PGRP-S	0.1	0.2	0.0	0.0
Serpin A4	2.1	0.0	4.7	2.3
sFRP-3	57.0	0.0	0.0	6.8
Thrombomodulin	0.0	0.0	0.0	0.0
TLR2	11.3	3.7	3.8	1.8
TRAIL R1	0.0	0.0	0.0	0.0
Transferrin	0.0	5.5	0.0	0.2
WIF-1	20.6	34.4	53.7	52.9
ACE-2	0.0	0.0	0.0	0.0
Albumin	808.3	212.8	354.2	53.6
AMICA	0.0	0.0	0.0	0.0
ANG-4	0.0	0.0	0.0	0.0
BAFF	0.0	0.0	0.0	0.0
CA19-9	0.0	0.0	0.0	136.3
CD163	0.0	0.0	0.0	0.0
Clusterin	141.6	354.5	490.2	391.2
CRTAM	5.8	4.0	0.0	0.0
CXCL14	229.3	412.6	332.9	210.1
Cystatin C	1,001.1	934.7	889.5	1,017.9
Decorin	3,963.6	4,351.8	1,446.5	4,654.7
Dkk-3	5,629.1	5,060.1	4,536.8	7,071.1
DLL1	42.9	0.0	0.0	1.0
Fetuin A	189.0	0.0	170.4	0.0
aFGF	0.0	0.0	0.0	0.0
FOLR1	0.0	0.0	0.0	0.0
Furin	0.0	0.0	84.0	0.0
GASP-1	0.0	0.0	0.0	0.0
GASP-2	0.0	0.0	0.0	0.0
G-CSF R	0.0	0.0	0.0	0.0
HAI-2	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0
IL-27	0.0	0.0	0.0	0.0
LAG-3	0.0	0.0	0.0	0.0

LDL R	221.8	199.6	182.1	185.7
Pepsinogen I	0.0	0.0	0.0	0.0
RANK	0.0	0.0	0.0	0.0
RBP4	126.7	93.3	98.0	1,314.2
SOST	421.5	834.7	2,960.6	2,677.0
Syndecan-1	0.0	0.0	0.0	0.0
TACI	0.0	0.0	0.0	0.0
TFPI	984.8	1,621.6	3,012.7	2,550.3
TSP-1	22,717.4	47,922.4	48,928.5	36,331.2
TRAIL R2	0.0	0.0	0.0	0.0
TRANCE	0.0	0.0	0.0	0.0
Troponin I	0.0	0.0	0.0	0.0
uPA	55.4	15.7	139.2	0.0
VE-Cadherin	0.0	0.0	0.0	0.0
WISP-1	0.9	0.0	0.0	0.0
ANGPTL3	0.0	0.0	56.0	0.0
bIG-H3	0.0	0.0	0.0	19.1
CA9	19.3	4.8	0.0	0.3
Cathepsin B	3,114.6	4,170.2	3,244.9	3,441.2
CD23	0.0	8.8	0.0	1.1
CHI3L1	5.4	0.0	0.0	0.0
CTLA4	0.0	29.5	9.8	0.0
Dkk-4	0.0	0.0	0.0	0.0
DPPIV	0.0	0.0	0.0	0.0
EDA-A2	0.0	0.0	8.1	0.0
Epo R	0.0	0.0	0.0	0.0
FGF-6	4.1	15.5	1.3	0.9
FGF-9	0.0	0.0	0.6	0.0
Gas 1	3.0	0.0	0.0	0.0
IGFBP-5	20.5	0.0	0.0	1.4
IL-1 F5	0.0	1.3	3.1	0.0
IL-1 F6	0.0	59.8	0.0	0.0
IL-1 F7	19.7	0.0	26.7	0.0
IL-1 F8	0.0	1.9	0.0	0.0
IL-1 F9	3,806.4	3,117.0	1,666.9	3,047.0
IL-1 F10	0.0	377.2	0.0	0.0
IL-1 R5	0.0	0.0	0.0	0.0
IL-17C	0.4	5.0	0.0	0.2
IL-18	0.0	6.9	0.0	1.0
IL-20	0.0	0.0	0.0	0.0
IL-34	0.0	1.0	0.0	0.0
IL-5 Ka	0.0	57.5	65.3	0.0
IL-10 Ra	0.0	426.1	23.0	130.8
	22.3	65.1	50.3	23.8
Leptin R	0.0	0.0	0.0	0.0
Marapsin	0.0	44.3	0.0	0.0
Mer	0.0	12.0	0.0	0.0

MMP-7	822.5	964.7	6,071.1	1,819.0
P-Cadherin	18.0	28.4	6.3	16.3
Prostasin	3.6	9.9	0.0	4.7
PSMA	0.0	15.1	0.0	0.0
SIGIRR	31.0	0.0	0.0	0.0
TGFb RIII	16.1	22.7	377.5	580.1
TF	0.2	0.0	0.5	0.2
TWEAK	21.2	38.4	22.1	58.7
ADAMTS13	0.0	0.0	0.0	0.0
Aggrecan	74.5	0.0	0.0	12.4
Angiotensinogen	0.0	0.0	0.0	0.0
B7-H1	57.1	26.7	23.5	0.0
BMPR-IA	466.1	0.0	97.3	2,775.7
BMPR-II	148.7	0.0	0.0	0.0
Cadherin-11	0.0	0.0	0.0	0.0
CD27	0.0	0.0	1.4	8.0
CD6	223.0	259.4	0.0	516.6
Ck beta 8-1	2.4	1.0	1.0	5.7
CNTF	3.2	3.9	91.6	0.0
DNAM-1	0.0	87.9	495.6	0.0
EMMPRIN	706.3	458.7	544.8	378.6
FLRG	1,514.1	79.4	193.7	1,863.4
Follistatin-like 1	17,142.2	30,817.6	60,403.7	30,872.4
Fractalkine	731.4	319.5	6,483.4	1,751.0
Galectin-1	300.9	249.8	250.9	426.6
GITR L	0.0	0.0	37.9	102.4
Granulysin	6.1	4.4	18.4	0.0
IL-1 R3	37.3	23.5	153.7	125.9
IL-15 R	0.0	147.0	585.9	80.0
IL-17E	22.2	38.7	38.7	42.7
IL-32 alpha	0.0	0.0	10.6	4.7
L1CAM-2	0.0	0.0	101.9	310.9
LRIG3	0.0	0.0	42.5	0.0
LRP-6	607.6	143.6	139.2	443.4
MEPE	2.0	2.5	21.5	1.2
Nectin-4	50.6	0.0	41.9	57.4
Periostin	286.5	285.6	199.6	69.8
Persephin	2,712.5	0.0	0.0	2,375.6
Renin	0.0	0.0	0.4	0.2
RGM-B	36.6	3.7	0.0	9.6
ROBO3	0.0	1.6	0.0	7.0
S100A8	0.1	0.0	3.5	0.0
Siglec-7	0.0	0.0	0.0	1.5
Syndecan-3	0.0	0.0	0.0	368.5
Inrombospondin-2	0.9	0.0	0.0	0.1
I hrombospondin-5	18,110.9	1,351.9	576.5	17,062.7
	1.050.0		00.0	4.051.0

ULBP-2	0.0	0.0	0.0	0.0
ADAM8	23.8	67.3	76.2	70.8
ADAM12	0.0	0.0	7.1	259.4
B7-H3	362.7	478.9	62.7	259.6
BMPR-IB	0.0	51.6	7.7	156.7
Cadherin-4	448.3	128.6	1,017.0	1,408.1
Cadherin-13	975.7	416.0	0.0	1,766.4
CD48	0.0	109.1	0.0	706.5
CD58	0.0	0.0	0.0	0.0
CD84	0.0	0.0	0.0	0.0
CD99	172.3	179.9	93.8	181.8
CD155	2,739.7	2,484.6	2,685.2	0.0
CD229	10.3	0.0	35.7	32.9
CEACAM-5	0.0	0.0	0.0	874.4
CF XIV	0.0	90.0	97.9	0.0
Cystatin A	0.0	0.5	0.0	0.0
Cystatin B	1,826.1	2,048.0	1,745.2	1,494.4
Cystatin E M	0.0	0.1	6.1	0.0
Desmoglein 2	0.0	12.1	18.9	0.0
DR3	0.0	181.4	214.0	1,222.4
ErbB4	24.4	108.7	15.7	161.3
ESAM	1.4	22.0	4.7	16.6
FGF-21	0.4	18.5	5.4	57.0
Galectin-2	0.0	113.0	119.2	193.3
Galectin-9	7.8	76.0	33.6	118.5
ICOS	189.2	599.9	254.5	813.5
JAM-A	5.6	37.7	12.9	47.0
JAM-B	6.6	59.4	8.2	0.3
Kallikrein 5	2.7	30.4	158.8	48.8
Midkine	4,235.0	4,704.0	4,967.6	3,328.5
Pentraxin 3	0.2	13.6	4.4	74.7
Pref-1	450.8	264.1	241.3	3,560.3
Siglec-10	1,913.1	1,744.0	418.9	3,204.4
SLAM	211.3	907.5	322.0	1,715.6
SP-D	74.3	70.1	46.5	528.5
Syndecan-4	180.5	131.2	74.9	128.6
Testican 2	65.6	12.2	116.9	278.9
TIM-3	606.4	1,087.9	703.7	1,090.8
TLR4	38.5	79.6	89.4	474.1
TRAIL	0.0	0.0	1.4	2.0
ULBP-1	0.0	149.2	204.0	381.6
ALK-1	0.0	0.0	0.0	0.0
B7-H2	0.0	0.0	0.0	0.0
BLAME	180.4	119.4	189.7	132.8
BMP-8	0.0	0.0	0.0	0.0
CD28	0.0	0.0	0.0	0.0
Common beta Chain	194.0	58.7	94.3	122.4

Contactin-1	3.9	1.0	0.0	0.7
Desmoglein-1	111.4	12.1	0.0	20.0
Desmoglein-3	9.5	0.0	7.4	20.3
EDAR	7.2	4.3	18.1	0.0
EphA1	0.0	0.0	0.0	0.0
EphB6	75.0	44.0	57.4	44.5
Ephrin-B3	409.7	454.9	425.6	595.5
Epiregulin	145.2	0.0	122.5	0.0
FGF-12	0.0	0.0	0.0	0.0
FGF-17	44.6	0.0	0.0	0.0
FOLR2	0.0	12.4	15.1	0.0
Galectin-8	0.0	41.1	17.9	37.6
GHR	73.6	0.0	27.6	28.5
Glypican 1	801.9	464.9	91.3	260.3
Glypican 5	78.6	25.4	74.8	103.0
IFN-gamma R1	0.3	0.8	0.8	0.0
IL-22 R alpha 1	0.0	0.0	0.0	0.2
IL-22BP	23.7	27.6	30.5	46.3
IL-23 R	0.0	0.0	0.0	4.0
IL-31 RA	10.9	10.7	35.7	0.0
IL-7 R alpha	618.7	1,641.6	3,211.8	614.8
Integrin alpha 5	0.0	0.0	0.0	1,115.2
MDM2	0.0	24.0	32.4	46.5
Nectin-1	918.2	1,189.0	683.7	738.7
NKp30	19.3	7.0	34.4	47.6
Nogo Receptor	32.0	61.3	0.0	96.7
Notch-3	0.0	0.0	0.0	0.0
OSM R beta	0.0	0.0	0.0	0.0
Prolactin R	0.0	0.0	0.0	0.0
RELT	1,052.3	828.5	1,528.5	1,300.9
Ryk	0.0	0.0	0.0	0.0
Semaphorin 6D	0.0	0.0	0.0	0.0
Semaphorin 7A	0.0	0.0	0.0	0.0
Siglec-11	137.8	0.0	18.4	545.1
B/-2	0.0	62.1	33.3	2/1.2
BAFF R Calaitanin	0.0	0.3 1E 0	10.4	24.9
Calcumtonin 1	0.0	191.6	I.I 52.4	4,194.1
Cathonsin E	0.0	0 1	2.0	0.0
	0.0	0.0	2.9	300 3
	0.0	205.0	20.0	1 062 2
CMASP3	0.0	1 503 1	2 698 1	8 412 6
Endocan	0.0	1 1	2,030.1	99.4
Endocan Enha?	0.0	26.9	71.6	132.4
EphR4	0.0	62.5	0.1	221 4
Ephrin-44	0.0	334.8	251 7	347 1
FGF-23	0.0	151 3	57.0	57.7
101 20	0.0	101.0	01.0	01.1

FGF-5	0.0	34.6	0.0	466.4
Flt-3	0.0	492.9	329.3	0.0
GLP-1	0.0	7.1	2.0	6.7
Glypican 2	0.0	482.3	151.4	437.4
GM-CSF Ra	19.3	2,800.5	5.7	1,170.1
GP73	0.0	326.7	260.0	4,352.9
HTRA2	0.0	1,229.6	449.0	2,349.1
IL-20 Ra	178.9	261.5	168.2	47.3
IL-4 Ra	0.0	197.1	145.6	48.0
JAM-C	9.7	153.2	74.9	296.7
LH	133.8	91.3	0.0	510.6
Matrilin-3	0.0	39.2	2.7	4.7
MeprinA	0.0	1,025.5	849.0	0.0
MSP R	0.0	280.5	39.2	149.6
N-Cadherin	0.0	1,007.9	222.9	2,479.1
Neprilysin-2	0.0	481.1	5.2	2,684.5
NKp44	0.0	202.7	121.7	0.0
PAPP-A	1,954.0	6,314.2	4,025.2	0.0
Pepsinogen II	0.0	97.3	0.0	2,905.7
Presenilin 1	0.0	17.4	4.5	0.0
PTH	0.0	108.3	79.5	39.3
ΡΥΥ	0.0	193.0	97.7	1,323.2
SOX2	0.0	1,403.5	513.3	2,938.4
TFF3	0.0	2,076.9	1,819.4	1,454.6
TFPI-2	0.0	483.4	233.1	0.0
TRACP	0.0	2,768.7	0.0	7,894.2
Ubiquitin+1	215.9	1,203.5	819.0	773.3
ACE	0.0	0.0	0.0	0.0
Activin RIB	0.0	0.0	26.9	0.0
ADAM23	11.3	0.3	35.1	2.7
Artemin	1.2	0.9	0.0	0.0
Cardiotrophin-1	106.0	418.3	94.4	0.0
Cathepsin V	980.6	2,252.3	5,260.8	2,360.7
FABP1	0.0	0.0	0.0	670.6
FGF-20	0.0	0.0	0.0	0.0
GDF-8	10.1	0.0	30.8	0.0
HAI-1	0.0	0.0	0.0	0.0
IL-27 Ra	48.3	0.0	281.9	23.2
Insulin R	8.9	0.0	9.4	10.5
Kallikrein 7	32.1	92.2	60.0	139.0
LIF R alpha	6.3	5.4	0.0	0.0
Lipocalin-1	0.0	1.9	16.6	0.0
LTbR	0.0	0.0	0.0	0.0
Mesothelin	1.9	1.2	0.0	0.0
MFRP	0.0	0.0	0.0	0.0
Neuropilin-2	0.0	0.0	0.0	0.0
Neurturin	0.0	0.1	0.0	0.0

Nidogen-2	7,868.2	13,527.2	9,961.8	21,872.0
Olfactomedin-2	0.0	0.0	0.0	0.0
p53	0.0	0.0	1,761.7	364.0
PD-ECGF	1.1	0.0	0.0	31.6
PDGF-CC	0.0	0.0	0.0	0.0
Progranulin	3,609.6	3,177.0	3,239.4	7,314.2
Ret	0.0	0.0	178.7	0.0
ROBO4	0.0	0.0	0.0	0.0
Semaphorin 6B	0.0	0.0	0.0	0.0
Serpin F1	0.0	0.0	0.0	0.0
SREC-I	0.0	0.0	4.4	0.0
SREC-II	0.0	0.0	0.0	0.0
TLR1	0.0	0.0	0.0	0.0
TLR3	0.0	0.0	0.0	0.0
TPP1	5,615.9	7,332.1	6,950.9	4,197.9
TREM-2	0.0	0.0	0.0	0.0
TrkC	165.0	381.3	256.7	404.2
TROY	0.0	0.0	0.0	0.0
Uromodulin	13.5	0.8	0.9	4.0
XIAP	0.0	299.0	1,110.7	255.9
4-1BB Ligand	50.0	48.9	33.3	46.1
Activin RIIB	0.0	0.0	0.0	0.0
Aminopeptidase P2	0.0	0.0	0.0	0.0
BAMBI	281.2	339.1	121.8	117.1
BOC	0.0	103.6	0.0	20.8
Brevican	0.0	1.6	0.0	1.3
Carbonic Anhydrase XI	0.0	225.9	0.0	0.0
Carboxypeptidase A2	0.0	0.0	0.0	0.0
CD300C	0.0	0.0	0.0	0.0
CD320	146.3	/4.4	0.0	62.4
CDNF	0.0	0.0	0.0	0.0
	4.7	0.0	0.0	0.0
СЦЕТИ	0.0	0.0	0.0	0.0
CII P-1	0.0	0.0	0.0	0.0
CNTF R alpha	0.0	0.0	0.0	0.0
CRIM1	2.332.0	1.387.7	243.1	531.1
CRTAC1	0.0	0.0	0.0	0.0
CXADR	0.0	0.0	0.0	0.0
Dopa Decarboxylase	0.0	0.0	0.0	0.0
DPPII	247.5	487.3	283.0	62.1
DSPG3	0.0	0.0	0.0	0.0
EMR2	0.0	0.0	0.0	0.0
FCAR	191.0	46.1	73.3	103.9
FCRL1	8.7	87.0	0.0	93.2
FCRL2	0.0	0.0	0.0	0.0
Gas6	0.0	0.0	0.0	0.0

GPR56	0.0	0.0	0.0	0.0
GPVI	0.2	0.0	0.0	0.0
Hepsin	0.0	0.0	0.0	0.0
ILT2	0.0	0.0	0.0	0.0
Jagged 2	54.6	0.0	123.4	0.0
Kirrel3	83.7	47.6	30.0	38.1
KLF4	0.0	0.0	0.0	0.0
LAIR1	0.0	0.0	0.0	0.0
LAMP	0.0	0.0	0.0	0.0
LAMP1	0.0	0.0	0.0	0.0
MDGA1	0.0	0.0	0.0	0.5
MIS RII	0.0	0.0	0.0	3.9
Neurexin 3 beta	0.0	0.0	0.0	0.0
AMIGO	0.0	0.0	0.0	0.0
Aminopeptidase LRAP	78.8	0.0	78.0	0.0
Amnionless	0.0	14.9	2.0	0.0
Arylsulfatase A	0.0	0.0	0.0	0.0
Bcl-w	0.0	0.0	0.6	0.0
CD109	20.4	0.0	1,145.4	0.0
CD157	0.5	0.0	0.3	0.0
CD34	143.0	0.0	551.5	0.0
CD83	47.5	0.0	0.0	0.0
CLEC-1	282.8	0.0	1,060.1	0.0
CLEC10A	1,277.9	535.8	1,326.8	0.0
CMG-2	0.0	0.0	0.0	0.0
CREG	0.0	121.9	42.3	26.2
Cystatin SN	0.0	0.0	0.0	0.0
Cytokeratin-8	0.0	0.7	0.0	0.0
Dectin-1	0.0	0.0	0.0	0.0
Desmocollin-3	49.3	234.6	193.3	238.9
Endoglycan	0.0	187.0	1,170.7	0.0
Galectin-4	0.0	0.0	0.0	0.0
HAPLN1	87.5	105.0	206.6	2,851.9
Jagged 1	4.1	18.4	15.6	10.3
Langerin	286.5	53.7	0.0	100.9
Lumican	5,567.6	4,688.1	5,949.9	5,821.5
Matriptase	/6.0	66.2	142.9	0.0
MEP1B	140.9	139.3	514.8	0.0
Nectin-3	0.0	0.0	36.2	0.0
OX40	0.0	0.0	0.0	0.0
OX40 Ligand	0.0	0.0	2.3	0.0
p2/	0.0	0.0	<i>.</i> .0	0.0
Playin P2	0.0	0.0	0.0	0.0
Plexin B3	90.2	0.0	124.3	0.0
	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0
PSA-total	87.3	118.5	176.8	162.5

Reg1B	16.5	0.0	4.6	0.0
RGM-A	124.2	0.0	5.8	99.9
ROBO2	40.9	6.0	5.8	18.8
Spinesin	9.0	1.2	0.0	0.0
TWEAK R	0.0	0.0	157.7	0.0
ULBP-3	0.7	2.9	3.0	0.0
Activin RIIA	0.0	151.6	0.0	0.0
Biglycan	0.0	0.0	0.0	1.4
CA13	72.8	79.6	0.0	0.0
CA2	3.7	837.1	0.0	0.0
CA72-4	228.3	0.0	0.0	0.0
CLEC-2	1,608.0	0.0	0.0	0.0
C-myc	27.7	0.0	0.0	0.0
Cystatin D	1.9	0.0	0.0	0.0
Erythropoietin	118.4	0.0	76.3	0.0
FCRL5	207.2	0.0	0.0	0.0
FGF-16	6.0	0.0	0.0	0.0
GATA-4	0.0	0.0	0.0	0.0
GFR alpha-1	2,700.7	2,244.6	2,534.6	2,478.8
GFR alpha-2	0.0	0.0	27.3	0.0
Granzyme B	64.3	38.9	419.0	99.6
Granzyme H	90.3	23.3	59.4	3.9
HIF-1a	0.0	0.0	0.0	0.0
htPAPP-A	1,192.1	443.8	0.0	8,308.1
IFNb	134.7	0.0	100.8	85.7
IL-17 RC	0.0	0.0	0.0	0.0
IL-19	0.5	0.0	0.0	0.0
IL-20 R beta	8.5	0.0	0.0	0.0
IL-22	0.0	0.0	151.2	62.4
ILT4	7.3	0.0	0.0	0.0
LAIR2	559.8	0.0	656.0	57.8
LSECtin	0.0	0.0	0.0	0.0
Netrin-4	79.0	0.0	11.8	0.0
Norrin	37.7	0.0	0.8	0.9
NRG1a	0.0	0.1	0.0	1.0
PD-L2	0.0	0.0	0.0	0.0
PDX-1	59.9	0.0	35.8	0.0
Podocalyxin	31.6	14.6	113.1	18.1
RGM-C	1.7	0.0	0.0	0.0
S100A1	0.0	0.0	0.0	24.6
Semaphorin 6A	22.1	0.0	0.0	0.0
SLITRK5	0.0	0.0	0.0	0.0
SR-AI	3.0	0.0	121.4	0.0
ST6GAL1	0.0	0.0	0.0	0.0
	0.0			
Thyroid Peroxidase	103.7	0.0	0.0	0.0
Thyroid Peroxidase Troponin C	103.7 52.1	0.0 0.0	0.0 0.0	0.0 0.0

ASAHL	0.0	0.0	0.0	0.5
B4GalT1	0.0	0.0	0.0	21.2
BAI1	123.7	0.0	135.3	0.0
Brorin	0.0	0.0	0.0	2.6
C1qTNF4	0.6	0.0	0.0	6.5
CA14	0.0	0.8	0.0	0.0
CA4	0.0	0.0	0.0	0.7
CA6	0.0	0.0	0.0	0.0
CA8	0.0	0.0	0.0	0.0
Cadherin-6	0.0	1.0	0.0	3.7
Caspr2	1.5	12.5	3.4	25.9
CD27 Ligand	0.0	0.0	0.0	39.4
CD300a	0.0	0.0	0.0	8.3
CD300e	0.0	0.0	0.0	128.1
CD300f	0.0	0.0	0.0	0.0
CD4	0.0	0.0	0.0	2.7
CD5	0.1	0.2	0.2	3.4
CD69	0.0	0.2	0.0	2.0
CK18	0.0	0.8	0.2	3.3
CK19	1.6	3.6	5.5	30.9
CPB1	0.0	0.0	0.0	0.6
CRISP-2	15.0	34.5 7.2		51.5
DDR1	0.0	0.0	0.0	0.0
FUT8	0.0	9.0	7.0	20.5
MIA	0.0	0.0	0.0	0.0
NTAL	0.0	0.0	0.0	0.0
NTB-A	0.0	0.0	0.0	0.0
ОМдр	80.0	147.6	7.5	168.9
PEAR1	0.0	0.0	0.0	0.0
Podoplanin	0.0	0.0	0.0	5.7
PTH1R	0.0	2.7	2.6	0.0
Reg4	0.0	1.2	0.0	3.2
ROR1	8.6	0.5	0.0	1.2
Semaphorin 4G	0.0	0.1	2.3	9.0
Serpin A5	158.5	25.3	0.4	53.7
Serpin B6	5,073.3	5,402.2	2,473.7	3,019.0
Siglec-1	0.0	0.8	0.0	8.2
Sirtuin 2	0.0	0.0	0.0	0.0
Sirtuin 5	373.1	205.2	133.6	30.1
ANGPIL/	0.0	0.0	0.0	0.0
CD36	0.0	904.1	179.1	672.4
CLEC9a	0.0	0.0	0.0	0.0
CL-P1	0.0	0.0	0.0	0.0
Dectin-2	0.0	0.0	0.0	0.0
DLL4	0.0	0.0	0.0	0.0
DSCAM	0.0	0.0	0.0	0.0
EDIL3	12,660.3	11,508.3	11,062.5	11,897.5

ENPP-7	0.0	0.0	0.0	0.0
Enteropeptidase	8.4	0.0	0.0	19.1
FCRL3	0.0	0.0	0.0	0.0
FCRLB	0.0	0.0	0.0	0.0
FGF-3	0.0	0.0	0.0	0.0
FLRT1	0.0	0.0	0.0	0.0
FLRT2	0.0	0.0	0.0	0.0
GBA3	0.0	75.2	35.2	43.8
GDF-11	0.0	0.0	0.0	0.0
Glycoprotein V	0.0	0.0	0.0	0.0
Granzyme A	884.7	1,220.2 1,490.5		1,188.4
IGSF4B	0.0	10.7	0.0	0.0
IL-28 R alpha	0.0	0.0	0.0	0.0
Kynureninase	0.0	184.6	0.0	0.0
LAMA4	0.0	15.6	13.4	30.7
LRRC4	108.0	375.0	306.3	262.7
LRRTM3	313.7	1,523.6	0.0	0.0
NG2	0.0	243.7	165.9	738.0
NQO-1	0.0	0.0	0.0	0.0
PCSK2	0.0	92.0	0.0	0.0
PILR-alpha	0.0	0.0	0.0	0.0
Plexin A4	0.0	0.0	0.0	0.0
POGLUT1	0.0	0.0	0.0	0.0
PRELP	144.8	153.8	78.2	23.9
Smad4	0.0	0.0	0.0	7.5
SOX15	0.0	0.0	0.0	0.0
SOX7	7,196.4	8,853.9	14,516.1	9,668.7
SOX9	39,181.8	54,507.0	3,727.9	3,233.0
Syntaxin 6	2.6	9.8	10.6	0.0
TROP-2	0.0	0.0	0.0	0.0
TSLP R	0.0	0.0	0.0	0.0
UNC5H4	0.0	0.0	0.0	4.5
ADAM22	6,976.0	3,678.5	4,465.7	8,765.2
ARSB	0.2	0.0	374.0	0.0
B3GNT2	407.5	0.0	779.6	0.0
CA5B	4,365.5	2,489.3	2,765.8	0.0
Caspase 7	3,340.3	943.4	41,147.6	10,986.3
Caspase 8	283.5	0.0	780.9	136.0
CD11b	323.9	274.7	258.9	223.8
CD172g	399.9	368.6	541.4	12.9
	824.7	1,180.4	2,185.4	1,867.3
	1,394.5	1,045.8	1,076.8	246.9
CD49b	2,017.4	333.8	1,542.3	0.0
	39.3	0.0	253.2	0.0
	129.3	0.0	0.0	0.0
	1,200.0	1,269.8	788.4	781.0
FABP6	1,151.3	271.1	790.0	0.0

FAM3C	658.5	0.0	232.6	0.0
GDF-3	0.0	0.0	57.7	0.0
GSTM1	648.7	4.6	507.1	0.0
Kallikrein 11	0.1	0.0	0.2	0.0
Kallikrein 12	3.7	0.0	1.3	0.0
Kremen-2	21.1	68.6	10.2	8.8
OSCAR	459.0	0.0	127.9	0.0
PTP1B	18.9	0.0	17.3	0.0
Reg3A	4.9	0.0	0.0	0.0
R-Spondin 2	121.3	114.3	72.3	0.0
S100A13	205.8	273.5	228.7	104.0
Semaphorin 4C	519.6	38.4	383.0	387.8
Sirtuin 1	1,154.1	386.7	958.4	329.1
SMPD1	2,704.9	5,189.0	18,674.3	0.0
Sortilin	1,439.0	0.0	779.4	0.0
SPINK1	62.1	0.0	689.1	0.0
Stabilin-2	2,013.3	93.2	594.3	0.0
SULT2A1	16.9	0.0	157.3	0.0
TCN2	62.9	0.0	40.0	66.0
THSD1	0.0	0.0	0.0	0.0
TrkA	4,188.6	0.0	3,708.7	0.0
UCH-L3	177.3	0.0	0.0	0.0
VAP-A	0.0	0.0	17.4	0.0
vWF-A2	0.0	0.0	13.2	0.0
Wnt-4	422.0	0.0	376.4	0.0
ADAMTSL-1	0.0	1,819.3	0.0	3,197.3
AMSH	0.0	101.2	173.3	94.2
Annexin V	12.0	594.2	375.8	484.6
BATF3	0.0	29.8	28.7	8.3
Bora	0.0	12.1	35.9	52.0
Cadherin-17	0.0	85.0	18.8	0.0
Caveolin-2	0.0	0.0	0.0	0.0
CD2	0.0	304.6	98.5	117.1
CD200 R1	0.0	0.0	0.0	0.0
CHST3	0.0	469.7	0.0	363.3
COMT	0.0	387.7	235.5	419.3
Cystatin SA	178.8	188.8	58.7	0.0
DBH	0.0	3.2	0.0	0.0
Desmin	0.0	1.4	0.0	0.0
EXTL3	0.0	0.0	32.0	0.0
Ficolin-1	0.9	14.0	9.4	13.7
FosB	0.5	2.3	20.2	8.8
FRS2	0.0	40.9	11.5	78.3
GATA-5	35.8	0.0	122.5	11.5
GFAP	0.0	352.7	0.0	188.4
GLI-3	2.1	16.5	48.2	20.0
HepaCAM	0.0	3.4	3.0	3.4

HIF-1 beta	6.5	4.1	0.0	0.0
HSD17B1	0.0	139.8	33.4	138.0
IDO	339.2	0.0	596.3	143.1
Kallikrein 1	0.0	0.0	0.0	32.2
Kell	0.0	555.7	0.0	406.9
MDL-1	0.0	3.6	2.7	0.2
NPDC-1	0.2	0.4	0.1	0.5
Numb	0.0	34.3	0.0	81.3
Olia2	0.0	0.0	0.0	797.6
p63	0.0	40.8	0.0	44.9
Pax3	0.0	9.9	0.0	24.1
Semaphorin 4D	0.0	227.7	0.0	302.4
SPHK1	1.2	32.2	0.0	39.7
TAZ	0.0	129.7	66.7	120.9
TC-PTP	0.0	225.3	564.4	183.6
TGM3	1,250.9	2,320.8	1,473.4	1,831.4
TPST2	0.0	27.7	1.0	29.1
TREML1	0.0	0.0	0.0	0.2
Cf10	0.0	0.0	81.6	0.0
CHMP2B	0.0	0.0	97.5	0.0
Contactin-3	62.8	303.8	0.0	220.4
Cortactin	0.0	250.2	304.3	0.0
CrkL	1,652.0	3,346.9	1,386.7	212.6
Cyr61	3.8	2.0	2.7	3.8
DAPP1	0.0	0.0	0.0	0.0
DCTN1	112.2	422.2	1,156.8	0.4
DFF45	2,137.3	3,172.3	1,206.0	97.8
DRAK1	386.9	367.3	426.7	0.0
GRAP2	0.0	0.0	0.0	0.0
GRK5	450.1	5.8	0.0	0.0
HAO-1	192.7	253.6	249.2	0.0
LRIG1	0.0	0.0	0.0	0.0
MMP-12	0.0	0.0	0.0	0.0
NCK1	0.0	0.0	0.0	0.0
Nectin-2	202.0	256.5	149.6	63.2
Nesfatin-1	0.0	0.0	0.0	0.0
Neurogranin	0.0	1.4	0.7	0.0
Nrf2	0.0	0.0	1.8	0.0
NUDT5	0.0	0.0	0.0	95.7
NUP85	0.0	0.0	0.0	0.0
PAR1	0.0	176.5	0.0	0.0
PP	162.5	0.0	166.2	94.1
PRX2	239.3	0.0	223.8	0.0
PSMA1	0.0	0.0	145.6	0.0
PU.1	0.0	0.0	0.0	0.0
RalA	0.0	0.0	0.0	0.0
RCOR1	0.0	7.0	0.5	8.3

Serpin B8	393.3	526.6	928.6	440.4
SH2D1A	10.1	6.8	8.6	0.0
SHP-1	14.2	0.0	0.0	0.0
Siglec-6	2.6	0.0	11.9	0.0
SorCS3	0.0	0.0	0.0	0.0
THAP11	0.0	0.0	0.0	0.0
ULBP-4	0.0	0.0	0.0	0.0
UNC5H3	0.0	16.5	0.0	0.0
VAMP-1	0.0	6.3	30.4	0.0
VAMP-2	0.0	0.0 0.0		0.0
Visfatin	50.7	45.2 49.5		0.0
C1qTNF9	0.0	0.0	0.0 0.0	
CA5A	0.0	0.0	0.0 0.0	
CANT1	554.9	934.5	525.9	1,209.7
Cathepsin H	446.4	0.0	0.0	1,462.7
Contactin-5	231.6	152.7	16.5	132.1
CTRC	0.0	0.0	0.0	3.2
Draxin	0.0	9.6	0.0	80.7
EphB2	160.5	646.7 746.1		9,912.4
EphB3	0.0	6.7	0.0	129.1
FABP8	0.0	0.0	0.0	15.2
Fgr	0.0	0.0	0.0	642.3
FKBP51	3,012.1	4,501.7	1,743.8	1,564.6
FUCA1	287.0	431.2	223.2	415.3
Galanin	0.0	13.1	0.0	200.8
GALNT10	0.0	6.6	0.0	784.2
GKN1	155.2	293.5	0.0	908.4
Glyoxalase II	310.8	1,059.0	222.7	2,162.5
HS3ST1	19.2	149.3	114.8	267.7
HS3ST3B1	31.8	30.7	24.3	44.5
Lin28	0.0	61.9	0.0	168.1
LOXL2	0.0	0.0	86.7	481.2
LRRTM4	0.0	2.0	0.0	51.9
MAP1D	190.2	255.4	99.5	166.2
Matrilin-2	21,598.2	21,254.9	23,238.4	45,126.3
MCEMP1	25.7	51.2	9.4	266.9
MCI-1	39.9	147.4	30.0	207.0
MDGA2	0.0	48.0	0.0	3,837.4
MEF2C	0.0	0.0	1.4	17.6
METAP2	1,676.1	2,940.3	1,573.7	1,100.2
Neurocan	0.7	16.9	13.0	115.8
Nogo-A	1.2	8.8	0.3	7.1
	13.0	0.0	0.0	200.2
PIGE-2	13.3	32.3	22.9	33.2
	0.0	148.0	0.0	/5.0
SALM4	15.4	/5.3	16.5	162.3
Semaphorin 6C	1,630.3	1,420.2	4/2./	1,652.4

SorCS2	75.3	86.1	53.9	143.8
ST3GAL1	2,212.4	3,771.4	1,935.1	12,775.4
ST8SIA1	79.2	5.5	64.7	301.2
TSK	306.7	1,340.4	349.0	1,838.2
ADA	26.4	273.4	26.8	10.1
AIF	249.9	240.2	373.5	337.6
AKR1C4	0.0	0.0	0.0	0.0
ASAH2	0.0	0.0	0.0	0.0
BCL-2	195.9	320.9	119.6	0.0
BID	0.0	25.0	0.0	0.0
Calreticulin	66.9	2.8	0.0	0.0
Calreticulin-2	0.0	0.0 0.0		28.1
CD314	192.8	207.5 0.0		0.0
CD39L3	0.0	29.7	0.0	0.0
CD51	300.7	274.7	159.0	197.9
CD99-L2	170.2	198.5	92.6	96.3
CDC25B	0.0	9.2	0.0	0.0
Cerberus 1	3.0	10.5	0.0	14.3
CHST2	0.0	24.5	0.0	15.2
Cochlin	4,926.8	6,590.1	12,063.0	14,708.5
CRELD2	526.4	472.1	577.1	175.6
DC-SIGNR	0.0	0.0	0.0	9.3
eNOS	0.0	13.1	0.0	13.5
ENPP-2	14,022.2	12,262.0	16,021.8	11,827.8
FABP4	0.0	26.8	0.0	8.7
FcERI	1.2	5.7	0.0	0.0
FGF R5	438.8	459.7	545.8	336.0
GALNT2	509.4	481.1	430.6	411.4
GALNT3	0.0	24.9	6.5	17.2
GIF	0.0	1.2	0.0	0.0
GPR111	0.0	22.4	0.0	0.0
GUSB	4,789.3	7,945.6	7,381.8	4,169.5
Inhibin A	0.0	545.6	22.2	163.5
LILRB4	0.0	0.0	0.0	68.9
Neuroglycan C	0.0	0.0	0.0	0.0
NKp46	2.6	5.4	4.4	8.4
NPTXR	22.2	20.8	0.0	0.0
ROR2	2.2	4.2	0.0	4.3
SCCA2	1,301.0	3.0	0.0	0.0
Siglec-2	69.4	91.3	141.7	65.2
SIRP alpha	0.3	0.0	0.0	0.0
SorCS1	0.0	0.0	0.0	5.1
Trypsin 1	0.0	3,372.3	208.4	3.0
Trypsin 3	2.2	2.2	1.1	0.0
AMIGO2	697.0	590.8	223.0	1,449.6
Arginase 1	15.5	0.0	0.0	0.6
B7-H4	317.0	360.4	109.5	427.0

Bcl-10	0.0	849.7	0.0	937.2
CD42b	1,623.2	2,266.6	0.0	2,594.4
CD73	312.3	135.6	22.6	116.4
CES1	12.7	10.9	3.5	10.7
CES2	1,157.3	887.9	0.0	817.0
cIAP-1	0.0	518.8	764.1	189.7
Cyclophilin A	411.4	1,035.4	1,005.5	214.4
Cystatin S	24.0	22.3	57.3	20.2
DNMT3A	0.0	0.0	523.4	0.0
Epimorphin	32.2	94.6	67.0	35.7
GDF-9	137.7	0.0	155.7	135.8
Glypican 3	0.0	0.0	144.1	5.8
GPR115	365.3	262.4	268.4	292.6
HE4	20.5	0.0	26.5	0.0
HO-1	0.4	1.4	0.3	0.1
HS3ST4	954.4	0.0	1,296.0	2.0
IGSF3	285.9	178.4	63.4	167.7
IL-17 RD	0.0	0.0	0.0	67.9
Integrin alpha 1	778.9	218.5	0.6	611.5
KIR2DL3	361.0	0.0	458.8	124.2
LAMP2	2,670.7	2,730.6	2,312.1	2,375.0
LEDGF	16,283.8	22,203.0	8,282.6	3,355.1
MOG	1.9	0.0	1.6	1.6
Nestin	110.9	109.7	101.5	0.0
Neudesin	52.0	47.5	24.3	3.4
Neuroligin 2	0.0	0.0	0.0	0.0
NKp80	0.0	0.0	0.0	0.0
Osteoadherin	0.0	0.0	0.0	3.0
PDGF R alpha	164.2	0.0	0.0	0.0
PRDX4	1,814.8	1,057.0	2,854.7	1,666.7
Syntaxin 4	11.3	23.5	17.8	15.3
TAFA1	0.0	0.0	0.0	0.0
TAFA2	504.2	184.9	281.3	90.9
TAFA5	7.8	0.0	55.1	0.0
Tenascin R	74.6	14.1	70.9	83.3
TGM4	0.0	135.6	0.0	0.0
TMEFF1	0.0	31.4	12.4	16.2
AR	0.0	0.0	0.1	0.0
BDNF	5.7	10.5	50.3	24.9
bFGF	4.4	10.8	17.4	2.0
BMP-4	0.0	0.0	0.0	0.0
BMP-5	0.0	0.0	0.0	0.0
BMP-7	0.0	0.0	0.0	0.0
b-NGF	16.6	2.8	18.4	7.7
EGF	72.8	42.5	51.6	31.3
EGF R	42.4	26.5	28.9	16.0
EG-VEGF	0.0	0.0	3.0	0.0

FGF-4	655.9	203.8	903.1	534.7
FGF-7	0.0	0.0	1.0	0.1
GDF-15	24.5	29.1	189.2	229.6
GDNF	54.7	0.3	78.6	49.2
GH	0.0	0.0	0.0	0.0
HB-EGF	0.0	0.0	0.0	0.0
HGF	0.0	0.0	0.0	0.0
IGFBP-1	0.0	4.6	27.2	38.9
IGFBP-2	982.6	1,201.7	2,458.5	1,982.1
IGFBP-3	0.0	0.0	0.0	0.0
IGFBP-4	59.0	115.8	728.3	57.8
IGFBP-6	214.0	903.5	334.5	1,131.0
IGF-1	0.0	0.0	0.0	0.0
Insulin	3,183.9	1,912.7	3,356.0	4,773.7
MCSF R	0.0	0.0	4.7	10.1
NGF R	0.0	0.1	0.3	0.0
NT-3	144.9	31.5	160.4	117.8
NT-4	2.6	0.0	1.8	1.3
OPG	894.2	699.3	851.2	932.1
PDGF-AA	648.7	34.7	726.4	635.4
PIGF	0.3	2.1	1.6	0.8
SCF	21.5	17.4	3.2	15.4
SCF R	138.4	166.2	32.5	59.4
TGFa	0.8	0.5	3.2	2.1
TGFb1	0.0	0.0	0.0	0.0
TGFb3	0.0	0.0	7.6	0.2
VEGF	275.7	275.0	190.8	385.4
VEGF R2	0.3	0.0	40.1	7.0
VEGF R3	0.0	0.0	2.1	0.0
VEGF-D	14.7	12.6	18.8	14.6
BLC	0.5	0.0	1.1	0.0
Eotaxin	0.0	0.0	0.0	0.0
Eotaxin-2	99.0	46.1	54.8	85.1
G-CSF	0.3	0.4	0.0	0.0
GM-CSF	5.2	0.8	2.8	26.0
I-309	1.8	0.0	0.4	0.0
ICAM-1	172.9	593.2	94.2	259.3
IFNg	3.1	2.7	0.1	15.1
IL-1a	1.4	2.3	3.9	3.3
IL-1b	0.0	0.0	0.5	0.3
IL-1ra	4.0	1.3	2.3	1.6
IL-2	0.0	54.5	0.0	0.0
IL-4	0.0	1.1	0.7	0.0
IL-5	0.0	0.0	0.0	0.0
IL-6	0.0	0.0	30.1	0.0
IL-6R	0.0	0.0	92.0	45.6
IL-7	15.2	17.1	24.4	25.9

IL-8	65.2	21.8	48.4	33.5
IL-10	1.7	1.6	1.3	1.6
IL-11	0.0	0.0	0.0	0.0
IL-12p40	1.6	0.6	0.0	0.6
IL-12p70	0.3	0.0	0.0	0.2
IL-13	27.4	41.6	15.3	11.6
IL-15	125.8	158.3	77.2	96.1
IL-16	5.1	0.8	2.2	1.5
IL-17	0.4	0.1	0.0	0.0
MCP-1	87.3	60.0	41.1	228.7
MCSF	5.0	6.8	1.5	2.6
MIG	4.3	0.0	5.3	0.0
MIP-1a	48.0	17.7	25.5	23.0
MIP-1b	1.1	0.6	0.0	0.1
MIP-1d	1.3	1.0	1.5	0.6
PDGF-BB	0.0	0.0	0.0	0.0
RANTES	22.9	14.0	35.1	21.7
TIMP-1	6,504.3	5,979.3	5,841.3	5,675.4
TIMP-2	3,799.6	3,917.5	4,169.1	2,532.6
TNFa	21.0	11.0	1.3	3.5
TNFb	0.0	74.9	0.0	63.3
TNF RI	227.8	107.0	5.7	1.9
TNF RII	839.2	602.3	438.9	238.1
4-1BB	0.0	0.2	0.0	0.0
ALCAM	657.7	569.4	38.1	50.7
B7-1	0.0	0.0	0.0	0.0
BCMA	0.0	0.0	0.0	0.0
CD14	0.0	0.0	6.1	15.0
CD30	0.0	0.0	0.0	0.0
CD40L	0.0	1.3	0.0	0.0
CEACAM-1	0.0	0.0	0.0	0.0
DR6	4,553.4	6,152.2	11,737.1	7,539.1
Dtk	64.6	110.9	9.6	17.0
Endoglin	0.0	0.0	0.0	0.0
ErbB3	0.0	0.0	0.0	0.0
E-Selectin	0.0	0.0	0.0	0.0
Fas	8.2	0.0	0.0	0.7
Flt-3L	3.0	5.7	3.1	4.8
GITR	0.0	0.0	0.0	0.0
HVEM	0.0	0.0	0.0	0.0
ICAM-3	0.0	0.0	0.8	0.0
Contactin-2	0.0	0.0	0.0	0.0
IL-1 RI	0.0	0.0	0.0	0.0
IL-2 Rg	0.0	102.6	241.2	0.0
IL-10 Rb	0.0	0.0	0.0	0.0
IL-17R	0.0	0.0	0.0	0.0
IL-21R	0.0	0.0	0.0	0.0

LIMPII	27.5	44.9	82.9	36.4
Lipocalin-2	0.9	2.5	23.0	74.9
L-Selectin	0.0	0.0	0.0	0.0
LYVE-1	0.0	0.0	0.1	0.0
MICA	205.5	108.9	213.0	139.3
MICB	108.4	84.7	21.3	79.4
NRG1-b1	0.0	0.0	0.0	2.3
PDGF Rb	0.0	0.0	0.0	0.0
PECAM-1	0.0	0.0	0.0	0.0
RAGE	0.0	0.0	0.0	0.0
TIM-1	1.0	0.0	0.0	0.0
TRAIL R3	0.0	0.0	0.0	0.0
Trappin-2	0.0	0.0	0.0	0.0
uPAR	0.0	0.0	23.1	0.0
VCAM-1	216.2	48.2	0.0	0.0
XEDAR	0.0	0.0	0.0	0.0

Blue Italic: Below Limit of Detection Red Bold: Above Maxium

GSC8-11 NT	SC8-11 sgOPN 2E	GSC6-27 NT	C6-27 sgOPN 1	GSC7-2 NT	GSC7-2 sgOPN 26
0.0	0.0	12.6	2.2	4.6	153.1
0.0	70.0	114.8	29.4	2.7	1.1
0.0	34.8	4.5	1.5	2.6	0.0
0.0	61.9	0.0	10.6	2.1	15.5
2.8	4.1	19.9	2.5	3.7	0.0
749.7	382.2	1,798.4	1,760.0	590.1	1,069.2
0.0	8.8	19.5	6.3	1.1	12.8
3.9	17.4	19.6	0.0	0.0	0.4
5.1	28.8	4.8	0.0	0.0	4.2
0.0	6.6	0.0	0.0	0.0	0.0
0.0	2.5	1.1	0.0	0.0	1.0
0.0	8.4	8.2	0.0	0.0	0.9
0.0	1,801.6	0.0	0.0	0.0	587.8
0.0	20.0	9.4	0.0	0.0	8.7
3.6	58.3	87.0	0.0	23.5	53.3
0.4	4.2	3.7	1.2	0.7	2.1
0.0	1,226.7	427.2	571.2	270.9	527.5
2.6	185.6	31.8	50.9	39.7	50.8
1.4	3.7	6.9	0.0	1.6	8.4
0.6	58.9	44.3	5.0	21.5	21.5
136.8	268.0	219.3	132.6	223.9	174.5
15.2	16.3	59.3	35.5	14.1	33.3
0.0	51.3	54.4	8.7	6.6	35.4
0.5	2.2	0.8	0.5	0.4	1.9
1.8	1.8	2.0	0.8	1.9	0.2
0.1	0.8	0.8	0.3	0.4	0.5
0.6	2.3	3.5	1.1	2.0	3.5
1,193.2	2,626.4	2.3	5.0	1,542.0	231.0
0.0	0.3	0.3	0.1	0.2	0.3
0.0	10.6	3.3	0.5	0.0	3.0
0.0	27.7	2.6	5.3	2.7	17.4
0.0	310.6	5.0	6.5	17.7	113.3
3.8	4.5	5.3	0.0	7.0	0.0
3,263.3	67.6	27,619.8	1,696.0	451.7	67.2
0.8	5.4	6.0	0.0	2.7	6.2
48.8	191.7	132.1	0.0	0.0	92.9
0.5	5.1	8.9	5.8	7.1	7.9
0.0	6.5	2.3	1.3	1.2	2.8
0.0	82.2	0.0	25.0	9.4	21.5
0.2	1.9	3.9	1.0	0.8	4.1
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.1
16.9	14.1	237.4	241.0	157.6	241.4
0.0	0.0	68.7	15.8	0.0	9.8

0.0	87.1	0.0	0.0	0.0	2,678.5
0.0	0.0	0.4	0.5	0.0	2.3
0.0	0.0	0.0	0.0	0.0	19.0
0.0	0.0	0.0	0.0	0.0	4.1
0.0	0.0	0.0	0.0	0.0	65.3
0.0	0.0	8.4	3.0	0.0	63.9
0.0	0.0	2.5	0.0	0.0	235.8
1.9	0.0	2.9	0.0	0.0	1.9
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	39.3
3.7	9.4	754.9	536.7	172.2	14.8
0.0	0.0	0.0	0.0	5.2	9.4
23.3	0.0	24.4	0.0	16.4	69.3
0.0	0.0	5.6	0.0	0.0	17.7
0.0	0.0	9.7	0.0	3.7	3.9
0.0	0.0	21.0	0.0	0.0	2.9
0.0	0.0	0.0	0.0	0.0	8.5
0.0	0.0	0.0	0.0	0.0	19.7
0.0	0.0	0.0	0.0	0.0	31.0
0.0	0.0	181.6	341.5	121.7	68.5
58.8	1.5	37.3	5.8	0.0	40.3
0.0	0.0	12,374.8	9,805.1	64.2	316.4
7.7	5.1	856.1	2,878.1	0.0	3.9
0.4	0.0	0.0	0.0	0.0	120.2
0.0	0.0	0.0	0.0	0.0	0.0
102.2	0.0	358.5	668.6	414.8	275.7
0.0	0.0	16.4	7.4	0.0	4.1
0.0	0.0	0.0	0.0	0.0	9.3
0.0	0.0	0.0	0.0	0.0	8.7
0.0	0.0	0.0	0.0	0.0	14.6
0.0	0.0	0.2	0.0	0.0	10.7
0.0	0.0	13.5	9.3	0.0	63.0
0.0	3.5	0.0	7.6	0.0	15.3
0.0	0.0	0.0	0.0	0.0	33.7
0.0	0.0	13.8	21.6	2.7	4.3
0.0	0.0	0.0	0.0	0.0	49.2
0.0	0.0	0.0	99.4	0.0	0.0
0.0	0.0	0.0	70.8	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
29.6	0.3	94.0	86.0	12.5	9.2
841.1	895.7	827.7	1,201.4	/25.1	/66.1
0.0	0.0	0.0	154.7	0.0	0.0
0.0	0.0	0.0	119.9	0.0	0.0
0.0	0.0	4.0	27.4	0.0	0.0
0.0	0.0	0.0	0.0	14.1	0.0
0.7	0.0	0.0	6.8	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0

8,729.6	4,206.3	40,388.6	3,396.3	3,086.7	20.3
1.6	0.2	0.0	3.1	5.0	0.0
0.0	0.0	211.5	29.3	144.1	0.0
0.0	0.0	640.5	39.8	211.8	0.0
0.9	0.0	0.0	0.0	116.3	0.0
0.0	0.0	0.0	0.0	29.2	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	2.1	0.0	0.0
0.0	0.0	138.5	252.2	206.8	0.0
41.5	44.7	55.0	58.4	45.5	26.8
5.6	0.0	0.0	41.5	6.1	0.0
0.0	207.8	0.0	532.0	849.3	0.0
0.0	3.6	22.1	69.1	0.0	0.0
24.8	0.0	13.2	38.2	0.0	0.0
27.3	0.0	0.0	0.0	0.4	0.0
0.0	0.0	0.0	0.3	0.0	0.0
77.6	28.8	116.6	22.3	16.1	1.1
7,403.8	945.1	251.4	1,598.1	1,663.1	309.1
475.2	3,981.8	1,206.5	10,356.8	2,866.9	2,484.4
8,529.8	3,309.2	11,029.0	12,571.8	5,119.5	815.9
5.2	0.0	0.7	0.7	7.4	0.0
0.0	0.0	0.0	76.0	0.0	0.0
372.2	0.0	0.0	0.0	0.0	0.0
1.9	0.0	0.0	7.4	0.0	0.0
0.5	0.0	0.0	35.9	5.9	0.0
55.2	111.4	112.2	65.5	159.4	122.0
0.0	0.0	0.0	12.1	0.0	0.0
695.3	424.2	6,439.2	6,496.7	36.8	20.9
18.6	0.0	50.3	77.2	49.1	0.0
0.0	0.0	0.0	0.0	4.2	0.0
0.0	3.3	26.1	40.6	6.4	0.0
0.0	0.0	0.0	4.4	0.0	0.0
0.0	0.0	0.0	0.0	417.1	0.0
0.0	2.3	0.0	0.0	0.0	0.0
0.0	0.0	0.0	3.9	3.0	1.4
4.6	5.4	4.0	7.3	8.2	6.6
0.0	11.4	167.3	56.2	24.1	21.5
0.0	0.0	0.0	19.8	0.0	11.7
17.4	6.9	81.4	294.1	25.6	120.6
0.0	26.3	0.0	0.0	0.0	45.1
0.0	3.3	0.0	0.0	0.0	86.6
18.4	22.8	11.1	0.0	28.5	37.2
4.0	25.2	15.4	27.1	43.9	83.7
3.4	3.5	3.0	3.4	0.0	11.8
263.9	1,422.8	1,239.2	1,584.7	1,776.7	1,000.4
3.0	1.6	174.3	2.8	0.0	0.0
0.0	37.5	0.0	19.8	1.4	27.3

0.0	16.6	0.0	16.1	0.0	7.8
20.3	0.0	0.0	49.6	46.7	58.1
0.0	0.0	0.0	0.0	0.0	0.0
0.3	9.1	0.0	22.1	17.3	31.9
0.5	0.3	0.0	2.9	2.8	3.3
0.0	0.0	1.0	1.7	0.6	1.7
973.5	1,435.4	2,550.2	5,836.1	5,163.6	4,566.1
0.0	0.2	0.0	0.9	0.9	0.0
0.0	0.0	0.0	0.0	0.0	0.4
0.0	14.1	2.4	0.0	0.0	14.8
0.0	0.3	2.0	15.9	25.7	10.3
121.3	254.4	1,176.0	342.5	2,065.7	2,079.1
0.0	0.0	0.9	2.6	1.3	0.0
0.9	1.2	0.0	2.9	2.3	2.2
0.0	0.0	0.0	0.0	0.0	0.0
18.1	24.0	6.6	19.2	34.3	34.8
0.0	0.0	0.0	442.3	922.2	78.7
9.4	8.0	0.0	0.0	0.0	8.3
5.7	4.5	0.0	6.9	9.7	7.5
0.0	0.0	0.0	0.4	0.7	0.0
3.7	0.0	0.0	0.0	7.3	6.8
0.4	24.7	13.8	7.3	31.5	23.9
0.0	0.0	0.0	0.0	26.7	0.0
6,646.3	508.0	3,184.3	1,882.1	4,227.5	1,589.9
0.0	0.0	0.0	0.0	17.3	129.4
0.0	0.0	0.0	0.0	0.0	35.2
0.0	0.0	0.0	4.4	0.0	0.0
0.0	0.0	0.0	48.8	0.0	236.8
0.0	0.0	0.0	0.0	101.4	120.9
599.8	540.3	587.0	676.9	514.5	777.8
0.0	3.1	0.0	0.0	9.4	33.7
30.3	27.1	363.6	38.4	327.7	391.2
382.4	281.1	864.1	921.1	92.0	794.5
0.0	0.0	3.3	0.0	0.0	6.7
310.3	1,441.3	8,390.9	9,057.2	2,512.2	5,334.0
33.4	1.5	0.0	0.0	4.3	85.8
221.7	0.0	30.3	349.0	0.0	601.2
0.0	0.0	4.4	4.3	0.0	4.9
0.0	0.0	0.0	0.0	0.0	28.9
81.8	0.0	0.0	0.0	13.9	90.0
0.0	0.0	0.1	0.0	11.1	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	2.3	0.0	8.8
0.0	0.0	0.0	0.0	8.6	0.0
9.4	36.9	0.0	0.0	90.9	53.2
2.7	0.0	0.0	0.0	0.0	5.4
0.0	0.0	0.0	0.0	337.9	0.0

85.3	32.8	233.6	199.1	29.4	22.5
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
400.6	35.5	3,848.0	3,445.2	141.7	80.5
0.0	0.0	0.0	0.0	0.0	0.0
89.8	76.1	0.0	0.0	0.0	0.0
97.7	0.0	0.0	0.0	0.0	0.0
0.0	0.0	82.7	62.1	1,374.8	1,828.1
0.0	697.3	30,231.9	1,784.7	23,593.0	27,293.6
0.0	0.0	0.0	0.0	0.0	0.6
0.0	0.0	0.0	0.0	12.4	1.5
0.0	0.0	0.0	0.0	0.0	69.1
3.5	167.8	808.1	2,573.5	2,199.0	1,855.2
0.0	59.4	0.0	0.0	0.0	63.4
0.0	0.0	0.0	1,405.8	1,476.4	4,636.8
0.0	31.1	0.0	0.0	0.0	0.0
0.0	0.0	0.0	3,313.5	43.3	0.0
27.4	0.0	6.4	0.0	11.4	0.0
27.6	160.7	350.3	542.6	63.9	121.3
0.0	0.0	17.2	4.9	0.0	0.0
0.0	0.0	25.1	0.0	22.9	5.8
13.7	0.0	16.9	0.0	39.0	10.9
0.0	0.0	3.7	0.0	0.0	0.0
0.0	0.0	108.4	0.0	894.1	1,411.3
0.0	0.0	1.0	0.0	13.4	0.0
0.0	0.0	9.7	0.0	29.1	0.0
1.0	7.2	29.3	24.9	45.1	57.1
0.0	0.0	0.0	0.4	0.0	2.5
17.9	79.3	0.0	168.9	215.2	59.5
0.0	318.7	103.1	936.5	2,169.9	487.2
0.0	2.0	9.3	52.7	8.3	13.5
0.0	0.0	0.0	6.3	61.2	0.0
34.6	0.0	67.2	42.4	0.0	5.1
0.0	3.9	0.0	9.7	16.3	0.0
3,970.8	2,399.1	7,222.8	5,350.1	8,742.4	3,603.0
278.3	0.0	394.3	0.0	1,242.6	0.0
0.1	0.0	0.0	0.2	0.0	0.0
2.9	0.0	0.0	1.3	27.0	0.0
8.6	11.5	11.2	0.0	19.0	0.0
5.2	0.0	0.0	0.0	2.1	0.0
0.3	0.7	0.0	0.0	2.0	0.9
23.5	27.1	80.0	0.0	688.2	0.0
401.1	572.1	425.7	315.3	647.9	0.0
11.2	2.3	15.0	0.0	42.5	0.0
36.2	0.0	4.1	46.6	138.2	0.0
31.2	8.8	0.0	15.4	0.0	0.0
19.7	14.3	43.2	0.0	52.2	0.0

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3.3	3.2	15.8	0.0	117.7	0.0
44.6	4.1	36.0	30.1	42.9	25.5
19.4	1.2	26.2	8.3	28.2	0.0
47.1	0.0	0.0	0.0	221.5	47.7
86.4	9.1	85.9	19.8	163.7	0.0
2.0	14.4	0.0	0.0	1.6	0.0
0.7	0.4	1.5	3.8	2.9	0.0
23.5	0.5	357.0	134.9	172.8	113.1
182.4	0.0	0.0	39.5	0.0	1,218.7
99.4	0.0	20.2	108.2	17.1	76.8
843.4	0.0	18.7	511.9	0.0	78.7
234.9	0.7	24.5	0.0	29.4	436.1
217.9	0.0	6.0	1,112.4	0.0	137.2
41.8	7.5	184.9	0.0	0.0	39.3
363.2	14.1	0.0	0.0	0.0	122.0
0.0	0.7	0.0	0.4	0.0	10.2
1,388.9	737.6	0.0	413.8	180.6	749.6
10.0	1.5	4.0	4.7	1.5	4.0
135.3	1.9	0.0	0.0	129.0	83.6
50.3	35.2	155.5	4.9	56.9	187.4
583.0	278.2	427.7	250.6	278.9	206.1
0.0	0.0	0.0	0.0	0.0	0.0
44,821.0	20,978.7	55,079.1	87,828.3	17,180.7	63,344.3
240.8	0.0	18,714.6	767.9	0.0	252.7
279.1	169.3	712.9	690.0	265.1	505.2
0.0	0.0	0.0	174.1	0.0	0.0
24.3	2.5	30.0	41.9	5.4	35.5
7.5	11.6	23.9	27.4	0.0	54.2
0.0	359.4	612.5	13.6	75.1	575.1
77.4	0.0	40.2	56.3	0.0	47.6
0.0	4.3	0.0	0.0	0.0	7.2
0.0	583.5	0.0	26.9	0.0	0.0
0.0	0.0	173.9	120.0	206.4	0.0
6.7	93.7	0.0	318.2	0.0	0.0
0.4	3.1	1.1	1.8	2.5	1.6
0.0	52.8	22.9	88.0	1.1	0.0
1,026.7	304.9	0.0	26.7	5,194.6	8,644.2
0.0	96.8	0.0	747.6	0.0	0.0
0.0	0.1	0.8	0.0	0.0	0.0
365.9	489.0	0.0	0.0	0.0	4.1
170.4	14.7	0.0	0.0	0.0	11.7
0.4	3.6	0.0	0.3	3.8	3.4
0.0	0.0	0.0	1.2	0.0	0.0
0.0	0.0	0.0	0.0	0.0	388.7
0.0				10.0	004.0
	0.0	0.0	42.9	12.3	284.0
0.0	0.0	0.0	42.9	12.3 0.0	0.0

0.0	0.0	0.0	1.5	0.0	4.6
277.2	69.0	0.0	694.6	280.2	128.0
3.5	1.1	1.9	0.0	22.8	45.2
538.1	357.4	1,570.4	1,512.3	254.3	121.0
0.0	8.8	3.6	1 02 .1	137.7	77.3
6.7	1,566.3	6,404.1	17,769.3	2,372.6	3,515.4
0.0	357.4	517.2	220.0	881.7	180.8
0.0	1,055.0	167.0	1,114.4	933.0	397.7
378.0	915.3	0.0	845.0	243.6	686.9
0.0	0.0	0.0	5,350.8	2,218.1	8,901.1
116.3	108.7	139.8	169.3	239.9	147.4
1,105.5	4,533.2	3,554.5	3,092.9	2,559.5	6,397.1
30.1	22.2	41.9	0.0	0.0	59.0
275.8	1,599.4	0.0	698.5	238.6	726.1
0.0	73.2	0.0	0.0	106.5	137.4
0.0	0.0	0.0	0.0	0.0	10.7
1,642.0	1,630.4	1,750.3	1,363.1	1,531.8	1,025.4
5.3	5.5	0.9	2.5	3.3	3.4
7.3	30.4	0.8	2.9	0.3	21.9
443.3	220.0	726.2	683.9	903.7	321.3
17.8	44.1	66.6	130.7	59.2	142.9
0.0	0.0	1.1	53.8	0.0	24.5
1,903.9	116.0	0.7	23.2	19.2	16.5
0.0	0.0	66.1	119.4	139.6	43.8
3.5	32.7	88.1	96.0	13.6	25.2
189.5	287.9	335.1	693.8	322.8	130.4
5.3	26.8	54.6	43.3	13.3	14,9
0.0	18.4	0.0	52.1	9.2	3.1
44.6	14.8	17.2	18.1	19.6	6.4
1.9	87.1	3.740.0	4.352.0	4,289,4	2.719.3
0.0	0.0	3.042.4	8.488.1	6.503.7	7.002.3
485.5	0.0	1,186,2	433.0	393.9	439.1
1.038.0	821.4	2.841.2	1.827.0	1.084.6	1.484.7
165.4	617.1	776.6	905.3	776.3	190.0
4.1	0.0	175.3	169.3	59.8	219.1
5.6	8.9	63.9	30.4	10.4	9.0
89.6	183.6	121.2	193.9	102.4	163.1
713 7	503.5	606.2	647 1	568.0	359.5
22.4	57.1	19.8	45.6	8 1	10.6
0.2	0.0	1.3	1.3	0.8	0.7
59.3	0.9	102.4	78.9	83.8	40.0
0.0	0.0	0.0	48.8	0.0	4 5
0.0	4.0	0.0	7.8	0.0	
54.8	430 7	164.7	268.8	0.0	372.9
0.0		0.0	1 1	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
11.5	103.0	17.4	013.4	0.100	1,001.0

28.4	156.3	0.0	0.0	581.0	626.2
0.0	50.8	10.5	19.8	160.3	42.1
6.3	22.1	0.6	77.2	28.8	26.3
1.4	10.7	2.8	0.0	16.9	29.5
0.0	0.0	0.0	5.3	0.0	3.5
12.5	14.7	31.4	238.0	47.2	110.5
2,963.6	755.8	164.2	1,862.5	174.1	241.9
0.0	108.2	0.0	1,309.9	445.1	604.6
6.0	19.0	0.0	26.4	15.5	13.7
346.2	227.3	0.0	162.0	0.0	175.3
0.0	28.7	0.0	113.9	4.4	54.7
22.2	41.4	5.6	27.4	0.0	5.5
146.9	40.8	77.4	167.8	59.5	59.9
32.2	101.2	3,117.4	4,213.6	639.8	562.6
223.3	194.4	69.8	172.3	116.1	120.4
0.2	0.0	0.0	4.1	1.5	0.0
0.0	10.1	0.0	39.3	0.0	0.0
0.0	155.4	63.0	335.8	110.3	343.3
0.0	16.3	0.0	29.2	0.0	30.4
0.4	30.5	10.6	10.9	20.4	0.4
0.0	18.4	0.0	2.5	0.0	5.3
0.0	5,701.3	0.0	2,173.8	0.0	4,449.7
0.0	59.0	0.0	146.2	18.3	83.1
8,006.5	2,470.3	211.0	2,698.7	632.5	982.1
24.7	37.1	18.8	6.9	0.0	3.5
0.0	164.9	0.0	87.8	0.0	76.2
0.0	0.6	26.8	172.5	40.0	55.9
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
358.2	646.9	778.7	2,780.1	613.3	913.3
0.0	0.0	0.0			
0.0		0.0	112.7	31.9	7.9
	481.1	0.0	112.7 155.0	31.9 0.0	7.9 0.0
0.0	481.1 78.1	0.0 0.0 97.9	112.7 155.0 422.8	31.9 0.0 137.2	7.9 0.0 111.1
0.0 378.0	481.1 78.1 676.5	0.0 0.0 97.9 0.0	112.7 155.0 422.8 1,629.9	31.9 0.0 137.2 2,209.3	7.9 0.0 111.1 866.9
0.0 378.0 26.9	481.1 78.1 676.5 252.6	0.0 0.0 97.9 0.0 320.2	112.7 155.0 422.8 1,629.9 303.7	31.9 0.0 137.2 2,209.3 296.9	7.9 0.0 111.1 866.9 490.4
0.0 378.0 26.9 0.0	481.1 78.1 676.5 252.6 19.8	0.0 0.0 97.9 0.0 320.2 0.0	112.7 155.0 422.8 1,629.9 303.7 0.0	31.9 0.0 137.2 2,209.3 296.9 0.0	7.9 0.0 111.1 866.9 490.4 24.8
0.0 378.0 26.9 0.0 0.0	481.1 78.1 676.5 252.6 19.8 2,315.2	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2
0.0 378.0 26.9 0.0 0.0 40.8	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3
0.0 378.0 26.9 0.0 0.0 40.8 0.0	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3
0.0 378.0 26.9 0.0 0.0 40.8 0.0 42.9	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 0.0	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4
0.0 378.0 26.9 0.0 0.0 40.8 0.0 42.9 113.8	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5 1,657.4	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4 1,737.4	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0 1,815.4	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 0.0 1,834.7	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4 2,556.8
0.0 378.0 26.9 0.0 0.0 40.8 0.0 42.9 113.8 357.7	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5 1,657.4 28,569.0	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4 1,737.4 5,079.8	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0 1,815.4 14,855.7	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 0.0 1,834.7 10,450.1	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4 2,556.8 53,037.9
0.0 378.0 26.9 0.0 0.0 40.8 0.0 42.9 113.8 357.7 0.0	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5 1,657.4 28,569.0 763.9	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4 1,737.4 5,079.8 69.2	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0 1,815.4 14,855.7 477.8	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 1,834.7 10,450.1 24.1	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4 2,556.8 53,037.9 763.6
0.0 378.0 26.9 0.0 0.0 40.8 0.0 42.9 113.8 357.7 0.0 27.0	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5 1,657.4 28,569.0 763.9 156.1	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4 1,737.4 5,079.8 69.2 71.0	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0 1,815.4 14,855.7 477.8 58.4	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 1,834.7 10,450.1 24.1 47.2	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4 2,556.8 53,037.9 763.6 57.7
0.0 378.0 26.9 0.0 40.8 0.0 40.8 0.0 42.9 113.8 357.7 0.0 27.0 10.6	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5 1,657.4 28,569.0 763.9 156.1 150.3	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4 1,737.4 5,079.8 69.2 71.0 324.0	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0 1,815.4 14,855.7 477.8 58.4 674.4	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 1,834.7 10,450.1 24.1 47.2 209.9	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4 2,556.8 53,037.9 763.6 57.7 218.7
0.0 378.0 26.9 0.0 0.0 40.8 0.0 42.9 113.8 357.7 0.0 27.0 10.6 0.0	481.1 78.1 676.5 252.6 19.8 2,315.2 294.9 0.0 268.5 1,657.4 28,569.0 763.9 156.1 150.3 590.4	0.0 0.0 97.9 0.0 320.2 0.0 3,969.6 63.3 2.2 122.4 1,737.4 5,079.8 69.2 71.0 324.0 1,345.0	112.7 155.0 422.8 1,629.9 303.7 0.0 1,945.3 122.2 0.0 89.0 1,815.4 14,855.7 477.8 58.4 674.4 2,249.6	31.9 0.0 137.2 2,209.3 296.9 0.0 3,087.6 53.6 0.0 0.0 1,834.7 10,450.1 24.1 24.1 47.2 209.9 8.7	7.9 0.0 111.1 866.9 490.4 24.8 5,626.2 175.3 0.3 4.4 2,556.8 53,037.9 763.6 57.7 218.7 662.3

0.0	572.9	28.0	487.5	18.1	914.0
215.6	153.7	3.0	0.0	0.0	2.9
0.0	3.5	16.0	0.1	8.9	13.0
0.0	524.1	439.3	161.4	416.0	821.6
0.0	1,747.0	3,413.2	1,436.6	918.1	2,564.9
217.2	4,400.4	4,268.2	4,531.2	5,979.0	7,850.6
302.8	2,804.1	2,817.6	2,773.3	3,874.1	5,439.1
0.0	7.3	133.9	63.1	170.4	604.6
113.3	51.0	156.0	193.7	116.6	216.2
110.6	217.8	45.4	38.0	59.8	117.8
0.0	394.3	4,759.2	2,727.4	248.8	697.5
3.4	117.1	29.1	53.2	10.3	104.7
227.2	0.0	0.0	156.5	0.0	781.0
87.9	123.4	35.5	32.1	43.0	121.1
152.9	2,245.5	422.2	260.7	213.3	291.8
0.0	3,499.1	990.6	26.2	0.0	487.7
79.6	0.0	0.1	0.2	222.9	266.8
2,456.8	0.0	0.0	0.0	0.0	0.0
0.0	3,174.5	4,624.4	5,192.4	811.9	1,467.6
7.4	0.0	0.0	12.3	0.0	0.0
47.4	61.4	34.7	43.5	19.9	71.6
45.0	1,436.6	1,477.0	1,166.0	1,513.6	1,705.9
665.4	2,984.8	2,439.1	2,079.7	2,707.9	5,243.3
1,593.3	146.5	1,749.4	903.3	564.9	213.3
56.2	8,914.9	0.0	3,829.9	0.0	9,463.9
0.0	0.0	15,868.4	11,432.4	2,968.6	887.6
161.4	0.0	1,101.4	2,919.1	0.0	721.5
14.1	0.0	13.6	0.0	19.4	40.2
33.2	7.1	0.0	0.0	116.4	16.0
0.0	0.0	0.0	0.0	51.0	156.3
0.0	1.4	0.0	0.0	0.0	0.2
372.1	465.5	253.6	316.0	306.6	411.5
0.0	67.0	3,842.8	3,722.3	0.0	0.0
0.0	0.0	1,094.5	714.7	575.6	2,117.9
0.0	41.4	0.0	0.0	26.7	74.5
0.0	0.0	0.0	0.0	18.3	93.4
493.1	0.0	198.2	0.0	0.0	122.1
0.0	5.7	41.0	107.0	8.5	11.9
26.3	6.3	0.0	0.0	0.0	38.5
22.1	0.0	40.9	52.8	3.4	12.2
3.5	0.0	3.1	3.3	7.5	11.1
1.2	15.2	9.4	8.1	0.5	3.9
0.4	0.5	0.1	0.0	0.2	0.0
0.0	0.0	0.5	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	101.3
0.0	1.1	15.8	28.4	0.0	19.9
0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	3,974.0	4,484.8	53.2	13.2
0.0	0.0	14.8	0.0	30.6	167.8
63.3	38.6	5.9	0.0	6,693.4	80.0
22.8	0.0	0.0	0.0	0.0	2.9
1.6	0.0	0.0	0.0	0.0	3.5
86.5	574.0	287.2	443.2	1,077.9	1,527.4
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	48.1	0.0	54.8
0.0	4.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	466.3	0.0	95.7
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.5
0.0	0.0	2,081.7	5,453.7	436.3	1,475.4
0.0	0.0	0.0	0.0	0.0	0.0
17.8	0.0	64.6	122.3	6.7	33.9
0.0	0.0	0.0	0.0	0.0	0.0
5.6	0.0	0.0	4.0	1.4	13.5
1,752.3	1,509.3	952.8	306.0	618.9	154.9
24.8	41.2	36.8	62.9	45.0	163.9
0.0	0.0	0.0	0.0	0.0	14.1
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	13.1
0.0	0.0	0.0	86.9	0.0	81.0
0.0	6.9	1,025.3	5,990.1	2,440.8	6,438.3
410.0	0.0	1,553.1	3,190.4	162.7	18.9
0.0	0.0	0.0	0.0	0.0	12.4
0.0	0.0	0.0	0.0	0.0	9.0
0.0	0.0	0.0	0.6	7.6	76.1
0.0	0.0	0.0	0.0	0.0	1.3
42.3	0.0	0.0	81.4	0.0	30.7
0.0	0.0	0.0	0.0	0.0	10.1
0.0	0.0	0.0	0.0	0.0	50.1
27.3	0.0	0.0	0.0	0.0	18.4
0.0	0.0	0.0	0.0	0.0	0.0
72.0	247.6	1,038.3	705.1	25.7	92.2
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	44.2	41.3	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0
0.0	1,000.5	2,520.0	3,205.0	936.2	1,724.5
0.0	0.0	0.0	0.0	0.0	52.7
0.0	0.0	0.0	0.2	0.0	8.0
50.4	108.1	87.2	143.6	162.9	364.0
0.0	39.7	0.0	35.5	16.8	0.1
0.0	0.0	0.0	0.0	0.0	37.2
0.0	0.0	0.0	0.0	0.0	4.5

0.0	1.7	0.6	56.8	105.6	249.3
0.0	0.8	0.0	1.3	0.7	6.1
0.0	0.0	0.0	0.0	0.0	12.3
0.0	0.0	0.0	0.0	0.0	0.7
0.0	0.0	0.0	0.0	0.0	86.0
0.0	41.4	39.9	37.8	29.2	24.1
0.0	0.0	0.0	0.0	0.0	0.0
118.0	0.0	0.0	0.0	0.0	73.7
0.0	0.0	0.0	0.0	25.6	51.5
95.6	0.0	119.4	187.8	0.0	73.0
0.0	32.3	0.0	12.4	0.0	50.5
0.8	0.0	0.0	0.0	1.2	53.0
0.0	0.0	0.0	0.0	0.0	4.2
0.0	2.9	2.4	22.9	30.8	0.0
446.9	153.1	0.0	0.0	88.5	0.0
30.0	0.8	41.4	0.0	0.0	0.0
2,213.2	0.0	0.0	292.1	347.6	0.0
0.0	0.0	1.0	6.7	3.7	8.7
10,891.8	1,311.2	421.2	0.0	0.0	0.0
1.0	0.0	0.1	0.0	0.3	0.4
94.3	25.8	61.3	233.8	0.0	705.0
31.1	7.0	1.5	2.7	11.8	22.0
3,554.0	2,935.9	946.4	0.0	1,800.4	5,809.4
280.8	209.1	10.5	3.0	1,405.6	1,793.5
15.8	43.7	0.0	0.0	0.0	48.8
1,504.4	130.5	57.3	0.0	109.1	0.0
0.0	0.0	0.0	0.0	0.0	4.4
0.0	0.9	11.5	0.0	15.7	37.7
0.0	0.1	2.7	0.0	0.0	0.0
159.2	244.9	18.6	0.0	98.3	436.3
3,552.2	896.0	10.0	779.5	120.0	273.5
0.0	0.0	0.0	0.0	0.0	0.0
346.2	50.9	0.0	0.0	0.0	0.0
285.2	61.4	36.2	35.0	149.4	196.3
329.7	0.0	26.3	0.0	33.5	148.1
1,630.8	76.2	503.4	11.8	2.2	5.6
313.4	613.2	0.0	0.0	225.4	0.0
980.8	96.5	396.9	92.7	521.3	473.9
0.0	0.2	0.9	8.7	2.2	0.8
28.7	0.0	0.0	0.0	0.0	0.0
28.0	0.0	21.5	0.0	255.5	0.0
0.0	39.7	48.4	0.0	15.7	54.1
65.0	9.0	0.0	0.0	0.5	11.7
30.6	5.9	415.9	124.0	32.6	272.7
471.1	0.0	0.0	0.0	328.2	1,033.9
0.0	0.0	0.0	0.0	0.0	198.8
470.0	226.0	200.0	279 4	266.2	503 7

0.4	0.0	0.0	0.0	29.5	20.1
105.1	14.5	20.7	0.0	33.7	80.5
42.5	12.2	19.8	0.0	53.0	0.3
15.3	22.8	0.0	0.0	0.0	0.0
0.6	13.4	70.0	8.0	108.3	118.0
0.0	9.2	18.1	0.0	12.5	8.7
0.0	0.0	0.0	57.6	0.0	0.0
0.0	2.0	0.0	38.1	0.0	28.5
0.0	5.2	5.6	0.0	0.0	16.9
45.5	892.6	92.9	60.8	49.9	366.7
0.0	0.0	0.0	0.0	0.0	613.4
0.0	11.0	0.0	0.0	0.0	1,757.3
0.0	0.0	0.0	0.0	0.0	62.6
0.0	0.0	0.0	0.0	0.0	13.2
0.0	0.0	0.0	0.0	0.0	150.7
0.0	0.0	0.0	0.0	0.0	1,177.5
0.0	0.0	0.0	0.0	0.0	6.0
0.0	7.7	0.0	0.0	0.0	16.4
1,226.1	1,879.6	0.0	5.5	0.0	15.6
0.0	5.4	0.0	0.0	0.0	15.0
14.0	44.0	0.0	27.9	46.3	73.7
0.0	37.8	0.0	26.5	30.2	156.3
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	76.1
9.2	197.2	22.1	47.3	28.5	288.7
0.0	0.0	0.0	0.0	0.0	0.0
2.3	0.0	0.0	0.0	0.0	0.3
3.5	0.0	0.0	22.8	5.1	8.7
191.4	0.0	0.0	107.3	0.0	185.6
0.0	4.7	0.0	1.0	0.0	24.3
657.8	1,355.3	1,047.5	333.0	1,277.5	2,353.0
0.0	0.0	0.0	0.3	0.0	0.7
94.1	0.0	0.0	5.3	0.0	54.9
0.0	50.1	0.0	0.0	171.6	64.5
0.2	0.9	0.0	0.0	0.0	0.7
101.4	0.0	0.0	0.0	0.0	0.0
0.1	3.1	0.3	0.2	0.0	5.6
109.5	15.7	59.1	50.5	0.0	5.6
0.0	0.0	0.0	0.6	95.5	72.5
0.0	3.5	0.0	2,189.6	186.6	179.2
0.0	0.0	0.0	4.9	0.0	22.2
0.0	0.0	0.0	0.0	0.0	0.0
86.3	0.0	49.0	0.0	0.0	33.0
0.0	0.0	0.0	0.0	0.0	0.0
95.6	0.0	69.3	0.0	0.0	429.6
0.0	0.0	0.0	1.8	0.0	156.0
0.0	97.6	0.0	0.0	271.0	390.9

0.0	9.9	0.0	0.1	2.0	10.9
0.0	0.0	0.0	32.3	39.2	49.6
12.4	118.5	90.6	0.0	305.6	0.0
0.0	2.0	0.0	10.4	65.6	48.0
1.2	0.1	2.2	1.6	13.8	24.2
157.2	134.9	155.2	296.6	2.1	9.8
4.5	5.3	0.0	1.2	9.5	5.0
0.0	0.0	0.0	20.4	10.9	24.9
159.0	158.6	0.0	32.9	95.2	311.1
0.4	0.0	29.2	24.2	22.6	45.8
10.2	0.0	11.2	128.6	117.4	51.1
224.5	0.0	7.1	49.9	53.8	58.8
0.0	12.1	0.0	22.0	19.8	44.5
28.9	0.0	0.0	524.1	381.1	719.0
22.4	2.3	21.1	41.9	41.7	60.4
1.2	0.0	0.0	12.4	11.4	146.6
11.4	0.0	2.4	7.1	3.4	38.4
1.4	0.0	0.0	4.7	3.5	5.3
1.9	0.0	3.3	8.3	7.9	18.9
8.3	0.7	26.7	64.9	55.0	81.6
39.4	35.8	85.1	53.1	46.4	16.0
193.8	131.7	44.8	117.5	84.6	470.8
79.5	0.0	0.0	223.4	174.5	303.9
11.3	0.0	13.3	24.7	35.8	62.5
55.3	42.2	0.0	61.9	125.0	135.1
0.0	0.0	0.0	0.0	144.3	30.8
0.0	0.0	0.6	76.3	0.0	382.0
0.0	113.5	82.5	87.9	203.3	371.7
0.0	0.0	0.0	0.0	0.0	22.1
0.0	90.6	820.7	213.0	217.1	112.1
0.0	2.0	1.7	0.0	7.0	8.2
0.0	0.0	2.1	6.3	18.4	26.5
/6.6	15.4	85.3	123.8	288.9	456.8
4.7	35.6	30.4	53.2	33.2	45.3
77.1	70.5	49.2	128.0	129.6	129.9
5,232.2	2,167.7	4,547.1	2,593.6	1,502.3	1,282.8
0.0	12.0	3.5	15.9	32.3	45.7
0.0	0.0	0.0	0.0	0.0	1.0
0.0	0.0	029.5	819.9	0/1.0	934.4
0.0	0.0		0.0	0.0	0.0
004.1	<u>233.2</u>	1,400.1	0.0	1,013.2	C.011
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	J.9	0.0	0.0	0.0
0.0	21.4	0.0	0.0	0.0	0.0
0.0	41.4 183.0	0.0	0.0	0.0	0.0
0.0	100.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	34.8	0.0	0.0	0.0	0.0
0.0	300.8	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	33.6	0.0	0.0	0.0	0.0
0.0	239.1	0.0	402.7	32.6	7.8
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	2.3	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	30.6	0.0	0.0	0.0	0.0
3.2	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	40.4	0.0	5.9	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	489.4	0.0	0.0	0.0	0.0
83.2	925.0	0.0	0.0	157.2	0.0
0.0	0.0	1,027.2	221.5	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	19.3	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
157.0	59.1	0.0	0.0	0.0	22.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
331.5	0.0	0.0	0.0	0.0	0.0
163.7	0.0	1,059.1	1,384.7	7,190.3	906.7
9.9	0.0	0.0	0.0	9.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
4.1	0.0	0.0	0.0	3.2	0.0
5,536.8	4,218.3	6,239.9	9,264.2	4,930.3	7,167.2
268.8	0.0	546.9	252.9	388.7	194.9
877.1	310.6	1,217.6	1,416.6	1,342.1	873.1
4,208.0	0.0	1,645.0	0.0	1,807.8	1,759.8
81,917.0	68,212.9	210,196.7	107,071.1	144,426.3	20,198.5
678.4	510.1	1,056.9	584.5	1,048.3	308.3
606.3	0.0	757.3	457.6	426.3	125.0
693.6	362.4	780.3	772.6	491.8	355.1
308.8	612.8	235.1	7,410.9	775.6	653.0
80.7	62.2	856.9	1,441.2	835.5	653.5
1,395.3	39.3	831.4	952.6	948.8	1,247.3
307.4	34.0	59.2	96.8	60.4	0.0
0.0	0.0	46.2	116.0	199.1	103.3
4,079.0	3,464.5	1,721.5	1,044.6	5,438.6	6,400.6
868.4	0.0	1,379.1	1,558.1	1,467.8	0.0

161.9	0.0	376.4	289.9	671.5	15.5
660.7	0.4	1,209.0	1,576.9	1,290.7	136.7
1,673.2	0.0	2,886.5	1,394.3	927.0	367.5
0.1	0.0	1.2	3.5	0.4	0.0
1.3	0.0	18.7	7.2	14.9	8.1
0.4	7.7	15.3	16.0	18.0	150.2
1,365.5	0.0	415.4	694.1	354.5	753.1
35.9	0.0	39.8	57.4	49.4	85.3
47.1	27.0	4.9	4.1	12.0	3.6
783.8	129.3	98.1	73.8	87.0	101.1
81.1	204.0	98.5	103.1	28.3	19.5
435.3	525.3	432.6	719.1	219.9	941.3
4,361.3	2,570.1	1,312.3	1,169.9	2,226.4	1,953.0
3,432.0	0.0	5,564.7	1,200.2	4,743.0	3,511.7
1,471.9	0.0	1,186.9	662.7	1,347.0	1,086.8
2,192.5	1,469.4	1,662.2	978.4	1,777.7	723.8
230.5	46.1	2,199.6	2,578.3	2,301.4	3,609.6
4,409.7	0.0	442.7	0.0	1,114.6	1,685.5
167.3	75.4	156.4	133.9	119.3	103.1
0.0	0.0	0.0	0.0	0.0	559.0
53,905.4	6,814.7	5,103.6	5,073.4	14,880.7	4,948.5
0.0	0.0	450.8	712.7	0.0	982.6
376.5	36.4	24.5	23.9	57.1	44.8
10.9	0.0	34.7	14.7	43.2	42.2
667.9	779.0	1,135.6	1,279.5	673.6	1,676.4
0.0	3,554.5	453.4	4,969.9	121.3	9,166.5
49.7	184.2	0.0	101.2	0.0	216.0
0.0	461.5	770.8	536.7	80.8	820.0
0.0	1.9	0.0	31.6	0.6	61.8
0.0	83.1	20.3	22.7	58.5	77.0
30.9	241.4	0.0	21.4	175.7	0.0
0.0	1.0	0.0	0.0	0.0	0.0
94.0	288.3	0.0	244.5	139.6	379.8
15.7	21.9	0.0	3.1	55.6	144.5
0.0	145.5	0.0	109.3	247.8	459.3
553.2	1,199.8	398.5	448.2	583.3	668.8
719.0	0.8	0.0	547.4	192.2	493.4
51.6	0.0	0.0	21.9	0.0	0.0
0.0	0.0	0.0	5.1	157.9	127.7
13.3	40.0	113.4	423.3	129.2	364.2
0.0	16.2	0.0	15.7	9.0	0.0
6.0	31.1	56.6	28.2	18.4	66.3
0.0	86.7	0.0	67.9	36.0	251.5
53.8	69.0	47.6	26.4	152.7	85.3
25.7	550.7	0.0	198.0	763.4	95.6
57.7	107.9	0.0	19.7	88.4	0.0
0.0	2.1	0.0	32.7	9.1	8.6

0.0	72.8	0.0	0.0	3.2	69.9
0.0	144.3	18.5	98.5	23.0	104.9
359.9	783.7	0.0	184.8	39.1	246.1
0.0	998.1	0.0	107.6	106.2	766.1
0.0	798.3	19.8	401.4	0.0	1,212.6
1.8	4.0	3.4	5.4	0.0	0.7
0.5	2.6	2.8	3.7	2.5	2.2
0.0	139.3	0.0	0.0	0.0	97.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	312.9	0.0	180.5	0.0	243.4
0.0	16.4	0.0	105.3	0.0	199.3
0.0	2.0	0.0	0.0	246.6	231.8
0.0	50.3	8.6	37.4	3.1	72.5
71.6	95.6	111.3	104.6	165.5	195.4
1,097.9	635.7	0.0	229.8	793.0	0.0
0.0	49.8	2.9	15.7	29.6	49.1
31.9	19.8	15.5	35.8	109.9	13.5
7.9	19.9	0.0	1.3	15.1	29.2
1.2	1,167.6	0.0	0.0	0.0	18.1
4,824.7	13,503.4	0.0	6.4	635.3	0.0
744.3	728.2	139.2	1,337.8	0.0	18,790.7
252.4	1,173.7	0.0	185.8	1,791.7	322.7
3,648.5	2,881.0	68.1	140.7	894.4	316.7
2.8	5.8	0.0	0.0	3.1	3.4
0.0	1.4	0.0	0.0	4.1	1.6
1,614.7	1,597.9	0.0	0.0	1,107.3	1,075.3
1,003.6	1,822.6	6.5	12.3	256.0	52.3
0.0	0.0	209.9	0.0	338.8	419.4
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1,090.2	1,038.8
0.0	0.0	0.0	0.0	267.6	320.5
0.0	211.2	0.0	222.6	265.5	245.2
0.0	0.0	0.0	5.621.5	1.895.4	0.0
0.0	0.0	0.0	0.0	0.0	0.0
139.3	73.1	95.1	153.5	145.6	72.8
12.0	129.3	0.0	0.0	105.9	138.8
125.7	0.0	0.0	0.8	130.7	0.0
0.0	3.3	0.0	22.7	28.4	13.3
16.6	476.1	1,976,9	2.535.6	8.635.3	2.475.1
253.8	314.7	0.0	29.3	399.5	0.0
878.3	790.5	0.0	0.0	1,478.2	771.0
0.0	279.5	0.0	172 1	143.0	114.8
69.5	570.4	249.6	373.0	1 369 9	978 5
0.0	19	0.0	51 4	109.6	91 3
56 /	0.0	0.0	0.0	15.1	0.0
177.9	0.0	0.0	0.0	107 7	177.6
6.9	0.0	0.0	7.7	197.7	6 9
0.0	1.9	0.0	1.1	14.7	0.0

55.3	34.1	428.1	124.3	71.0	14.3
37.4	22.9	9.7	17.4	11.6	8.9
0.0	0.0	0.0	15.9	115.8	2.2
0.3	0.0	0.0	5.2	35.9	0.0
211.4	0.0	0.0	0.0	0.0	0.0
49.0	8.6	0.0	0.0	25.5	0.0
512.9	161.8	0.0	0.0	609.0	651.0
52.6	93.4	29.2	0.0	266.6	189.8
12.0	51.7	0.0	0.0	60.4	16.4
1,977.7	0.0	0.0	84.8	71.1	14.3
26.6	348.3	6.2	0.0	266.7	34.4
0.0	701.7	0.0	257.8	0.0	0.0
0.0	52.9	0.0	194.0	0.0	0.0
91.2	196.9	446.3	1,221.8	255.8	743.3
0.0	416.2	541.3	1,295.9	0.0	24.2
0.0	115.8	32.3	54.6	0.0	62.9
0.0	6.9	0.0	17.1	0.0	8.9
416.5	372.3	1,493.2	1,306.7	1,045.2	746.8
0.0	796.6	233.1	1,200.3	245.0	894.0
0.0	30.6	0.0	39.3	54.1	10.6
0.0	12.5	0.0	31.8	0.0	0.0
0.0	36.2	0.0	87.4	0.0	0.0
4,847.9	8,952.4	1,493.7	1,943.5	10,106.5	1,080.4
218.6	443.5	740.6	348.5	240.4	302.6
0.0	341.5	0.0	282.0	1,087.1	446.2
144.9	87.7	247.5	89.9	301.5	1,001.7
170.7	359.6	27.0	907.7	372.3	273.0
252.0	932.4	1,224.3	1,563.8	1,977.9	936.6
0.0	109.8	39.1	131.1	46.9	71.3
32.3	42.5	32.5	69.8	40.9	40.1
37.7	77.8	32.7	107.9	67.5	124.2
0.0	1.9	0.0	46.4	205.0	188.3
0.0	13.5	0.0	15.0	26.6	30.7
139.9	150.6	115.6	110.9	88.1	69.7
63.8	164.5	500.1	1,561.6	301.5	625.2
25.6	96.7	50.2	458.8	154.8	226.9
31.9	189.6	15.0	186.7	78.0	105.6
0.0	1,080.4	0.0	2,120.2	0.0	928.9
0.0	11.1	0.0	18.4	27.1	4.6
659.3	681.2	473.4	470.3	1,111.8	437.3
12.1	6.3	0.0	207.0	278.5	429.5
11.3	2.6	0.0	19.0	3.1	1.7
0.0	149.8	0.0	105.5	36.4	176.0
63.1	55.6	0.0	4.0	6.6	2.6
0.0	0.0	0.0	266.3	106.7	8.3
0.0	88.0	8.4	137.4	59.6	63.6
536.6	2,554.4	1,616.2	3,436.8	1,678.6	625.3

71.0	138.8	76.7	464.0	90.2	269.5
121.6	430.1	942.2	2,193.9	831.3	739.0
75.8	218.2	42.3	281.8	89.8	149.7
341.0	0.0	3,020.9	8,497.7	3,517.2	6,815.6
0.0	0.0	3,252.4	541.2	33.8	99.4
368.0	398.5	1,101.4	733.7	557.7	691.0
0.0	0.0	69.4	173.6	0.0	156.2
0.0	0.0	0.0	13.9	0.0	0.0
265.7	0.0	132.6	241.0	0.0	100.8
0.0	15.6	0.0	25.4	0.0	0.0
0.0	0.0	0.0	2.3	0.0	0.0
1.6	38.5	0.0	8.9	0.0	7.6
0.0	62.8	0.0	174.6	0.0	314.9
0.0	0.0	0.0	0.0	0.0	16.2
0.0	0.0	0.0	300.7	28.9	76.9
329.4	386.2	244.8	333.7	213.1	313.2
0.0	0.0	0.0	0.0	0.0	197.7
0.0	18.2	0.0	20.4	1.0	0.7
12.7	0.0	0.0	51.1	17.3	0.0
0.0	81.2	0.0	72.3	4,521.9	2,296.1
111.9	161.2	132.0	232.5	119.8	112.3
0.0	1.9	0.0	0.0	0.0	0.0
0.0	18.2	0.0	21.7	43.2	0.0
35.1	0.0	0.0	14.8	88.7	0.0
0.0	0.0	0.0	5.8	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
5.2	29.8	370.2	393.0	75.3	63.3
596.0	514.1	1,402.1	2,557.2	678.1	1,308.9
5.8	5.5	12.3	29.2	0.0	11.2
0.0	3.5	0.0	0.0	1.7	2.5
0.0	45.5	0.0	5.0	11.4	43.7
1,048.5	2,516.9	1,412.1	1,027.7	637.0	454.9
38.5	351.6	0.0	119.4	192.8	129.8
29.0	0.0	0.0	51.3	72.8	102.7
40.4	73.7	77.5	438.5	82.6	224.6
0.0	3.0	0.0	3.7	4.8	3.9
85.1	130.7	12.7	46.8	736.7	208.6
1.9	3.3	0.0	0.0	1.1	6.2
0.0	0.0	0.0	0.0	0.0	0.0
52.0	20.6	0.0	24.7	68.3	83.1
0.0	0.3	0.0	0.0	0.4	0.6
15.0	0.0	0.0	38.5	47.6	71.4
0.0	0.0	0.0	0.0	0.0	4,859.1
1.4	0.0	1.3	1.8	1.6	7.6
341.7	1,571.8	879.0	890.1	293.1	850.3
0.0	0.0	3.3	0.0	3.0	2.2
559.8	297.8	0.0	585.0	548.2	60.1

0.0	903.6	1,015.5	849.8	1,357.0	379.3
0.0	1,871.6	2,212.2	689.5	3,151.4	3,860.0
0.0	37.4	517.0	124.7	109.9	118.1
0.4	7.3	12.4	11.5	0.4	7.9
0.0	527.3	733.4	740.7	459.4	708.2
181.2	918.6	216.4	489.8	479.9	462.7
26.3	384.1	1,866.3	747.8	1,901.4	85.7
14.1	25.0	15.7	14.2	12.6	12.9
0.0	551.2	52.5	684.5	27.9	22.0
12.9	29.0	39.5	30.2	0.0	10.8
142.2	130.5	4.8	111.4	57.2	48.2
215.1	5.3	111.0	0.0	62.4	61.9
0.0	236.7	179.5	118.9	113.9	255.5
9.4	3.7	30.6	9.7	11.6	6.3
0.6	0.2	0.9	0.4	0.4	0.0
752.2	0.0	3,152.3	0.0	480.8	54.5
336.3	730.3	351.8	256.7	279.5	0.0
309.5	61.2	0.0	0.0	127.3	0.0
70.9	0.0	286.6	234.0	96.6	689.8
87.8	0.0	0.0	0.0	14.0	0.0
8,971.1	3,188.4	8,565.0	8,381.1	1,700.2	3,125.5
22,108.6	15,032.6	2,374.7	2,172.3	4,962.6	551.1
2.0	0.0	1.7	2.1	0.8	0.9
0.0	40.9	0.0	38.1	0.0	0.0
45.5	63.8	34.4	32.4	15.9	19.5
80.3	0.0	6.6	0.0	181.5	0.0
0.0	5.0	0.0	29.9	0.0	2.9
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	154.2	104.0	0.0	700.9
2,330.1	692.8	0.0	1,834.6	0.0	0.0
27.1	0.0	15.9	0.0	0.9	7.3
0.0	0.0	0.0	0.0	0.0	0.0
283.2	120.6	421.4	102.9	127.2	153.0
3.4	0.0	0.0	0.0	0.7	0.0
40.0	5.7	72.7	12.3	5.7	12.6
0.0	4,112.6	0.0	0.0	0.0	1,232.0
0.0	0.0	127.5	365.1	239.4	266.0
0.0	0.0	0.0	8.3	3.7	13.4
1.4	0.2	2.8	3.4	0.7	2.1
7.4	5.7	1.9	3.7	6.2	4.8
0.0	0.0	0.0	15.3	11.4	30.0
0.0	0.0	0.0	57.4	0.0	163.6
0.0	0.0	0.0	59.9	4.0	41.6
0.0	0.0	0.0	0.0	0.0	0.3
195.4	214.3	42.5	47.1	207.9	92.3
16.8	3.4	17.7	19.0	4.3	5.1
13.5	10.2	0.0	8.3	2.8	8.8

0.0	0.0	3.4	38.8	0.0	54.1
0.0	0.2	0.0	0.8	0.3	1.3
38.7	40.3	1,541.6	2,496.1	34.8	7.0
0.6	0.0	110.9	100.9	9.2	1.9
0.0	0.0	4.2	9.1	20.4	2.3
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	5.8	6.1
0.0	0.0	6.3	0.0	9.8	13.9
1,245.1	1,791.2	2,686.5	2,873.4	3,811.0	3,742.2
0.0	0.0	197,179.3	81,678.7	4,097.4	4,354.9
98.1	0.0	0.0	49.6	183.8	390.8
0.0	175.0	32,313.3	7,014.6	1,105.9	2,687.6
0.0	0.0	0.0	0.0	0.0	0.0
3,044.8	6,741.7	3,310.8	3,537.7	2,730.8	3,849.3
0.4	4.4	0.0	6.5	12.6	18.1
0.0	3.1	42.1	29.7	4.7	1.6
0.0	0.0	1.7	7.1	3.0	1.9
1.4	3.1	0.0	2.4	8.0	7.9
1.2	26.9	58.8	27.3	152.6	396.7
8.8	6.4	747.7	775.1	76.9	22.2
11.4	5.9	0.0	0.5	1.6	1.8
69.9	68.5	23.3	3.6	20.3	20.1
1.1	0.7	0.0	0.0	0.0	0.0
0.3	1.1	434.5	13.1	2.5	1.1
0.0	0.0	229.7	287.6	0.0	48.8
17.2	16.6	10.1	18.3	15.4	9.2
198.2	68.1	301.9	317.8	20.7	53.9
0.6	0.0	9.6	3.1	22.2	5.6
0.0	12.6	14.7	31.8	32.6	19.5
164.6	249.8	24.4	23.5	231.9	78.5
0.0	0.0	0.0	1.3	0.0	0.9
0.0	0.7	0.0	2.6	0.3	0.0
0.0	0.0	6.8	1.8	0.0	2.4
0.0	1.0	0.0	3.0	0.2	3.7
0.0	8.7	0.0	33.0	0.0	21.6
0.0	5.7	0.0	9.4	0.2	3.3
30.6	16.6	1,811.5	1,802.1	23.1	56.3
0.0	25.7	6.5	64.1	0.0	68.6
2.7	3.8	9.8	7.3	0.0	10.8
0.4	0.5	0.4	1.4	0.0	0.9
1.3	2.2	2.0	1.9	0.6	2.5
0.0	11.2	21.2	68.7	0.0	80.3
0.0	4.4	0.0	3.3	0.0	8.7
0.0	0.0	1.8	3.5	0.0	3.8
0.0	0.0	15.9	39.1	3.1	62.5
27.5	11.6	215.5	158.7	38.3	346.5
0.0	0.0	0.6	14.7	0.8	29.4

0.0	41.4	20.6	95.8	0.0	67.0
0.5	1.7	2.5	5.9	1.7	4.1
0.0	109.2	1,729.0	313.3	0.0	165.3
0.1	0.2	0.5	1.4	0.0	0.1
0.1	0.6	0.0	1.4	0.0	0.8
0.0	39.2	4.6	62.9	3.3	52.3
55.1	188.5	35.0	343.7	0.0	421.7
0.0	3.0	0.8	5.8	0.0	4.3
0.0	0.7	0.2	1.2	0.1	0.1
233.7	492.1	348.0	423.3	236.2	448.0
0.6	1.6	147.4	247.9	6.2	7.2
0.0	6.8	4.0	30.4	0.0	21.6
6.1	0.0	12.9	0.0	1.2	24.1
0.0	0.6	0.0	1.2	0.5	1.6
0.0	1.4	3.1	2.1	0.9	2.4
0.0	0.0	134.3	543.9	0.0	0.0
0.0	1.4	1.4	3.4	5.0	6.8
5.7	15.2	5,932.1	7,313.9	5,316.3	6,954.3
6,720.6	8,241.2	8,670.8	9,381.1	8,632.4	9,799.2
0.0	1.2	4.5	14.6	3.9	25.7
29.7	196.3	157.3	398.9	0.0	258.8
0.0	3.6	1,490.1	1,547.6	19.8	55.3
0.6	64.1	942.4	1,022.1	28.8	4.5
0.0	0.0	0.0	0.0	0.0	5.3
7.2	13.3	19.6	1.7	29.7	9.7
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0
0.0	0.0	0.0	10.6	0.0	0.0
437.2	288.1	1,992.6	2,065.8	386.6	1,274.6
0.0	0.0	0.0	13.6	12.7	63.6
0.0	0.0	0.0	0.0	0.0	55.1
0.0	0.0	0.0	0.0	0.0	34.7
0.0	0.0	0.0	0.0	0.0	21.4
0.0	0.0	0.0	0.0	0.0	0.5
0.8	0.0	3.1	3.1	0.9	1.3
0.0	0.0	0.0	0.0	0.0	24.4
0.0	0.0	15.4	3.1	0.0	2.1
0.0	0.0	0.0	0.0	0.0	0.0
3,300.6	401.9	0.0	0.0	0.0	58.8
0.0	0.0	0.0	0.0	0.0	1.7
0.0	168.9	0.0	0.0	0.0	60.1
0.0	0.0	0.0	0.0	0.0	3.5
0.0	0.0	0.0	0.0	0.9	5.2
0.0	0.0	0.0	0.0	0.0	0.0

9.0	1.8	23.3	22.5	9.5	13.8
0.0	0.0	0.0	1.0	0.0	0.5
0.0	0.0	0.0	0.0	0.0	104.9
0.0	0.0	0.0	0.0	0.0	0.4
0.0	0.0	0.0	0.0	33.9	4.3
0.0	0.0	0.0	0.0	0.0	13.6
0.0	0.0	0.0	0.0	4.5	6.3
0.0	0.0	0.0	0.0	0.0	0.0
0.0	18.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	2.6
0.0	0.0	0.0	0.0	0.0	1.0
0.4	0.0	0.0	0.0	0.0	0.8
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.9	89.6	35.2	0.0	3.1
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	19.0