

Online Supplementary Material:

Experimental Procedures

Cells: Fresh adult whole bone marrow (BM) was purchased from All Cells, Inc. (Emeryville, CA). Unmatched human peripheral blood was purchased from the Stanford Blood Bank according to an IRB-approved protocol. All blood and bone marrow samples were collected in heparin sulfate anticoagulant, stored at room temperature for 4-6 hours, and then separated over Ficoll-Paque Plus (Amersham Biosciences) using Accuspin tubes (Sigma-Aldrich, St. Louis, MO) to remove erythrocytes, platelets, and granulocytes. Cells were used fresh prior to 34-parameter mass cytometry experiments, or frozen in FCS with 10% DMSO. Cells were rested at 37°C, 5% CO₂ for 1 hour in RPMI with 10% FCS (supplemented with 2mM EDTA in the case of frozen samples), 1X L-glutamine and 1X penicillin/streptomycin (Invitrogen).

Antibodies: A summary of all mass cytometry antibodies, reporter isotopes and concentrations used for analysis can be found in Methods Table 2. With the exception of CD3-QDot 655 (Invitrogen, Carlsbad, CA), primary conjugates of mass cytometry antibodies were prepared 100 µg at a time using the MaxPAR antibody conjugation kit (DVS Sciences, Toronto, Canada) according to the manufacturer's recommended protocol. Following labeling, antibodies were diluted in Candor PBS Antibody Stabilization solution (Candor Bioscience GmbH, Wangen, Germany) to between 0.1 and 0.3 mg/mL and stored long-term at 4°C. Each antibody clone and lot was titrated to optimal staining concentrations using cell lines and primary human samples.

For the comparison of mass cytometry and fluorescence flow cytometry data, commercially available, fluorescently labeled antibodies were used. The pre-methanol staining panel consisted of: (1) Pacific Blue CD8 (clone RPA-T8); (2) V500 CD4 (clone RPA-T4) (BD Biosciences, San Jose, CA); (3) Qdot 605 CD45RA (clone MEM-56) (Invitrogen); (4) Alexa Fluor 700 CD56 (NCAM) (BioLegend, San Diego). The post-methanol staining panel consisted of: (1) PE CD3 (clone UCHT1); (2) PerCP-Cy5.5 CD20 (clone H1(FB1)); (3) PE-Cy7 CD33 (clone 67.6); (4) Alexa Fluor 488 phospho-STAT3; (5) Alexa Fluor 647 phospho-STAT5 (all from BD Biosciences, San Jose, CA).

Stimulation of peripheral blood and bone marrow with phospho-signaling analysis: Stimulation and cellular staining protocols were based on procedures previously described by (1). Briefly, after resting cells 1 hour, cytokines were

added and cells were returned to the 37°C incubator for 15 minutes. A summary of stimuli and inhibitors can be found in Methods Table 1. Where indicated, chemical inhibitors were added to cells for the final 30 minutes of the rest, prior to stimulation. To halt signal transduction, cells were fixed with formaldehyde (PFA; Electron Microscopy Sciences, Hatfield, PA) added directly to growth media at a final concentration of 1.6% for 10 minutes at room temperature. Cells were then centrifuged at 500g for 5 minutes and washed once with staining media (PBS with 0.5% BSA, 0.02% sodium azide) to remove residual PFA, and blocked with Purified Human Fc Receptor Binding Inhibitor (eBioscience Inc., San Diego, CA) following manufacturer's instructions. Surface marker antibodies were added yielding 50 or 100 μ L final reaction volumes and stained at room temperature for 30min. Following staining, cells were washed 2 more times with cell staining media then permeabilized with 4°C methanol for at 10 min at 4°C, then optionally stored at -80°C for later use. Cells were then washed twice in cell staining media to remove remaining methanol, and then stained with phospho-specific antibodies in 50 or 100 μ L for 30 min at room temperature. For fluorescence analysis, cells were then washed once in cell staining media and analyzed using a BD LSRII (BD Biosciences, San Jose, CA). For mass cytometry analysis, cells were washed once in cell staining media, stained with 1 mL of 1:4000 $^{191/193}\text{Ir}$ DNA intercalator(2) (www.dvssciences.com; DVS Sciences, Richmond Hill, Ontario, Canada) diluted in PBS with 1.6% PFA for 20 mins at room temperature. Cells were then washed once with cell staining media and then finally with PBS alone. Care was taken to assure PBS and buffers preceding CyTOF™ analysis were not contaminated with metals in the mass range above 200 AMU analysis range. In cases where cells were not treated with methanol, the iridium intercalator was used at 1:2500. Mass cytometry samples were diluted in dH_2O to approximately 10^6 cells per mL and then analyzed on a CyTOF™ mass cytometer(3)(DVS Sciences, Toronto, Canada) equilibrated with dH_2O .

Mass cytometry viability (membrane permeability) staining: Where indicated, cells were viability stained for mass cytometry analysis during the 15 minute stimulation period. Here, the viability dye was mixed 1:20 with stimulation media. Viability dye was made fresh by creating a solution of 30 mM RhCl_3 (Sigma-Aldrich, St. Louis, MO) and 60 mM DOTA-NHS ester (Macrocyclics, Dallas TX) in 50% v/v DMSO in L-Buffer (DVS Sciences, Toronto, Canada). Dasatinib-treated cells from the unmatched bone marrow were viability stained in a 3-fold higher concentration of viability dye (i.e. 4.5 mM final concentration) due to a technical error.

Mass cytometry measurement: A review of initial mass cytometry analysis

methods can be found by Ornatsky *et al.*(4). Here, cells were acquired on the CyTOF™ mass cytometer (www.dvsscience.com; DVS Sciences, Richmond Hill, Ontario, Canada) at an event rate of approximately 500 cells per second. The instrument was run in high-resolution mode (Mass resolution ~700) with internally calibrated dual-count detection. Noise reduction and cell extraction parameters were: cell length 10-65, lower convolution threshold 10. A cell subtraction value was set to -100. After acquisition, the effect of the cell subtraction setting was negated by subtracting a value of 100 from every channel of each FCS file using the FlowCore package for R (5). Also using FlowCore, the cadmium 110, 111, 112, and 114 values were summed to create a single representative channel for the CD3-QDot 655 used in the mass cytometry analysis. For both BM samples, data collection was carried out over multiple days, during which a systematic decay in the signal intensity was observed over a scale of hours. To help minimize this, each day standard cleaning of the instrument was performed. To account for remaining variability between samples, the intensity of each parameter was modeled over time to account for systematic signal decay, and to allow normalization of samples from different days to a consistent baseline. Biological replicates of the unstimulated condition were collected at the beginning and end of each day, and used to calculate a linear regression that estimates the dependence of signal intensity on absolute event number. The change in signal intensity over time for each channel of each unstimulated sample was estimated using the median intensity in overlapping sliding windows of 5000-10,000 cells each, sliding in increments of 1,000 from the first to the last cell in the sample, yielding 395 data points from a typical FCS file with 400,000 events. Values between 0 and 2 were common when antigen expression is at or below the threshold of detection therefore, to avoid their predominance, values < 2 were excluded from the line fitting procedure. Lines with equations $s=m*n+b$ were fit to the unstimulated samples each day, where s is signal, n is the cell number ("event number") and m and b are fit parameters signifying the slope of the decay curve and the maximal signal intensity on that day ('y-intercept'), respectively. The individual events were multiplied by $s_N/(m*n+b)$, where s_N is a constant representing the signal at the last cell, thus normalizing each event to the signal level at the end of the last day.

Data visualization: All cell density plots shown were created in Cytobank(6) (www.cytobank.org, Cytobank, Inc., Menlo Park, CA). For mass cytometry data, all parameters except time and cell length were displayed with an arcsinh transformation and a scale augment of 5 ranging from -20 to 10000. Cell length

and time were displayed on linear scales. LSRII data was displayed using default Cytobank scales (arcsinh with a scaling argument of 150, ranging from -200 to 262,144). Justification for the use of these different transformations is provided in Fig. S2.

Phospho-signaling and mass cytometry data analysis: Normalized, background-subtracted FCS files were imported into Cytobank for single cell and population gating. Cytobank was also used to create the heatmaps comparing fluorescence and mass cytometry measurements using log₂ ratio of the stimulated population phospho-STAT mean fluorescent intensity (MFI) versus the unstimulated control. For larger heatmaps, the median intensity values from the indicated cell populations (Fig. 3A) were exported from Cytobank and imported into Spotfire (TIBCO Software, Inc., Palo Alto, CA) to create of heatmaps, drug response X-Y plots, and perform hierarchical clustering. Clustering was performed using UPGMA with Euclidean distance measurements and normalization by means. For spanning tree visualization and comparison, singlet-gated FCS files were exported from Cytobank and analyzed using SPADE in Matlab v.R2010a (The Mathworks, Inc., Natick, MA) as described below.

For all of the mass cytometry analysis, signaling induction was calculated using the average of the median scaled arcsinh values of 5 untreated replicates, minus the median scaled arcsinh value of a stimulated condition. To minimize the noise in measurements where the data is close to zero (the limit of detection on the mass cytometry scale), the median intensities in were scaled (divided by 5) prior to archsinh calculations. An example calculation and comparison of archsinh difference to fold change is shown below:

For example:

Sample	Number of cells downsampled in Node X	Number of cells upsampled in Node X	Median scaled arcsinh intensity of pSTAT5 in Node X (median(arcsinh(intensity/5)))
Unstim 1	54	3132	1.4
Unstim 2	62	3286	1.2
Unstim 3	81	4050	1.3
Unstim 4	71	3692	1.6
Unstim 5	87	4437	1.5
TPO	54	3240	4.5
Unstim Average:			1.4
Signaling Induction of pSTAT5 by TPO:			4.5 – 1.4 = 3.1

Arcsinh vs. fold-change:

Unstimulated Intensity	Stimulated Intensity	Fold Change	Arcsinh difference (calculated above)
5	10	2	0.6
5	25	5	1.4
5	50	10	2.1
5	250	50	3.7
5	500	100	4.4

Statistical analysis of signaling responses in manually gated bone marrow was performed as follows: For each experimental condition, the arcsinh-transformed median intensity of each of 18 intracellular antibodies was compared to the distribution of the arcsinh-transformed median intensities of unstimulated replicates ($n=5$) in each of 24 manually gated cell populations (resulting in a total of 432 observations per condition). Independent one-sample t -tests were performed with 4 degrees of freedom and p -values were adjusted for 432 multiple comparisons (Bonferroni). All signaling responses with adjusted p -values below 0.05 are listed in Table S3.

SPADE analysis and tree construction. Given an FCS file as input, SPADE first performs a density-dependent down-sampling step based on n parameters specified by the user. This step heavily down-samples dense populations corresponding to abundant cell types while preserving rare cell types with relatively sparse distributions. The resulting dataset is density-normalized, but retains the multidimensional structure of the original FCS file. Using the density-normalized dataset, rare and abundant cell types are equally likely to form clusters in the subsequent clustering step. After down-sampling, an unsupervised agglomerative hierarchical clustering step consolidates down-sampled cells into clusters of phenotypically similar cells based on n parameters. SPADE then

connects the centroids of the cell clusters using a minimum spanning tree (MST) (7). The topology of this tree representation reveals the underlying relationship and similarity of cell nodes in n dimensional space. All stimulated BM and PBMC mass cytometry datasets were singlet-gated in Cytobank, exported as FCS files and imported into SPADE for analysis. SPADE analysis was performed with the default configuration (arcsinh cofactor = 5, normalization = OFF, down-sampling scaling factor = 5, sparsity exclusion percentile = 1, target number of cells = 20000, max number of cells = 50000, target number of clusters = 200). Fifteen (15) 'static' parameters that were not expected to change between experimental conditions were used for down-sampling and tree construction: DNA (Ir191), Cell_length, and the 13 'core' surface antibody parameters. All conditions from a single experiment were processed simultaneously so the resulting tree structure would capture all cell surface subpopulations present in the entire dataset. To reduce the effect of counting error, the n dimensional coordinates of each node were then used to up-sample the data from the original FCS file, thereby populating each node with every cell from the original FCS file that shares the phenotype with the cells in the node. Here, for each cell in the original data file we computed the distance to every individual cell in the pooled down-sampled dataset from which the tree was constructed (L1 distance based on the 13 surface markers). Then, based on which one was its nearest neighbor (NN), the cell in the original file was assigned to the same cell cluster (tree node) as its downsampled NN. The same approach was used to overlay the results of the 'immunophenotype' staining panel on the tree constructed from the 29 conditions with the 'functional' panel. The set of 13 'core' surface markers, which were shared between the two staining panels, allowed assignment of the 'immunophenotype' cells to the tree. These cells were used to compute the median intensities of the complementary 18 surface antigens shown in Fig. 2 and S4B. For cellular signaling response calculations, the median arcsinh intensity of up-sampled cells within each node (i.e. cluster) for each original FCS file (i.e. each experimental condition) was used for signaling induction calculations and visualizations. See above example table for archsinh calculations.

Principal component analysis (PCA) of phenotypic progression: We identified two subsets of cells involved in B-cell development. One subset included HSC, MPP, Pro-B cells and early Pre-B cells. The other included late Pre-B cells, Immature B-cells, Naïve Mature B-cells and IL3RA+ Mature B-cells. For each subset, we ran PCA(8) over the cell surface markers, and examined the coefficients of the first principal component. For the first subset (Fig. 4), the first component explained 22.8% of the variation in the data; the three highest coefficients for this component were CD38 (-0.67), CD20 (0.5) and CD45RA

(0.38). For the second subset (Fig. 5D), the first component explained 23.9% of the variation in the data; the three highest coefficients for this component were CD19 (0.55), CD33 (-0.54) and CD34 (-0.51). For each cell, we defined the progression value as the projection of the cell markers values on to the first principal component. In each subset, we divided the cells to 17 overlapping windows according to their progression values. The windows were in equal distances across the progression trajectory, had width of 20%, and 75% overlap between consecutive windows. Notably, the plots remain smooth even if no overlapping windows are used. For each marker, the mean in each window was used to plot the progressions in Fig. 4 and 5.

Public data distribution: For replicate human bone marrow samples analyzed here, single-cell gated FCS files are publicly available on www.cytobank.org for download.

Methods Table 1. Molecules used for stimulation and inhibition of biochemical responses in human PBMCs and bone marrow. All cytokines are the human sequence.

Short name	Stimulation/Inhibitor	Final Concentration	Supplier
BCR	Goat anti-human IgG (BCR cross-linking)	10 µg/mL	Southern Biotech, Birmingham AL
	Goat anti-human IgM (BCR cross-linking)	10 µg/mL	Southern Biotech, Birmingham AL
	Goat F(ab)2 anti-human Ig κ (BCR cross-linking)	10 µg/mL	Southern Biotech, Birmingham AL
	Goat F(ab)2 anti-human Ig λ (BCR cross-linking)	10 µg/mL	Southern Biotech, Birmingham AL
Flt3L	Flt-3 Ligand	50 ng/mL	PeprTech, Rocky Hill, NJ
IL-2	IL-2	100 ng/mL	PeprTech, Rocky Hill, NJ
IL-3	IL-3	20 ng/mL	PeprTech, Rocky Hill, NJ
IL-6	IL-6	100 ng/mL	BD Biosciences, San Jose, CA
IL-7	IL-7	20 ng/mL	BD Biosciences, San Jose, CA
IL-10	IL-10	100 ng/mL	PeprTech, Rocky Hill, NJ
LPS	LPS (Ultrapure)	1 µg/mL	Invitrogen, Carlsbad, CA
G-CSF	G-CSF	20 ng/mL	PeprTech, Rocky Hill, NJ
GM-CSF	GM-CSF	20 ng/mL	PeprTech, Rocky Hill, NJ
IFNα	IFNα	5000 U/mL	PeprTech, Rocky Hill, NJ
IFNα	IFNα/AD (Cat. #11200-1)	5000 U/mL	PBL InterferonSource, Piscataway, NJ
PMA/Iono.	PMA	50 nM	Sigma-Aldrich, St. Louis, MO, St. Louis, MO
	Ionomycin	1 µg/mL	Sigma-Aldrich, St. Louis, MO, St. Louis, MO
PVO4	Pervanadate (Sodium orthovanadate)	125 µM in 0.53 mM H ₂ O ₂	Calbiochem, San Diego, CA

SCF	SCF	100 ng/mL	PeptoTech, Rocky Hill, NJ
TNF α	TNF α	20 ng/mL	PeptoTech, Rocky Hill, NJ
TPO	TPO	50 ng/mL	PeptoTech, Rocky Hill, NJ
Dasatinib	Dasatinib	100 nM	LC Laboratories, Woburn MA
JAKi	JAK Inhibitor I	5 μ M	Calbiochem, San Diego, CA
U0126	U0126	20 μ M	Calbiochem, San Diego, CA

Methods Table 2. A summary of antibodies used for mass cytometry analysis. Also indicated is the staining panel the antibody was used in.

Antigen Target (Human)	Clone Number	Supplier	Elemental Isotope	Final Concentration (μ g/mL)	Immunophenotype Panel 1	Functional Panel 2
CD10	HI10a	Biolegend	Gd156	3	X	
CD117	104D2	Biolegend	Yb171	1	X	
CD11b	ICRF44	Biolegend	Nd144	3	X	X
CD11c	3.9	Biolegend	Sm154	5	X	
CD123	9f5	BD Biosciences	Eu151, Gd160	1	X	X
CD13	L138	BD Biosciences	Er168	1	X	
CD14	M5E2	Biolegend	Gd160	2	X	
CD15	W6D3	Biolegend	Dy164	1	X	
CD16	3G8	Biolegend	Ho165	2	X	
CD161	HP-3G10	Biolegend	Nd150	5	X	
CD19	H1B19	BD Biosciences	Nd142	1.5	X	X
CD20	2H7	BD Biosciences	Sm147	3	X	X
CD235a/b	HIR2	Biolegend	Pr141	2	X	
CD3	UCHT1	Biolegend	Pr141	3	X	
CD3 Qdot 655	S4.1	Invitrogen	Cd110, 111, 112, 114	1:500 dilution		X
CD33	WM53	Biolegend	Nd148, Gd158	1.5	X	X
CD34	8G12	BD Biosciences	Nd148	3	X	X
CD38	HIT2	Biolegend	Tb159, Er167	1	X	X
CD4	RPA-T4	Biolegend	Nd145	3	X	X
CD41	HIP8	Biolegend	Sm152	1	X	
CD44	G44-26	BD Biosciences	Er166	1	X	
CD45	HI30	Biolegend	In115	2	X	X
CD45RA	HI100	Biolegend	La139	3	X	X
CD47	B6H12	BD Biosciences	Yb172	2	X	
CD56	B159	BD Biosciences	Er170	2	X	
CD56	HCD56	Biolegend	Er170	2	Fig. 1 Comparison	
CD61	VI-PL2	BD Biosciences	TM169	0.25	X	
CD7	M-T701	BD Biosciences	Er167	2	X	
CD8a	RPA-T8	Biolegend	Nd146	1.5	X	X
CD90	5E10	Biolegend	Er170, Yb176	5	X	X
CXCR4	12G5	Biolegend	Lu175	3	X	
HLADR	L243	Biolegend	Yb174	2	X	
IgM	G20-127	BD Biosciences	Eu153, Dy164	2	X	
I κ B alpha	L35A5	Cell Signaling Technology	Er166	2		X
Ki67	B56	BD Biosciences	Sm152	2		X
Btk/I κ k (pY551/pY511)	24a/BTK	BD Biosciences	Gd158, Yb171	2		X
Creb (pS133)	87G3	Cell Signaling Technology	Yb176	1.5		X
CrkL (pY207)	polyclonal	Cell Signaling Technology	Lu175	2		X
Erk1/2 (pT202/pY204)	20A	BD Biosciences	Eu151	1		X
H3 (pS28)	HTA28	Biolegend	Er168	0.5		X
MAPKAPK 2 (pT334)	27B7	Cell Signaling Technology	Eu153	1		X

NfκB (pS536)	K10-895.12.50	BD Biosciences	Ho165	1		X
p38 (pT180/pY182)	36/p38	BD Biosciences	TM169	2		X
PLCg2 (pY759)	K86-689.37	BD Biosciences	Pr141	2		X
S6 (pS235/pS236)	N7-548	BD Biosciences	Yb172	2		X
Shp2 (pY580)	polyclonal	Cell Signaling Technology	Sm154	2		X
SLP-76 (BLNK) (pY128)	J141-668.36.58	BD Biosciences	Gd160, Dy164	1		X
Src (pY418)	K98-37	BD Biosciences	Yb174	2		X
STAT3 (pY705)	4/P-STAT3	BD Biosciences	Tb159	2		X
STAT5 (pY694)	47	BD Biosciences	Nd150	2		X
ZAP70/Syk (pY319/pY352)	17a	BD Biosciences	Gd156	1		X

Supplementary References:

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2. O. I. Ornatsky *et al.*, *Anal Chem* **80**, 2539 (Apr 1, 2008).
3. D. R. Bandura *et al.*, *Anal Chem* **81**, 6813 (Aug 15, 2009).
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5. F. Hahne *et al.*, *BMC Bioinformatics* **10**, 106 (2009).
6. N. Kotecha, P. O. Krutzik, J. M. Irish, *Curr Protoc Cytom Chapter 10*, Unit10 17 (Jul).
7. Y. Xu, V. Olman, D. Xu, *Bioinformatics* **18**, 536 (Apr, 2002).
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Supplemental Figure Legends:

Figure S1 – Comparison of mass and fluorescence cytometry profiling of immune cell response patterns in two PBMC samples.

(A–B) Representative antibody surface staining results and cell population definitions (“gating”) for fluorescence (A) and mass (B) cytometry analysis of fixed PBMCs from Donor A. Identical analysis of Donor B is shown in Fig. 1B and 1C of the main text. *Pearson correlation between frequencies measured by fluorescence or mass cytometry, including both donors ($r = 0.99$, $p < 0.000001$, two-tailed t -test) as shown in Table S1 and (C).

(C) Linear regression of paired frequencies measured by fluorescence or mass cytometry. Data includes frequencies of 12 populations from each of 2 donors ($r = 0.99$, $p < 0.000001$, two-tailed t -test) (Table S1).

(D) Heatmap summary of induced STAT phosphorylation in immune populations from PBMC Donor A. Immune populations are defined in (A) and (B) (*column headers refer to blue polygons in (A) and (B)*). Responses to the indicated stimuli in each row were measured by fluorescence (*top*) and mass (*bottom*) cytometry. Color scale indicates the difference in \log_2 mean intensity of the stimulated condition compared to the unstimulated control. Signaling responses of Donor B are shown in Fig. 1E of the main text. **Pearson correlation between signaling induction measured by fluorescence or mass cytometry, including both donors (pSTAT3: $r = 0.92$; $p < 0.000001$, two-tailed t -test; pSTAT5: $r = 0.89$, $p < 0.000001$, two-tailed t -test) as shown in (E) and (F).

(E) Linear regression of paired pSTAT3 signaling induction values calculated from intensities measured by fluorescence or mass cytometry. Data includes signaling intensities of 45 unique combinations of populations and stimuli (9 populations x 5 stimuli) from each of 2 donors ($r = 0.92$; $p < 0.000001$, two-tailed t -test).

(F) Linear regression of paired pSTAT5 signaling induction values calculated from intensities measured by fluorescence or mass cytometry. Data includes signaling intensities of 45 unique combinations of populations and stimuli (9 populations x 5 stimuli) from each of 2 donors ($r = 0.89$; $p < 0.000001$, two-tailed t -test).

Figure S2 – Justification for Arcsinh transformation of display scale in mass cytometry analysis.

CD4 and CD8 expression as measured by mass (top) and fluorescence (bottom) cytometry for T cells as gated in Fig. 1B and C of the main text. Shown is the same data on a linear scale as well as on arcsinh scales with a scaling

argument of 150, 5, or 1 in Cytobank software. The \log_{10} scales displayed are compressed according to the arcsinh transformation. An arcsinh scaling factor of 150 works well for digital fluorescence data while an augment of 5 works well for mass cytometry data. Both of these are default on cytobank.org.

Figure S3 – High dimensional single-cell surface analysis is difficult to display in a 2-dimensional space with dot plots.

A summary of possible 2-parameter dot plots for a 31-parameter cell surface immunophenotype of healthy human bone marrow obtained using mass cytometry.

Figure S4 – Expression of immunophenotype surface markers overlaid onto the SPADE plots of healthy human bone marrow.

(A) The expression of the 13 core surface markers used to construct the SPADE MST in Fig. 2 of the main text.

(B) The expression of an additional 18 surface markers from the grafted 31 surface marker analysis of the same sample. These 18 surface markers were not used in the SPADE plot and their localized expression is based solely on the shared expression patterns of the 13 core surface markers.

Figure S5 – Manual gating strategy for healthy human bone marrow using traditional 2D cytometry analysis methods.

The gating hierarchy is shown for 24 manually gated cell populations in used in the heatmaps of Fig. 3 and 5 of the main text. All gates were applied with Boolean “AND” logic in Cytobank software. Therefore, each cell population is defined by the combination of gates in its respective row.

Figure S6 – Hierarchically clustered heatmap of intracellular functional marker dynamics induced by 13 biological and chemical stimuli.

Single-cell data from healthy human bone marrow was divided into 24 traditionally gated cell populations, and hierarchically clustered based on signaling induction and cell population. Each row in the heatmap represents the phosphorylation level of one phospho-protein in response to one stimulation condition.

Figure S7 – Venn diagram of statistically significant signaling responses among manually gated bone marrow populations from two donors.

Independent one-sample *t*-tests (see Experimental Procedures) were performed to identify statistically significant signaling responses for each of 22 unique experimental conditions in bone marrow samples from each of 2 healthy

donors. The effect of each experimental condition was measured using 18 intracellular markers in 24 manually gated cell populations, for a total of 432 signaling responses per condition. After correction for multiple comparisons, an average of 554 significant signaling responses were observed for each donor, of which 248 were significant for both (45% concordance). All 1,108 significant signaling responses are listed in Table S3.

Figure S8 – A comprehensive summary of dynamics of 18 intracellular functional markers in a healthy human bone marrow sample, overlaid on SPADE plots.

(A) Induced changes in 18 functional markers by 13 *ex vivo* stimuli were overlaid onto the SPADE MST using the 13 core surface markers as anchors.

(B) A subset of 6 conditions (Unstimulated, BCR, IL-7, Flt3L, PMA/Ionomycin., PVO₄) are shown after 30 minutes pretreatment with 0.1 μM dasatinib.

(C) A subset of 2 conditions (Unstimulated, GCSF) are shown after 30 minutes pretreatment with 5 μM JAK inhibitor I. Signaling induction was calculated as the difference of arcsinh medians of the indicated *ex vivo* stimuli compared to the unstimulated control for each node.

Figure S9 – Confirmatory analysis of a second healthy human bone marrow.

A comprehensive summary of 18 intracellular functional markers and 13 extracellular markers in a second healthy human bone marrow sample.

(A) Induced changes in 18 functional markers by 13 *ex vivo* stimuli were overlaid onto the SPADE MST using the 13 core surface markers as anchors. Signaling induction was calculated as the difference of arcsinh medians of the indicated *ex vivo* stimuli compared to the unstimulated control for each node.

(B) A subset of 6 conditions (Unstimulated, BCR, IL-7, Flt3L, PMA/Ionomycin, PVO₄) are shown after 30 minutes pretreatment with 0.1 μM dasatinib. Calculated as in (A).

(C) A subset of 2 conditions (Unstimulated, GCSF) are shown after 30 minutes pretreatment with 5 μM JAK inhibitor I. Calculated as in (A).

(D) A subset of 2 conditions (Unstimulated, PMA/Ionomycin) are shown after 30 minutes pretreatment with 20 μM U0126, an inhibitor of MEK. Calculated as in (A).

(E) The expression of the 13 core surface markers used to construct the SPADE MST in (A) through (D).

Figure S10 – Signaling dynamics in response to the chemotherapeutic

agent dasatinib.

(A) Heatmap of the effect of dasatinib on intracellular signaling induction by five biological or chemical stimuli in 24 traditionally gated cell populations (Fig. S5). Suppression index was calculated as the signaling induction by the stimulus in the presence of dasatinib minus the induction by the stimulus alone.

(B) A complete spectrum of responses to dasatinib was observed. Induced signaling by pervanadate is shown with (Y-axis) and without (X-axis) dasatinib pre-treatment. Each data-point indicates induced phosphorylation of 18 functional markers (*colors*) in each of the 24 manually gated cell types. Suppression index is overlaid as the background of the plot. Points that fall along the white transition were unaffected by the presence of dasatinib. Points that fall to the lower right (*orange*) or to the upper left (*purple*) were suppressed or potentiated by dasatinib, respectively.

Figure S11 – Workflow diagram of optimization steps leading to final experimental design and published bone marrow dataset.

The final set of antibodies and stimuli used in the bone marrow experiments were determined through an iterative process of testing and titrating individual reagents, combining panels of reagents, then revising those panels based on biological experiments. The steps to optimize different components of the final experimental design are shown (*blue* – surface antibodies; *orange* – intracellular antibodies; *red* – stimulation conditions; *green* – viability indicator).

Supplemental Tables:

Table S1 – A summary of gated cell population frequencies for comparison of fluorescence and mass cytometry in Fig. 1 of the main text.

Table S2 – A summary of justifications for putative cell population assignments for the SPADE plot in Fig. 2 of the main text.

Table S3 – Statistically significant signaling responses observed in bone marrow samples from either of two healthy donors.

Figure S1

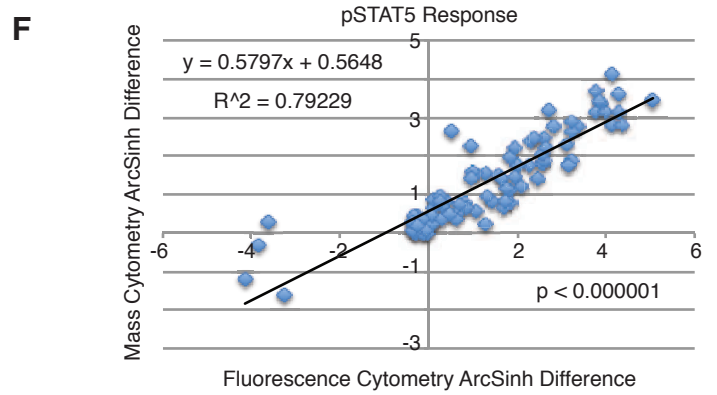
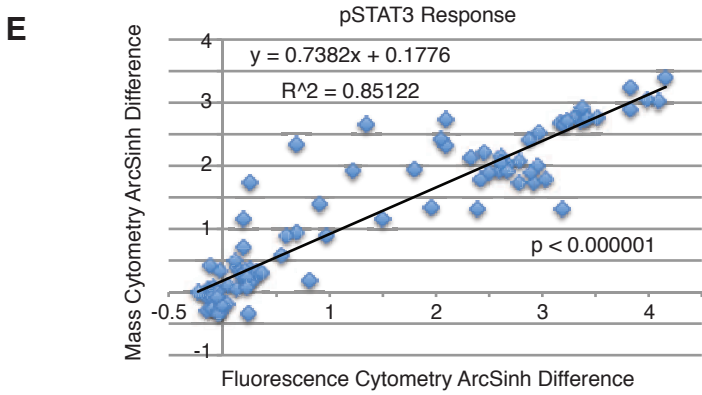
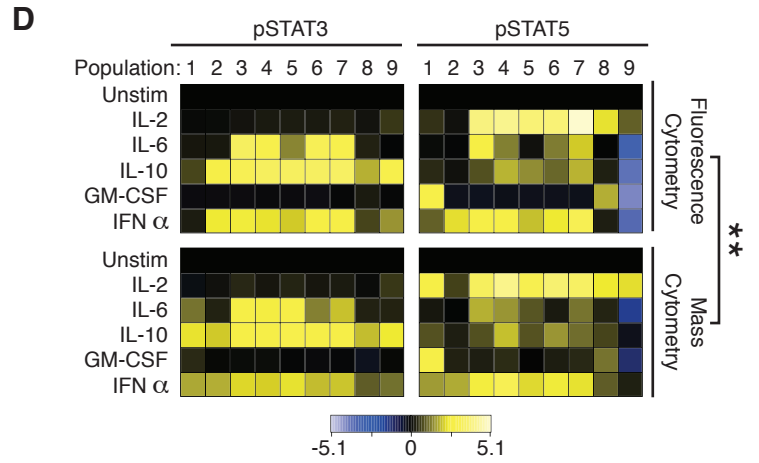
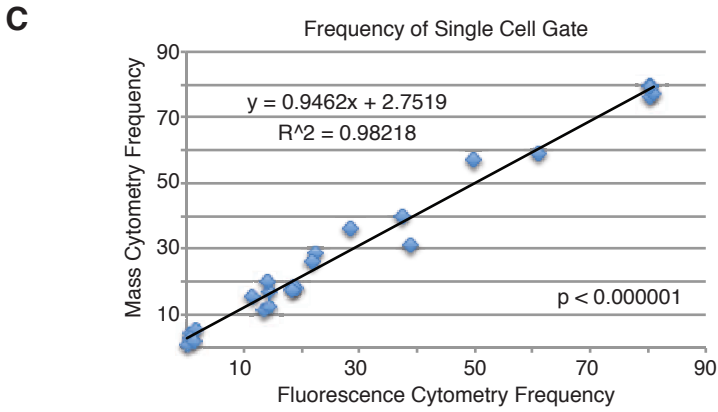
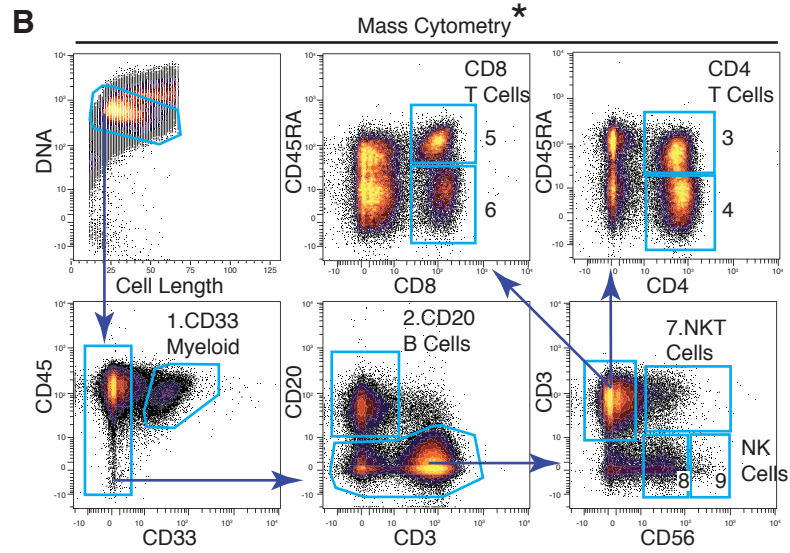
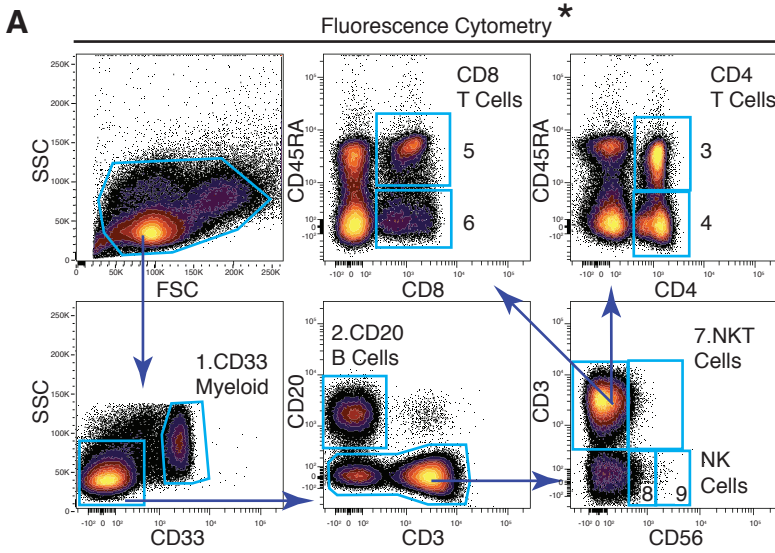


Figure S2

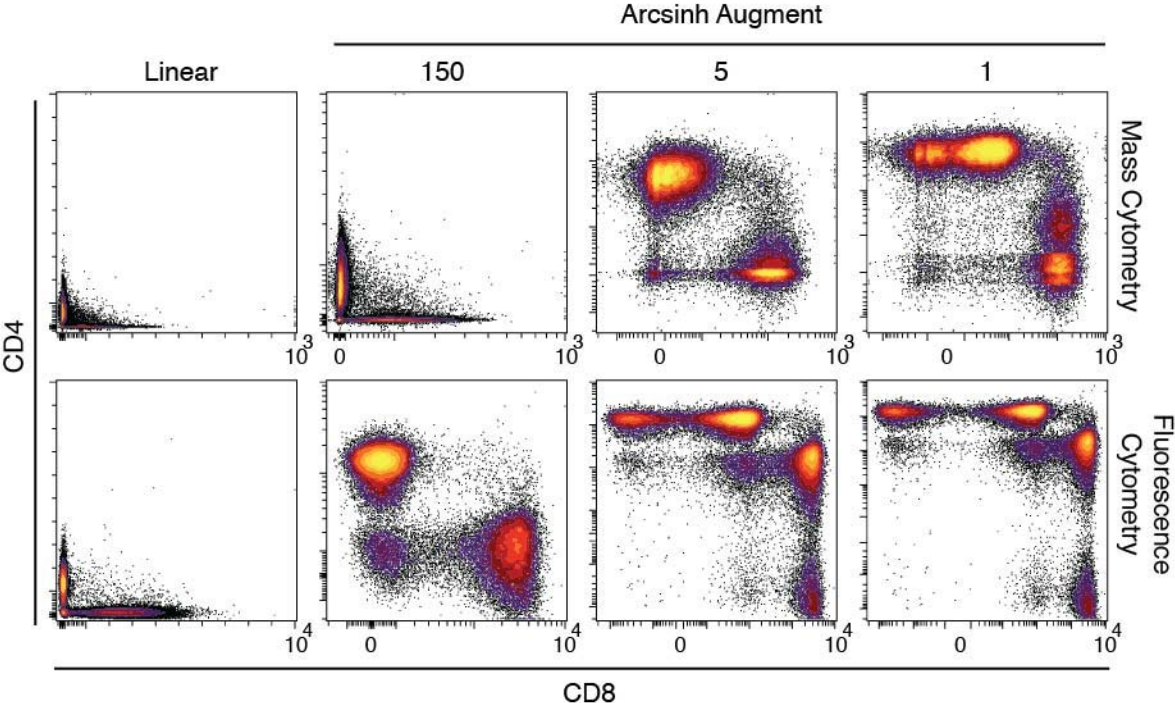


Figure S3

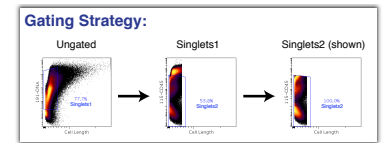
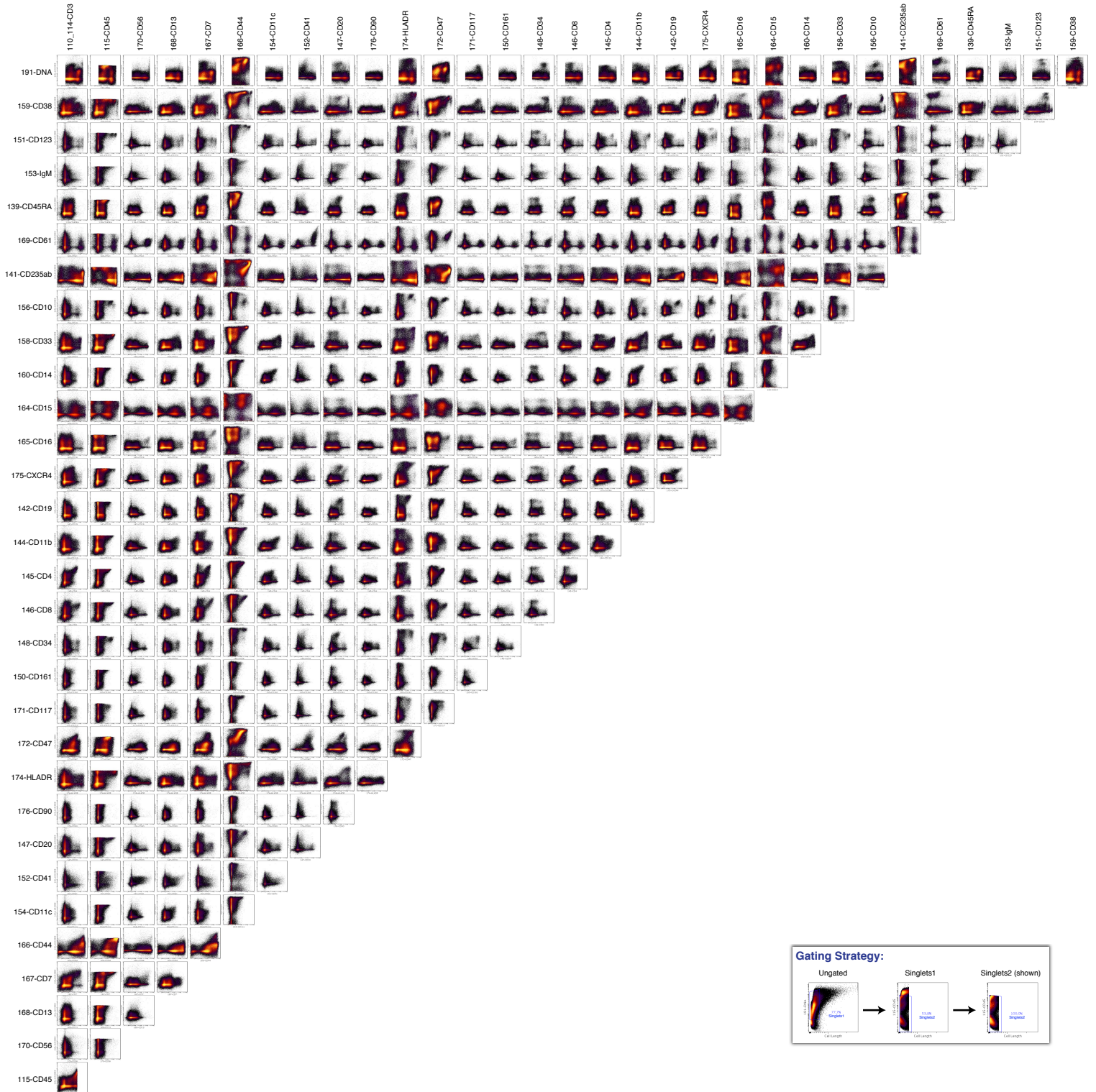


Figure S4A

110 114-CD3

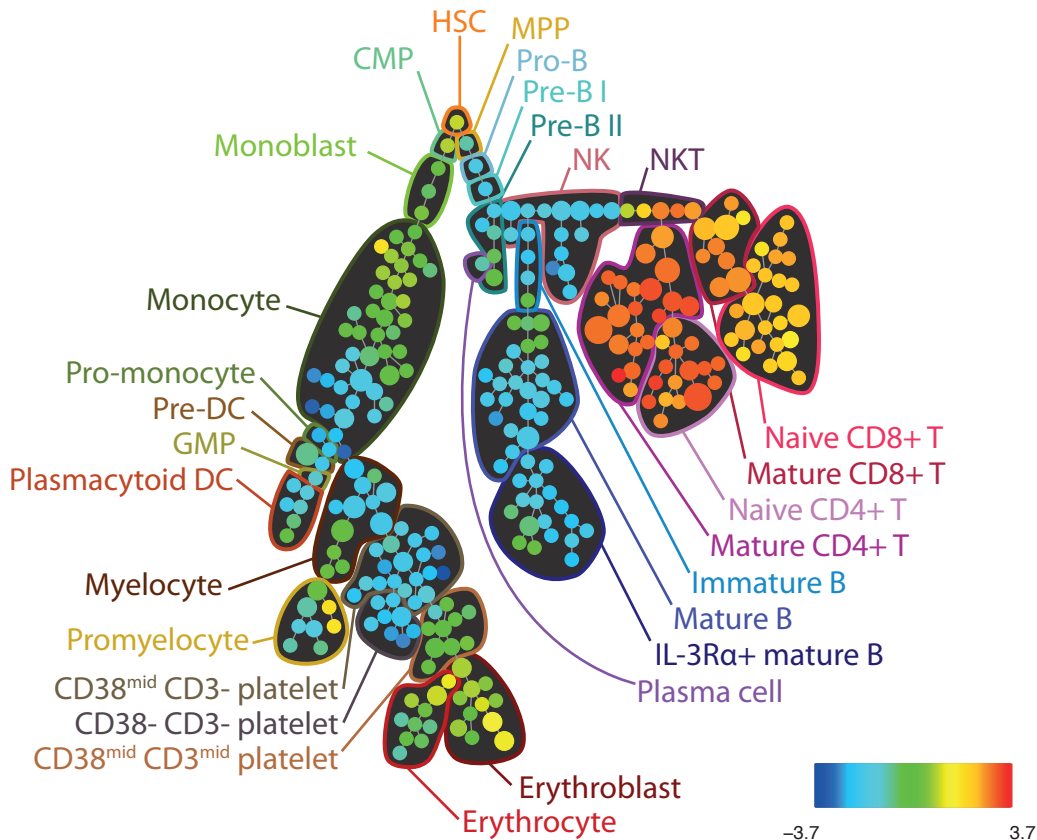


Figure S4A

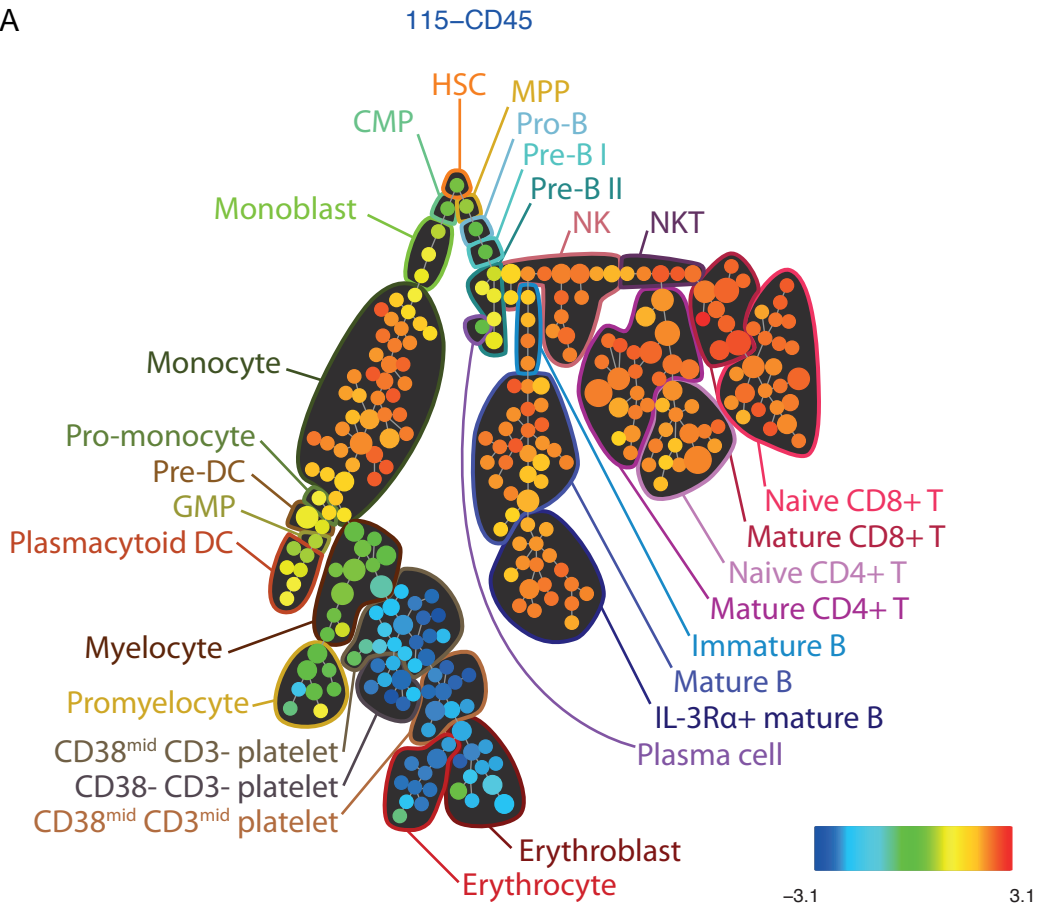


Figure S4A

139-CD45RA

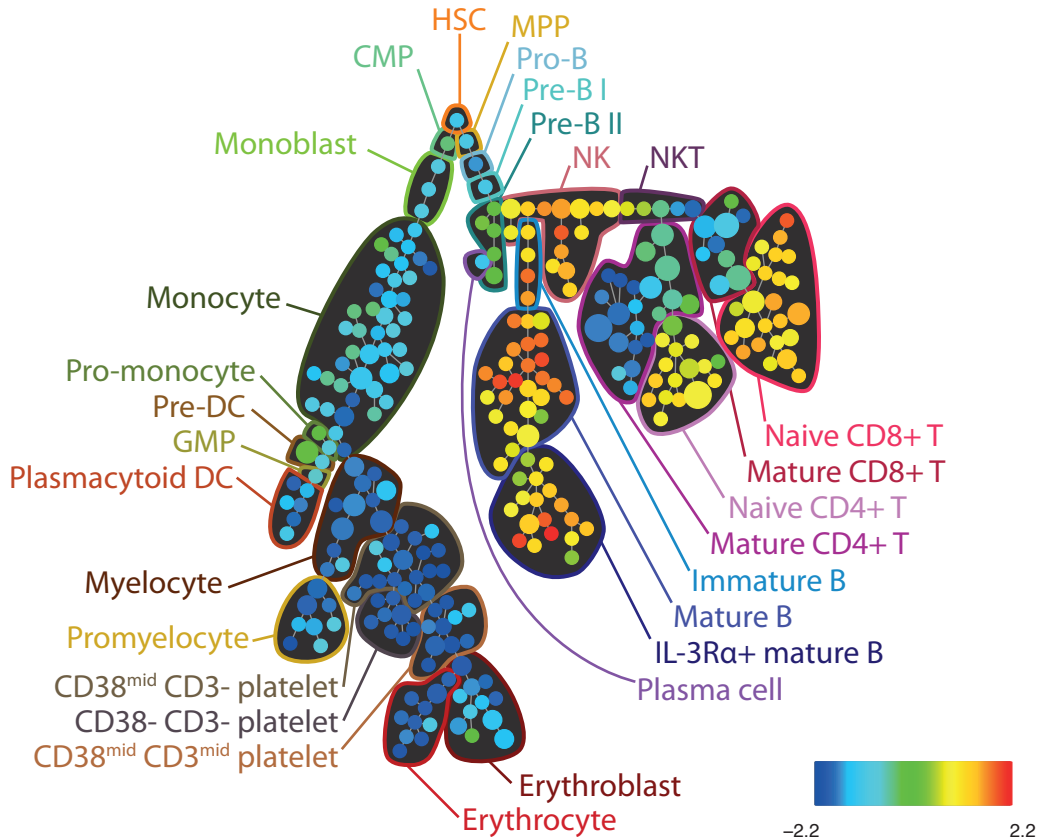


Figure S4A

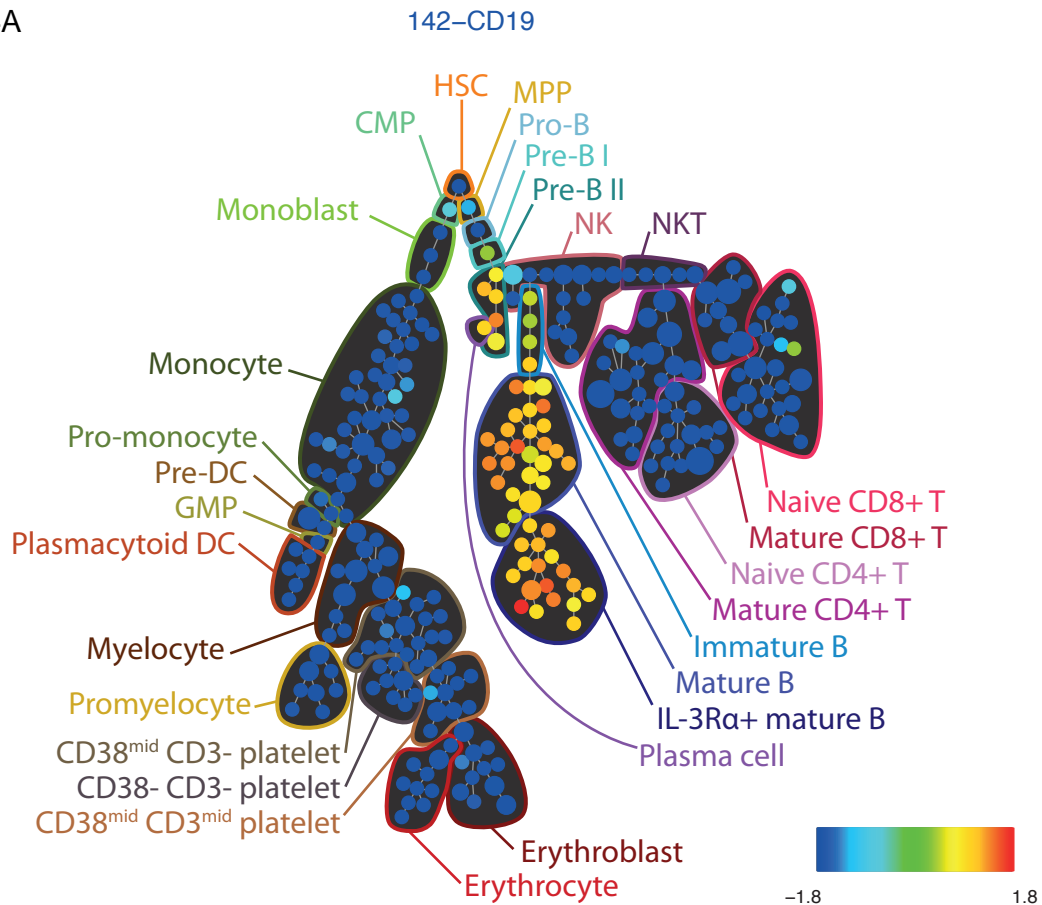


Figure S4A

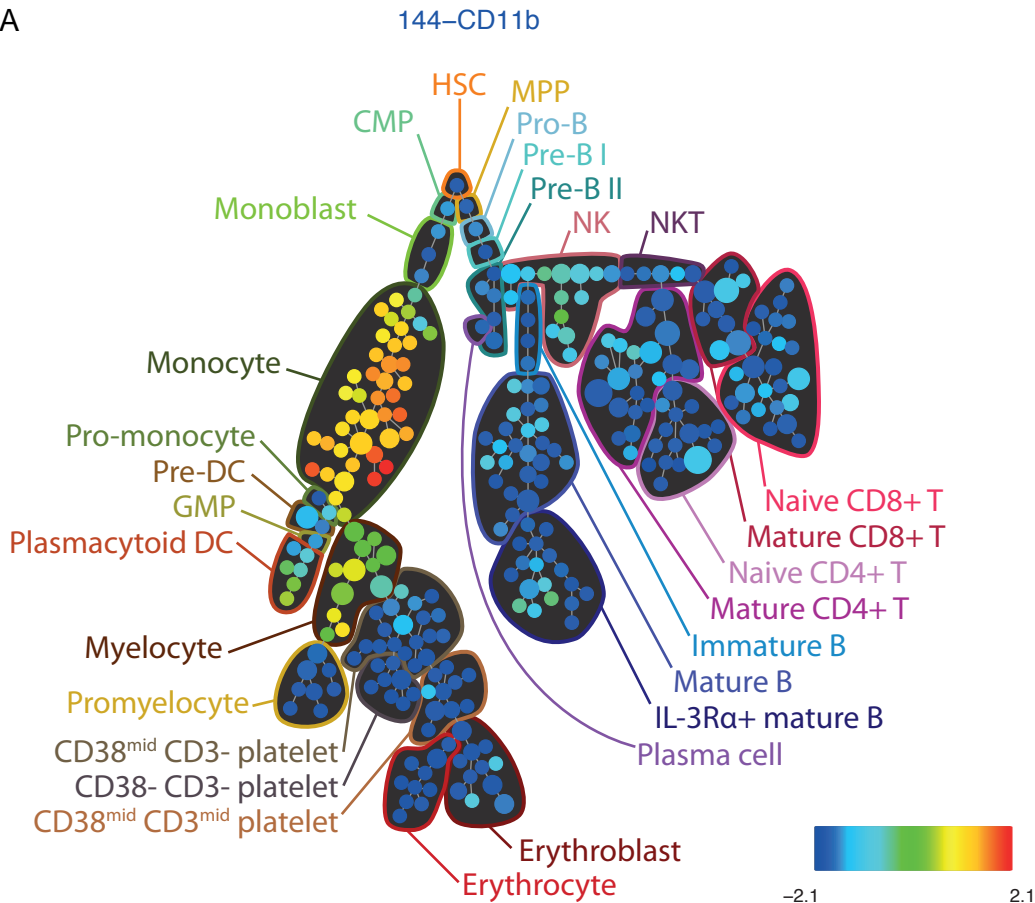


Figure S4A

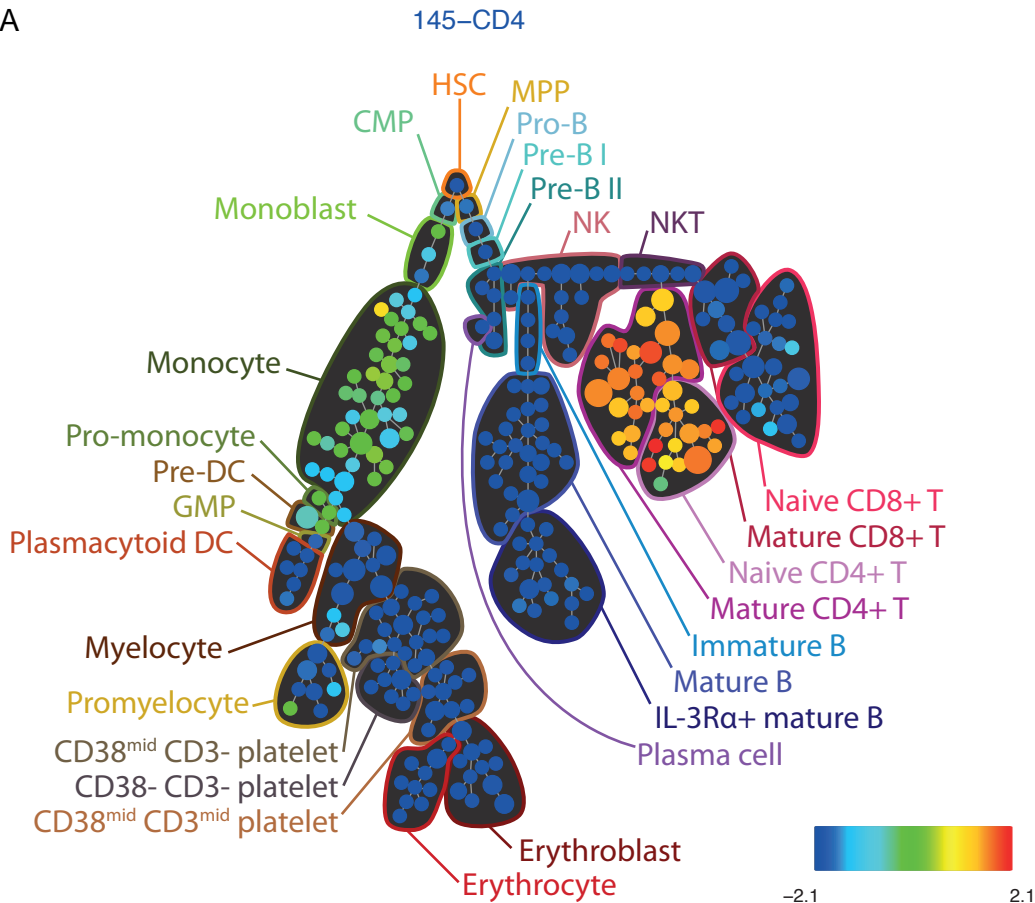


Figure S4A

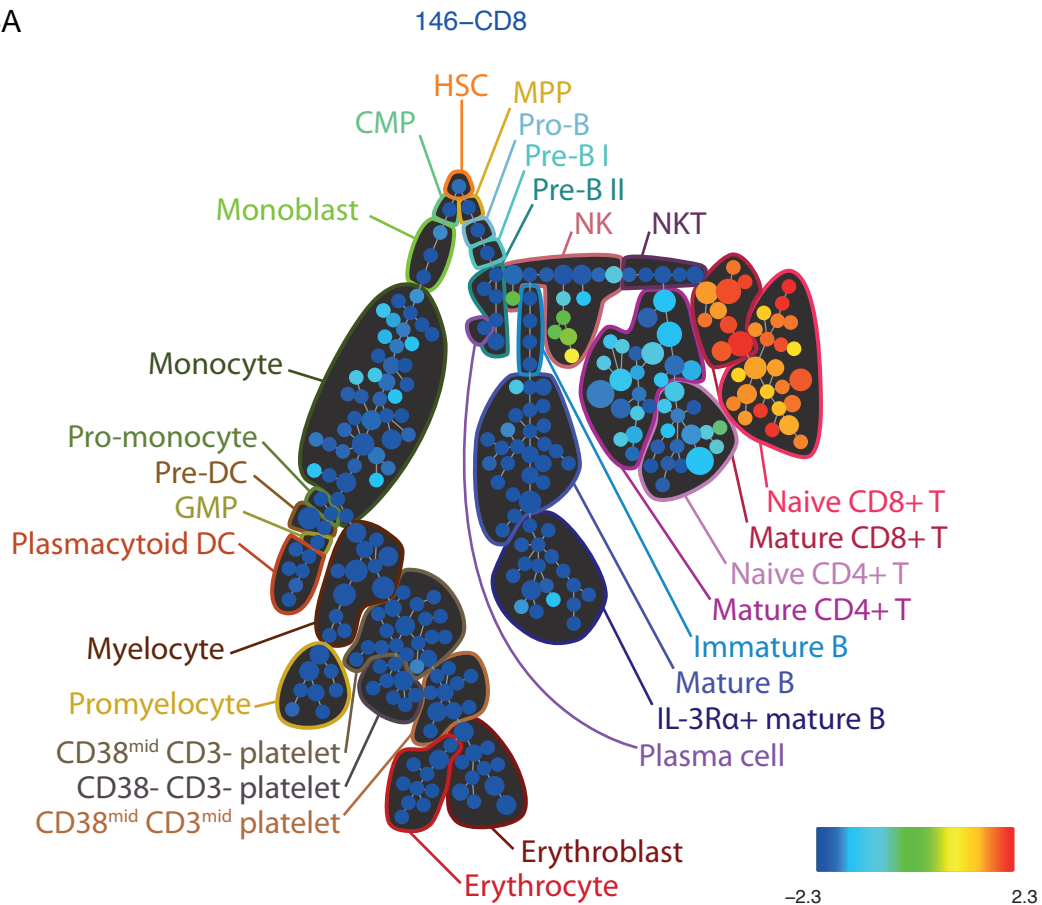


Figure S4A

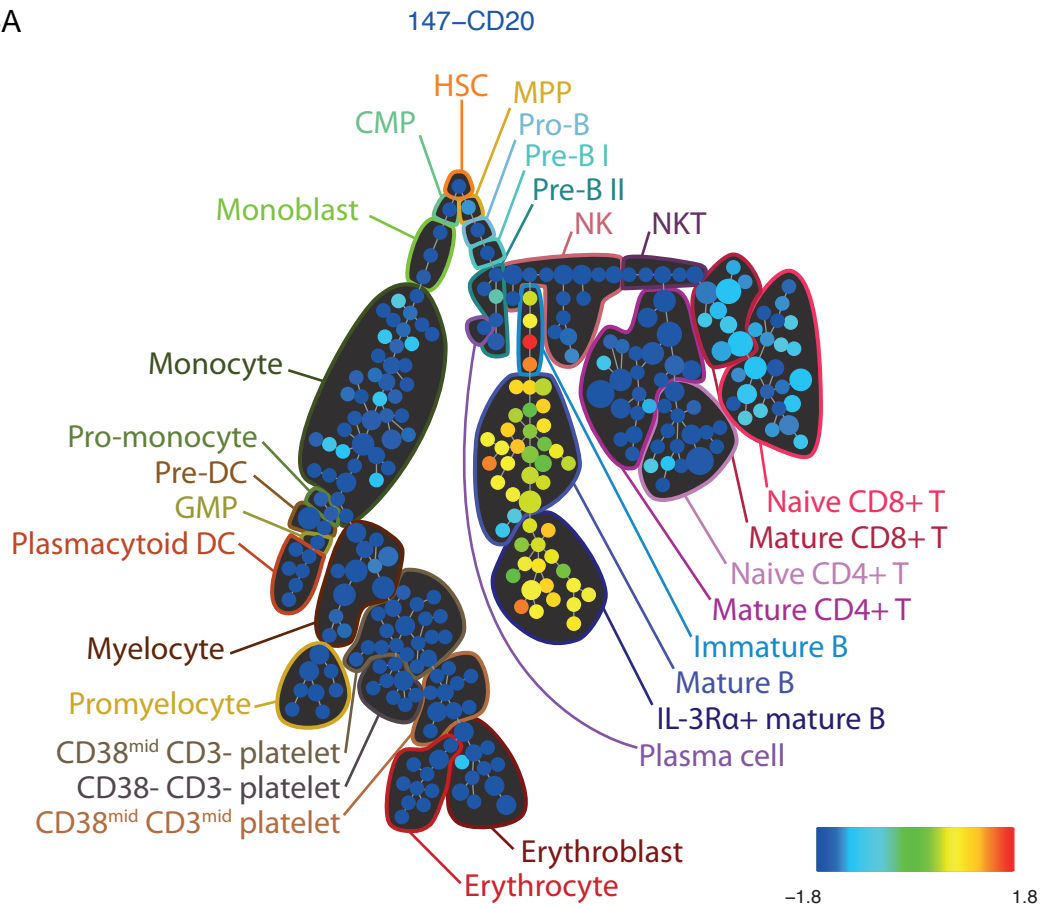


Figure S4A

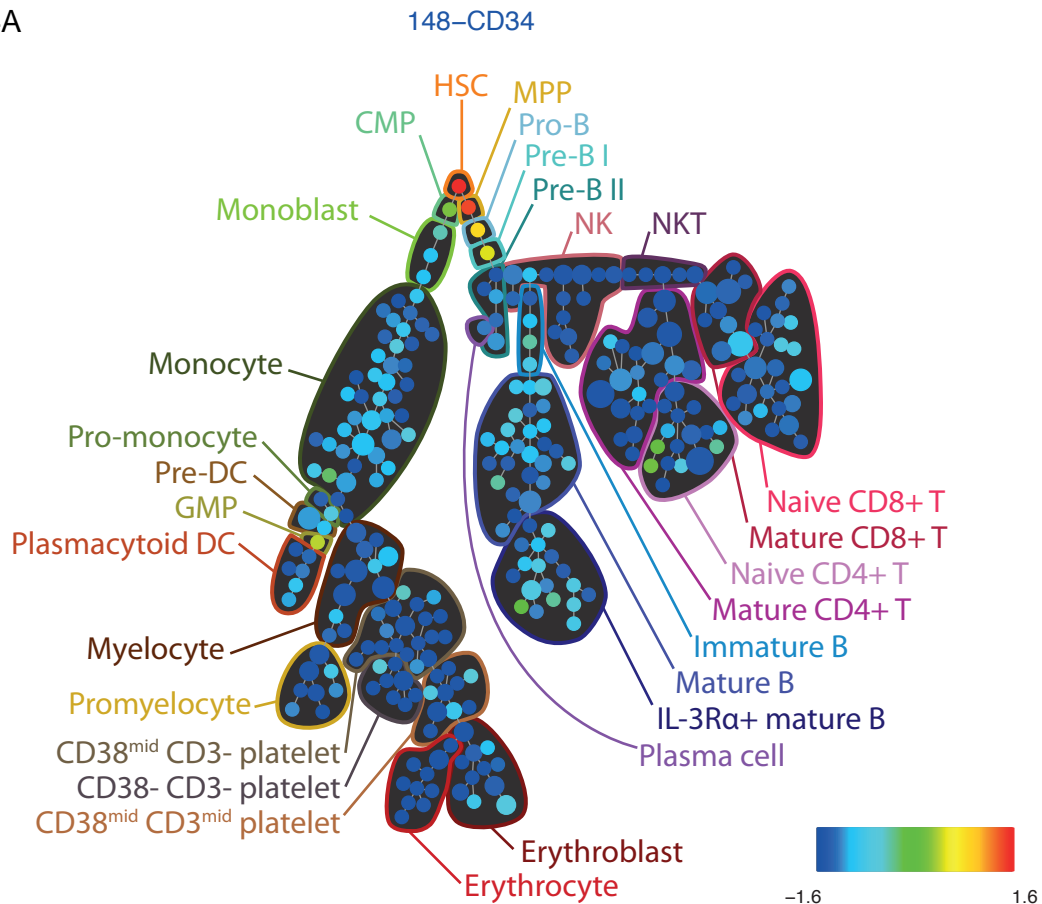


Figure S4A

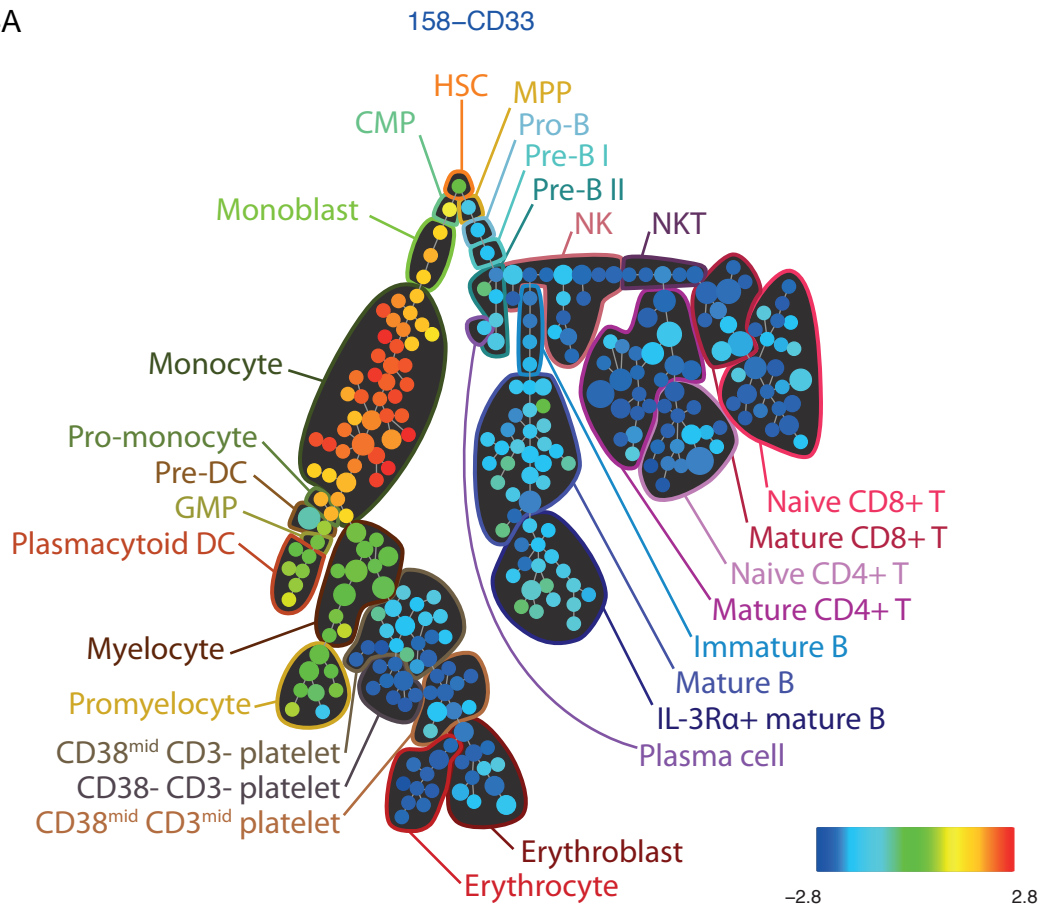


Figure S4A

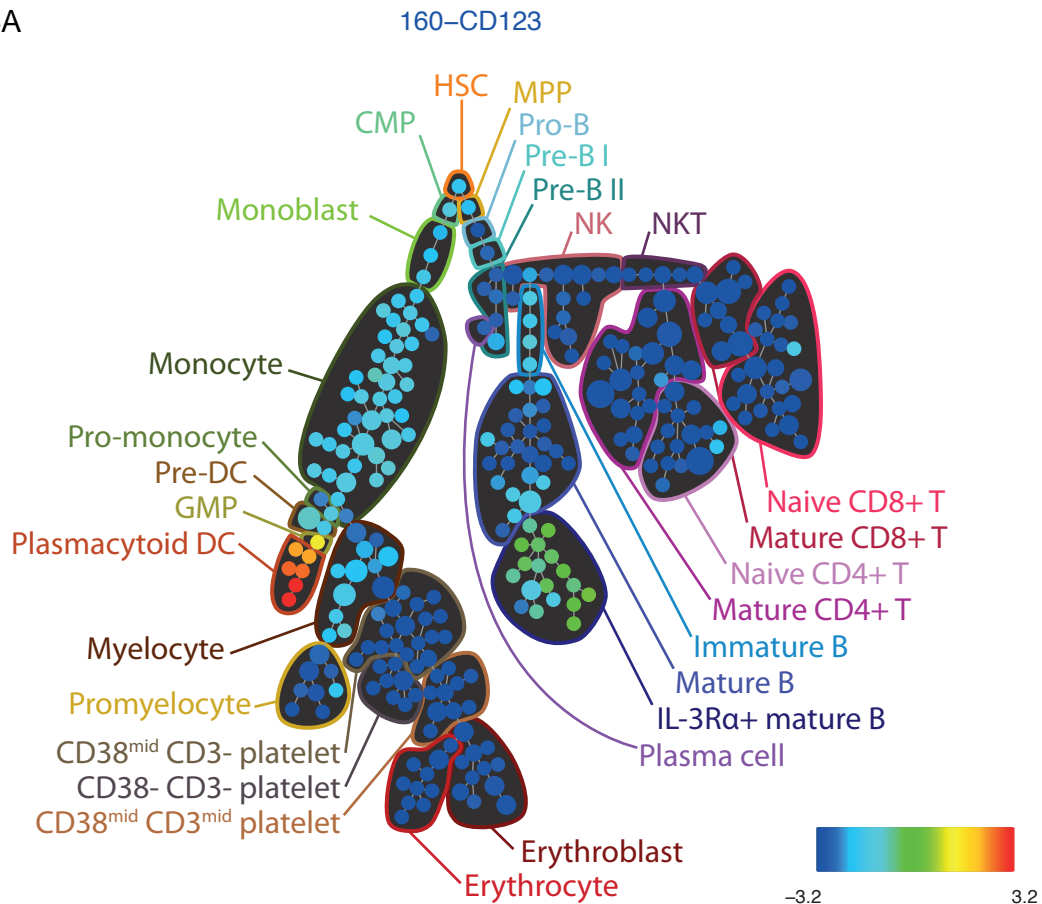


Figure S4A

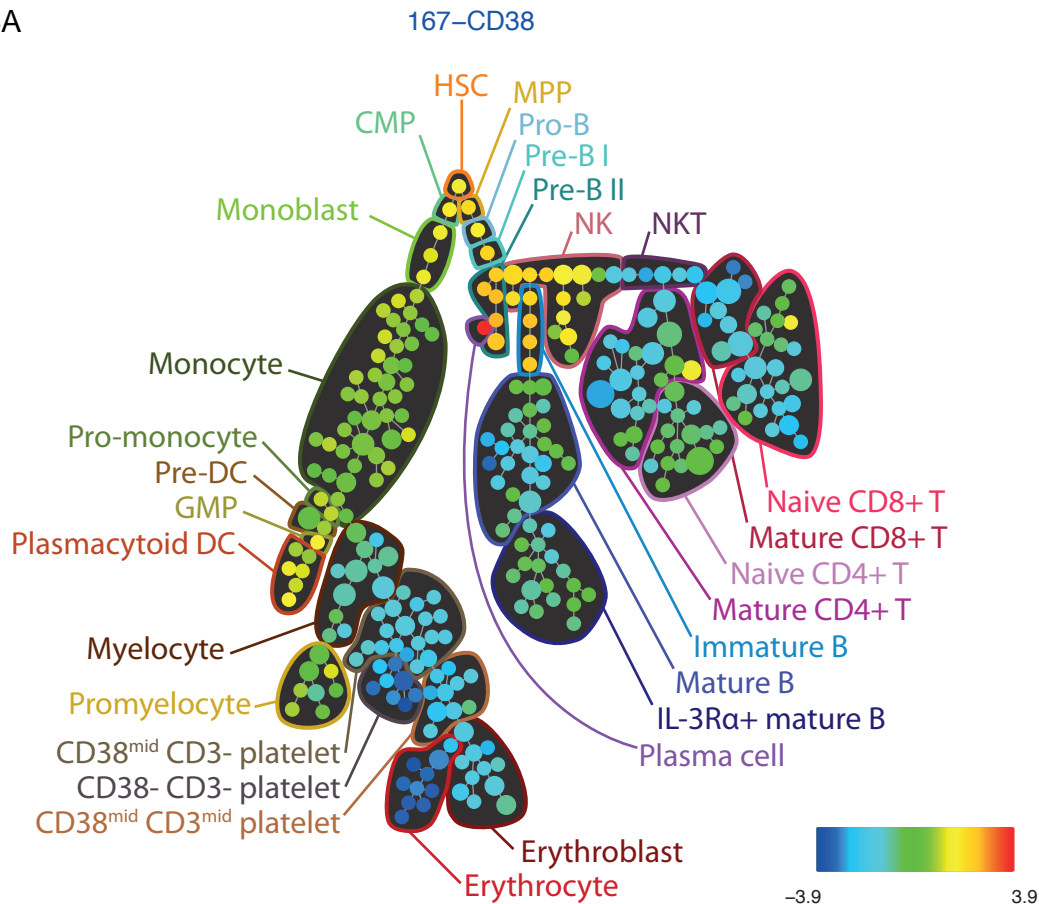


Figure S4A

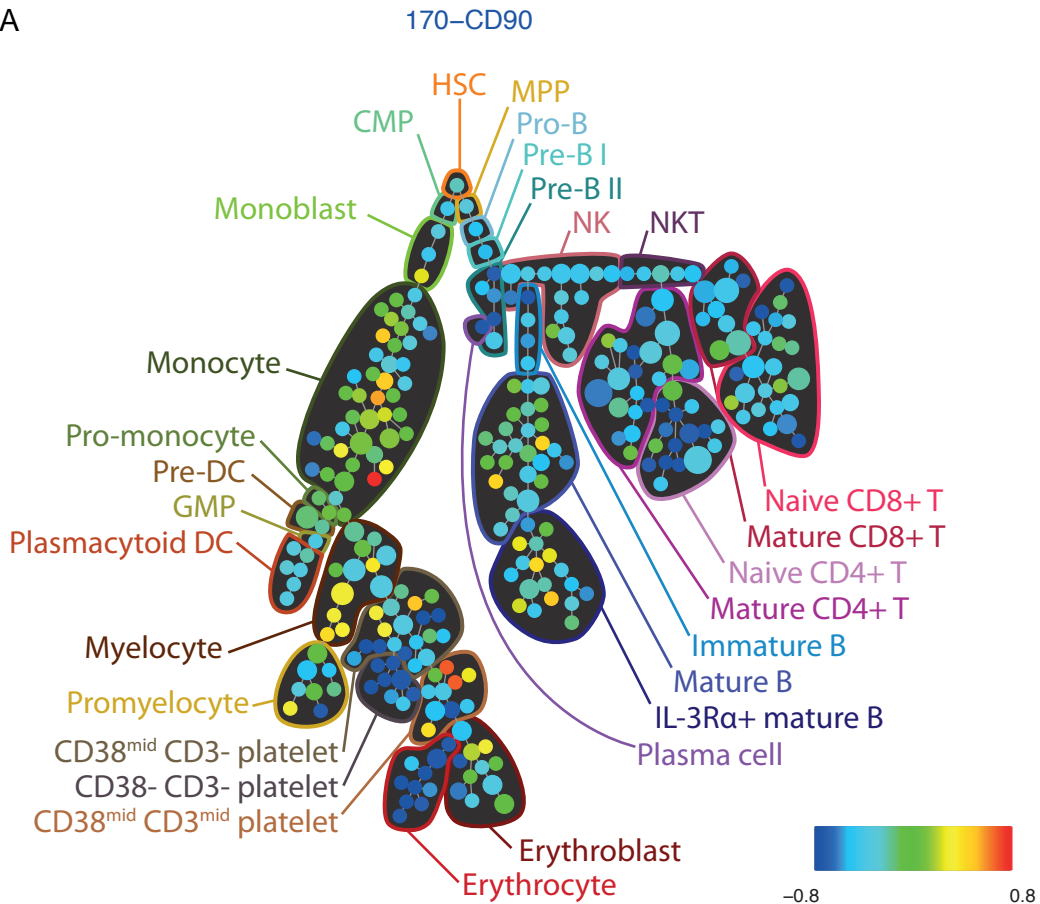


Figure S4A

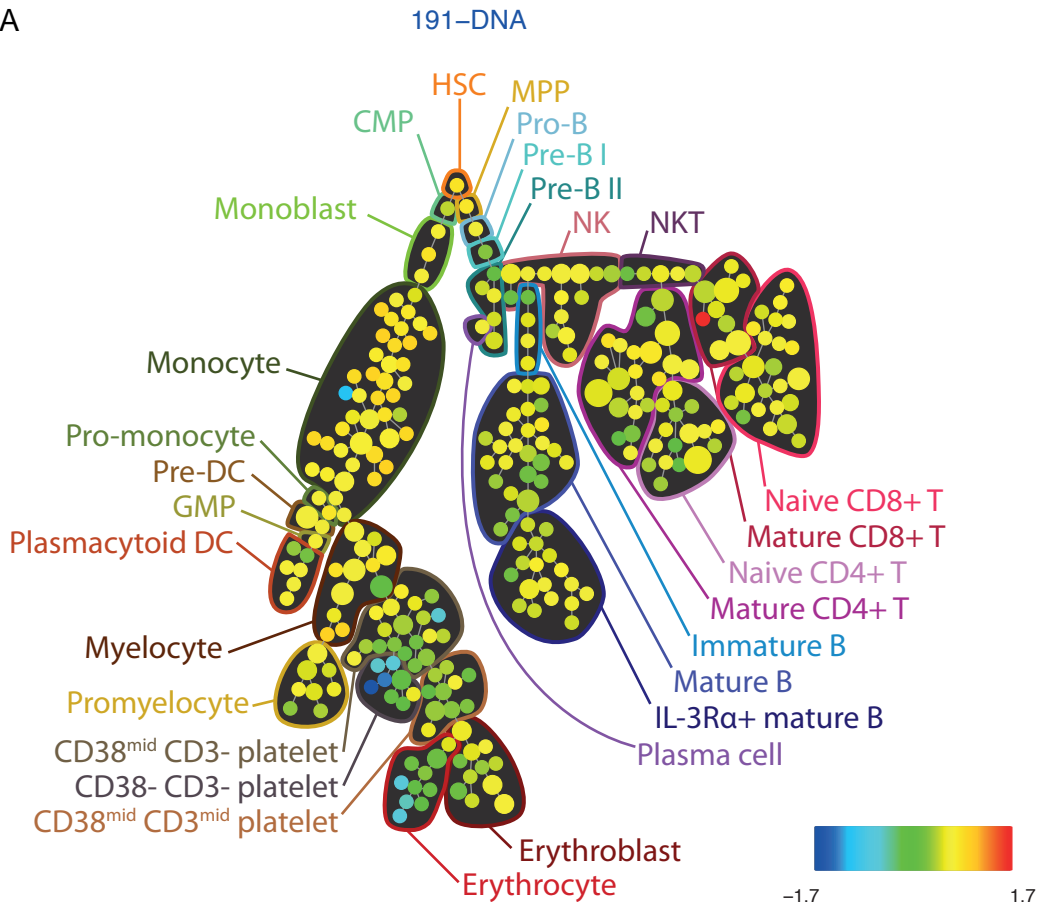


Figure S4A

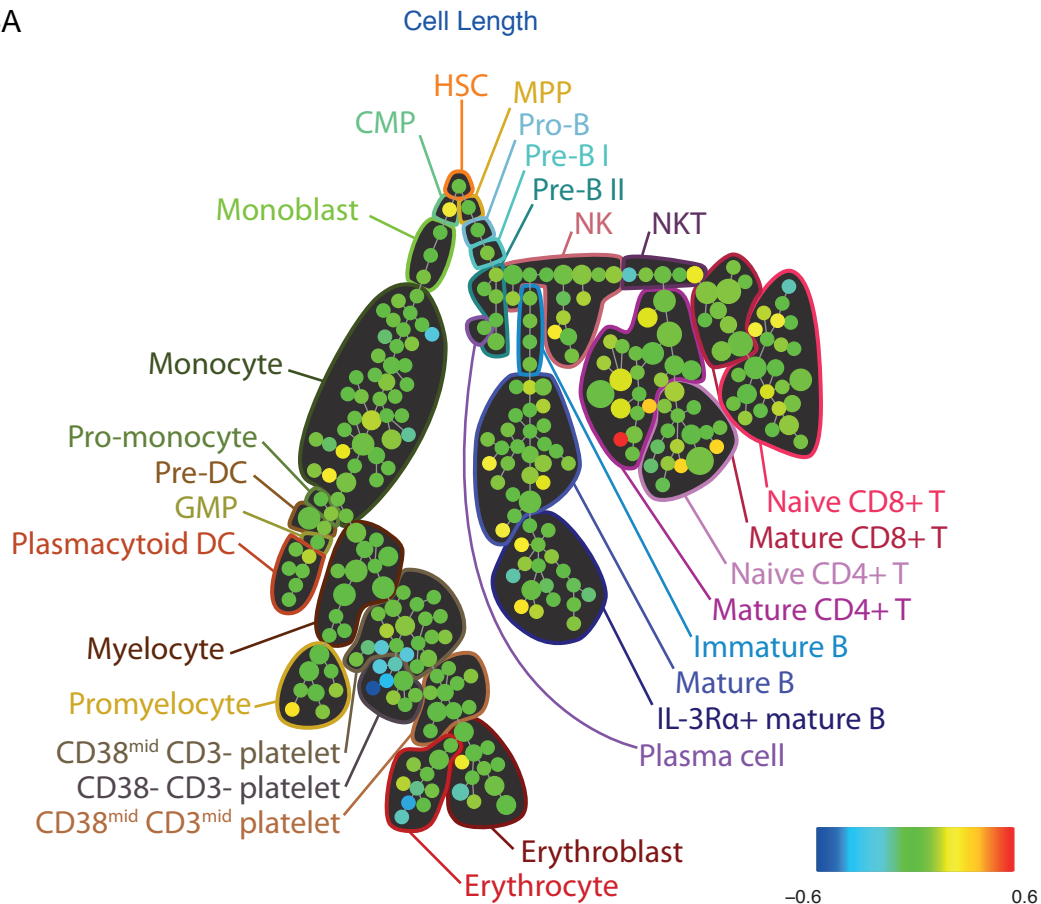


Figure S4B

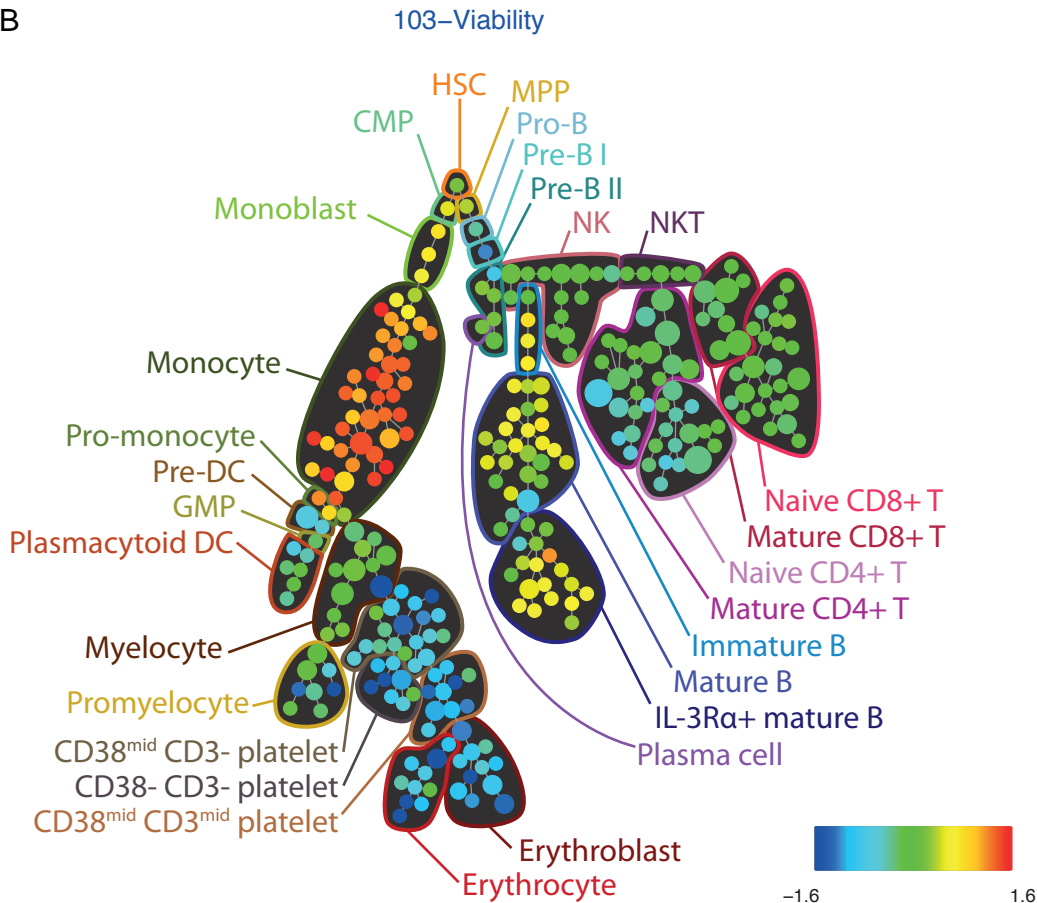


Figure S4B

110 114-CD3

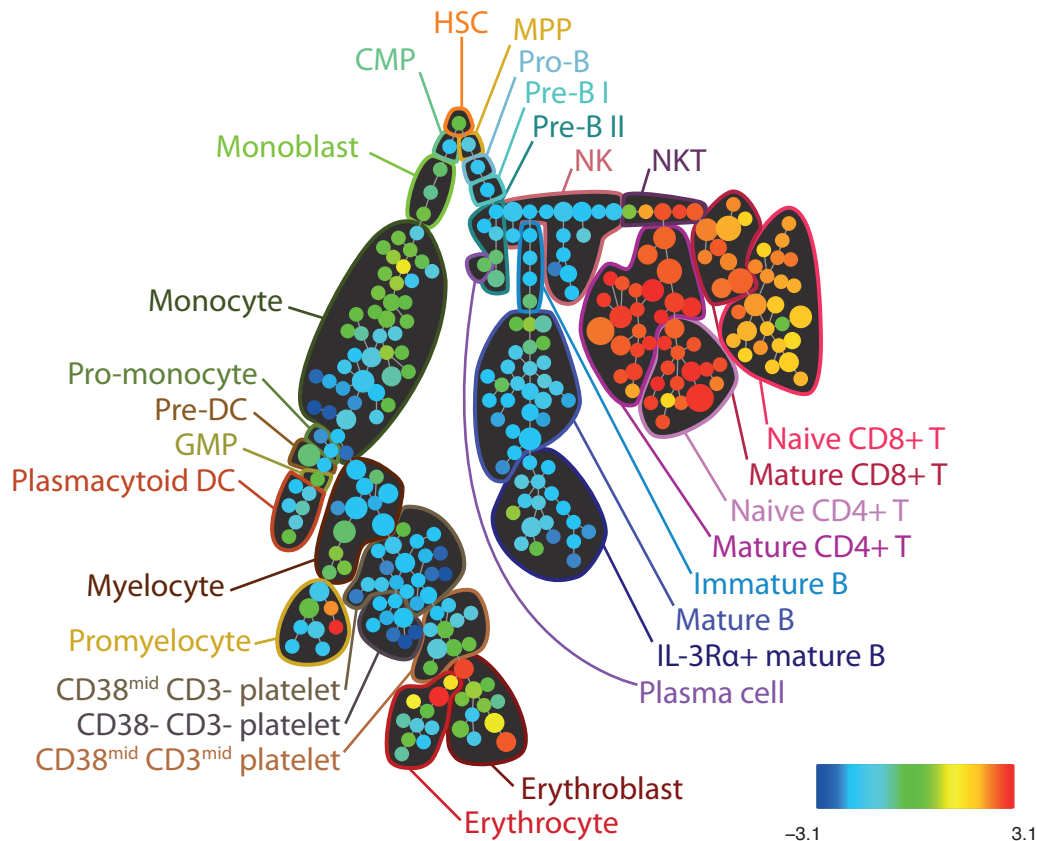


Figure S4B

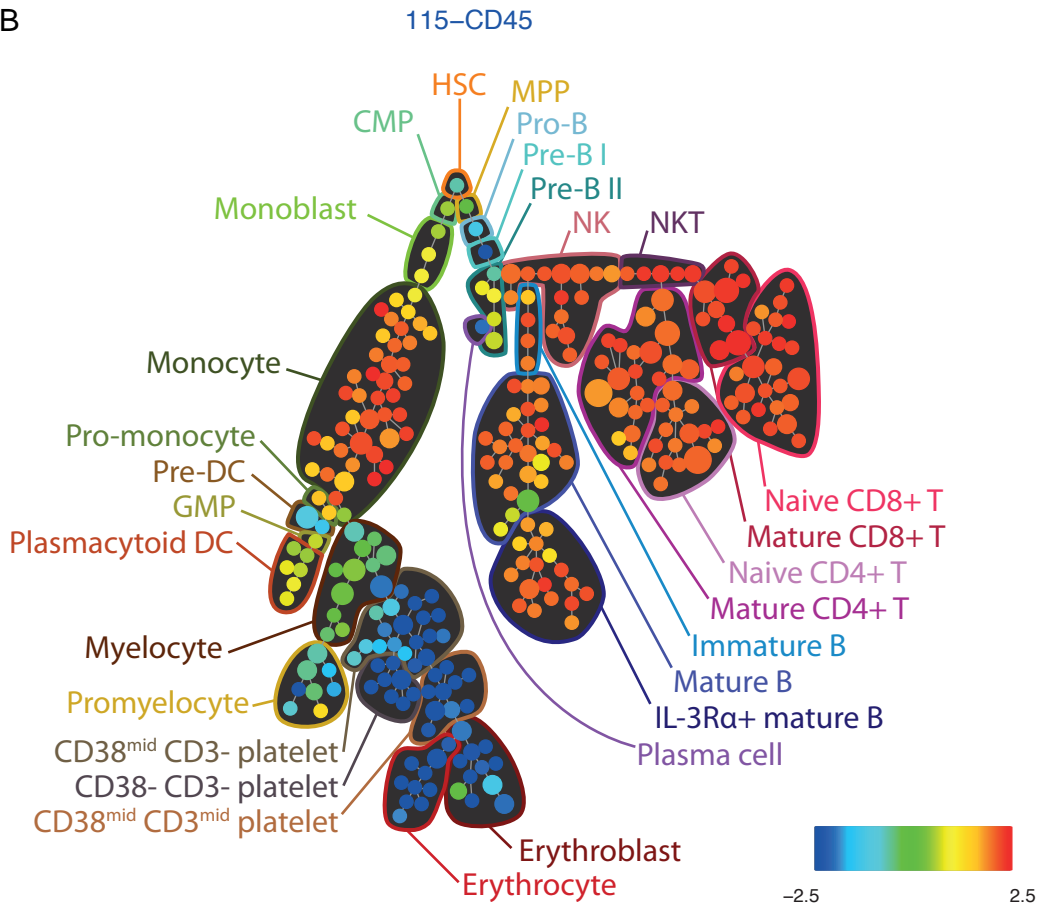


Figure S4B

139-CD45RA

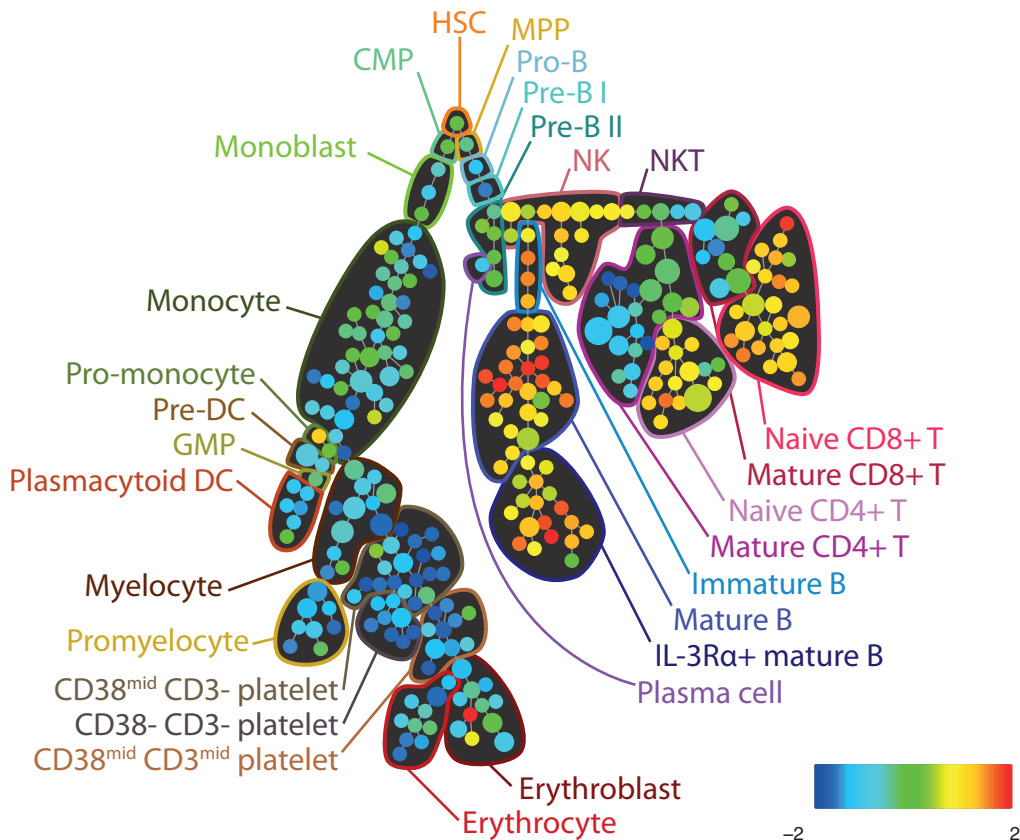


Figure S4B

141-CD235ab

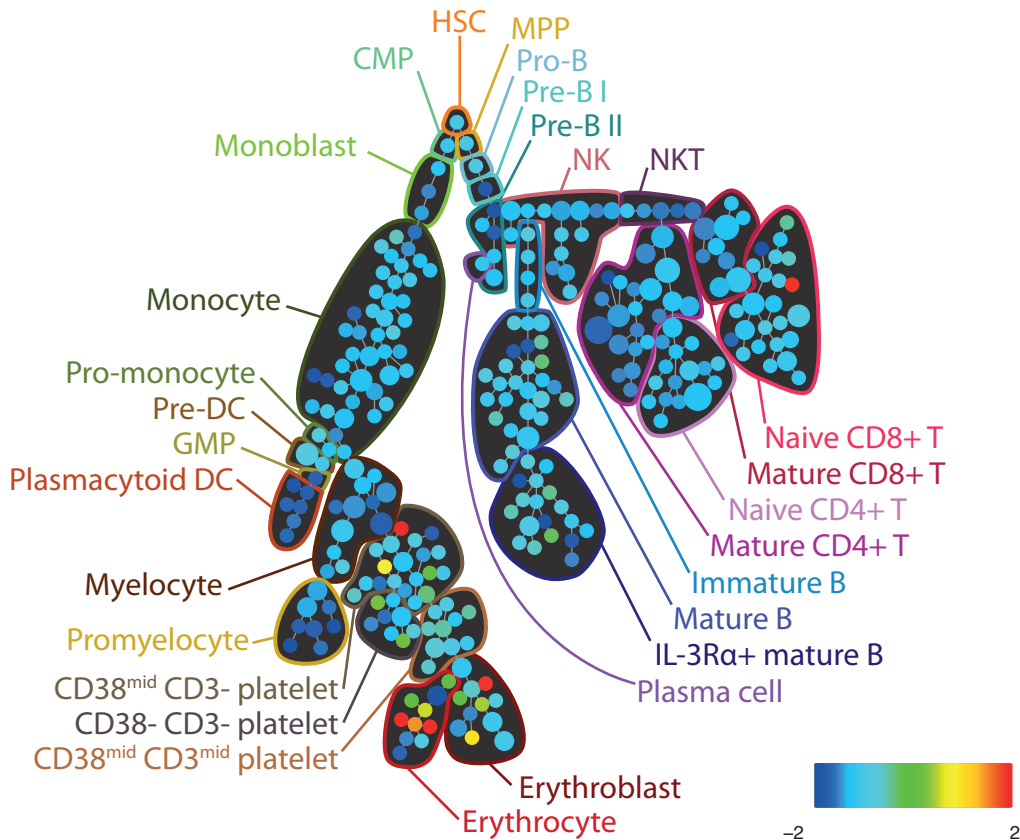


Figure S4B

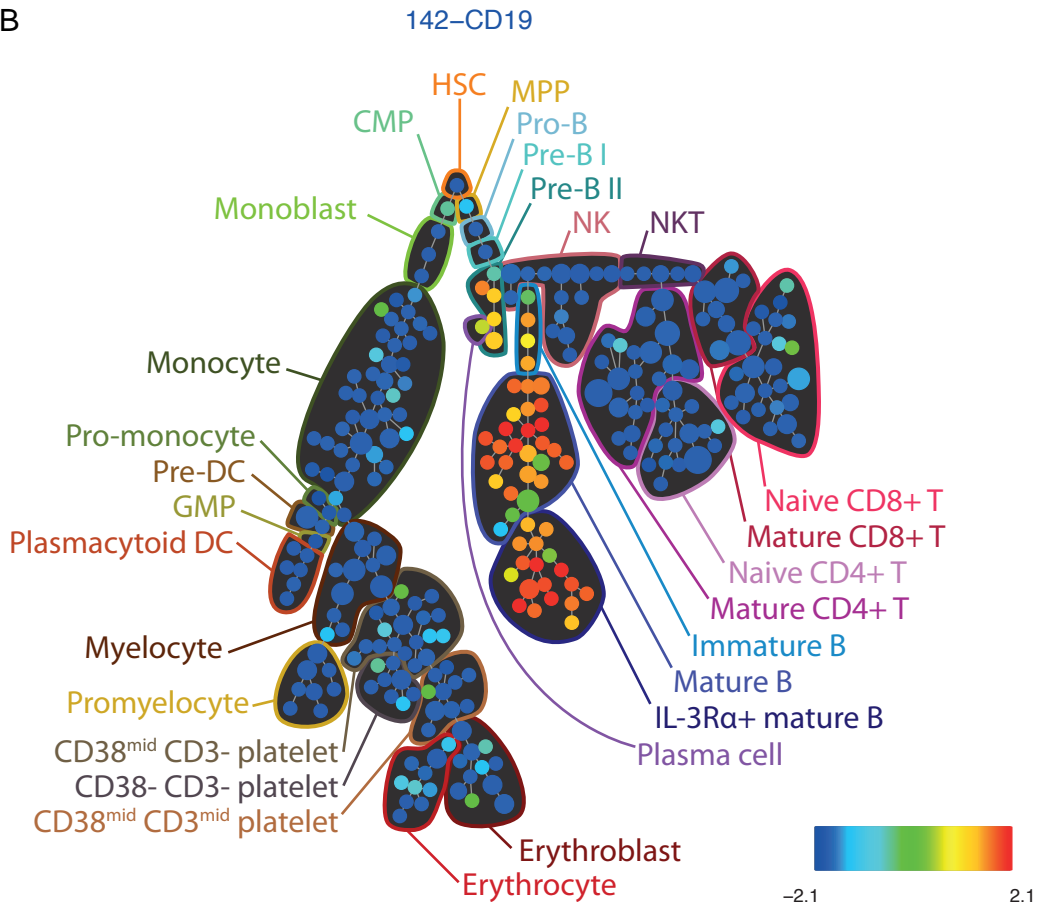


Figure S4B

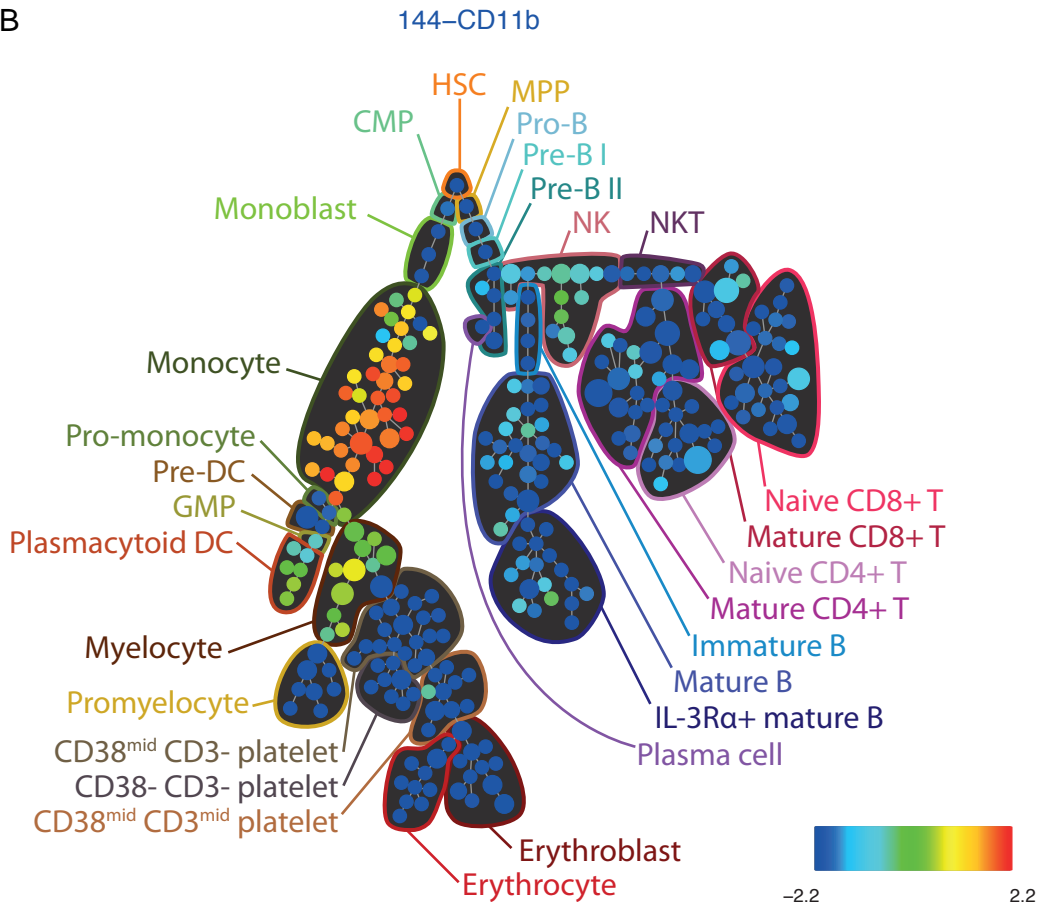


Figure S4B

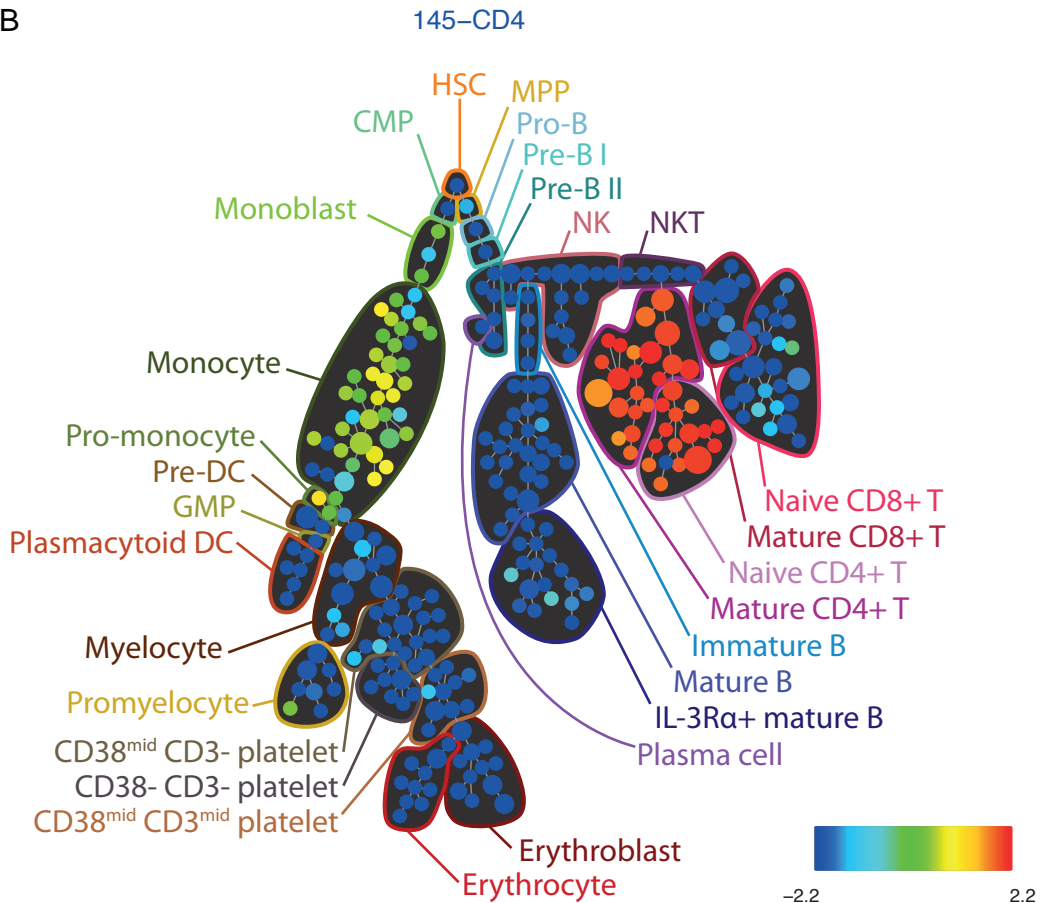


Figure S4B

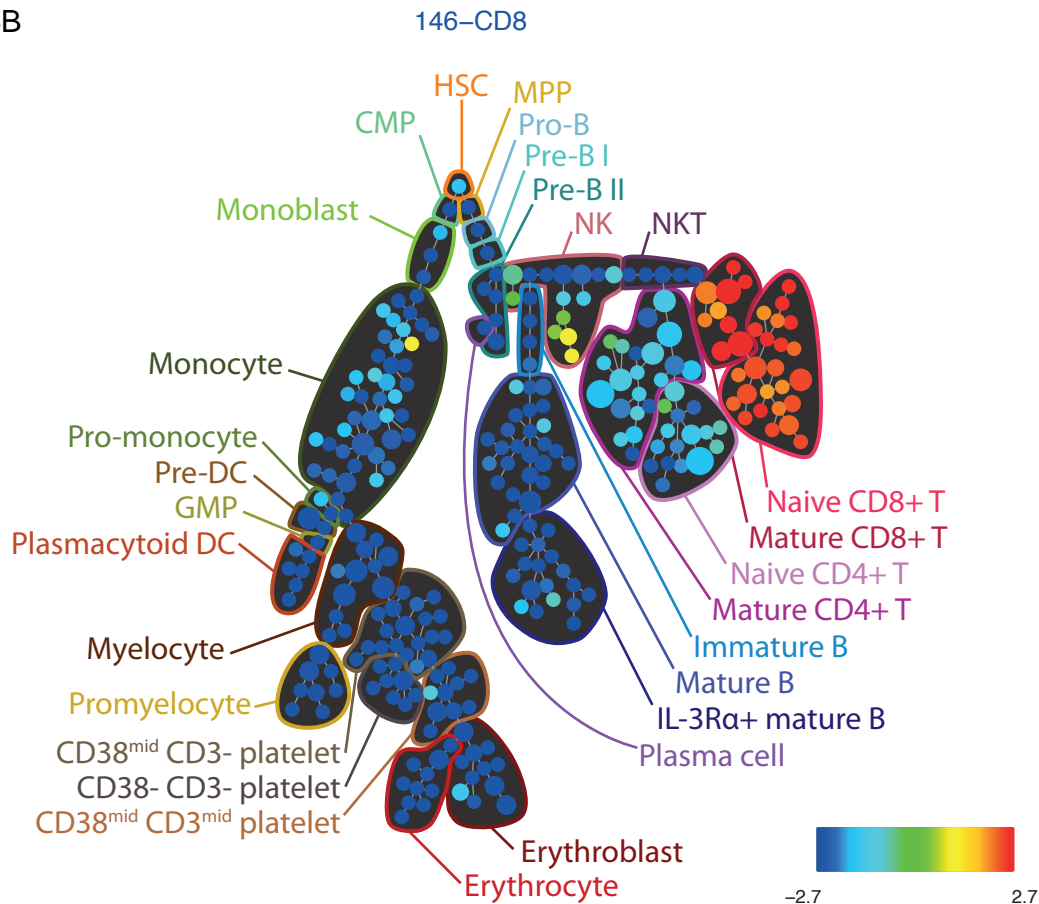


Figure S4B

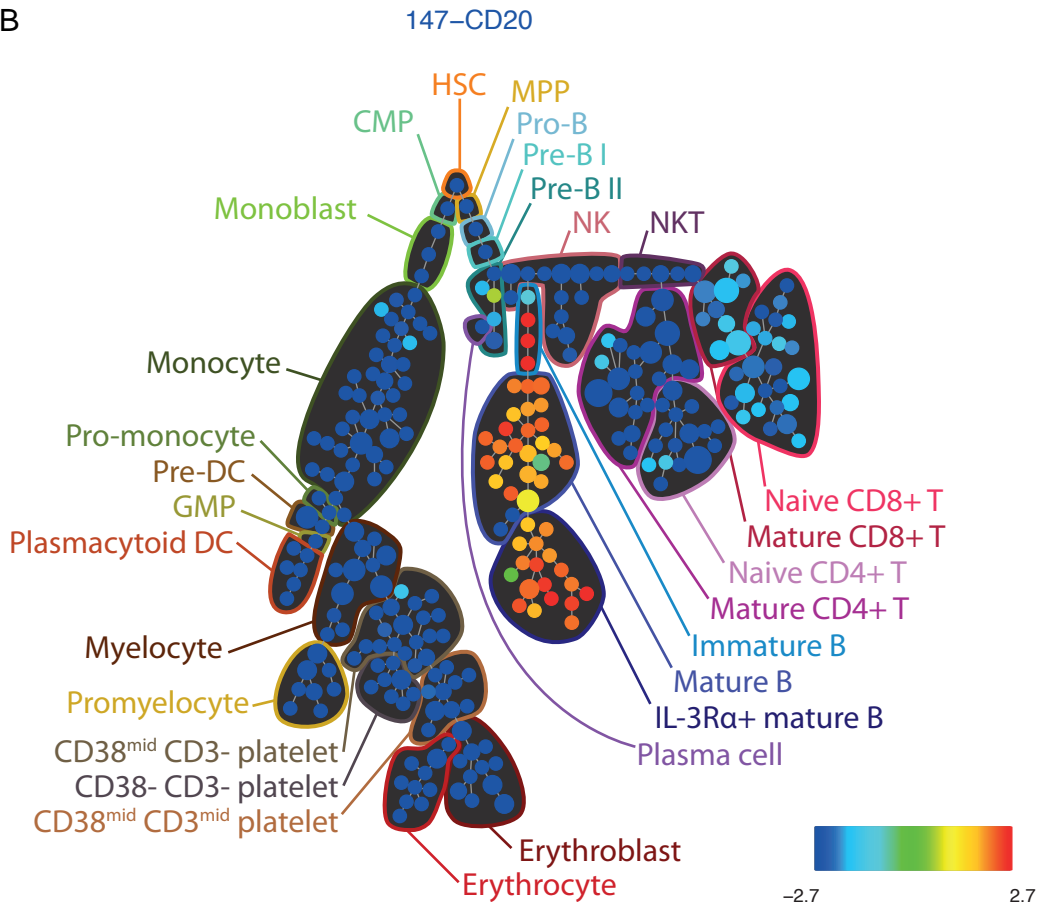


Figure S4B

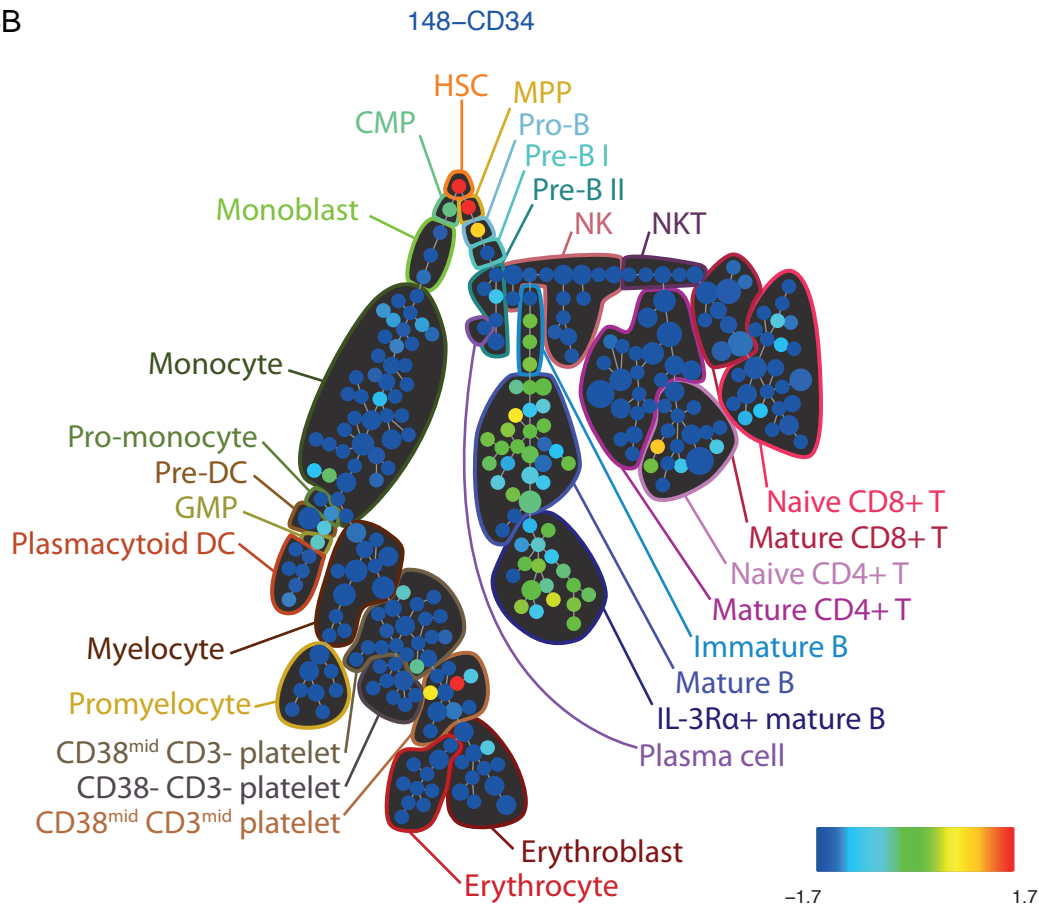


Figure S4B

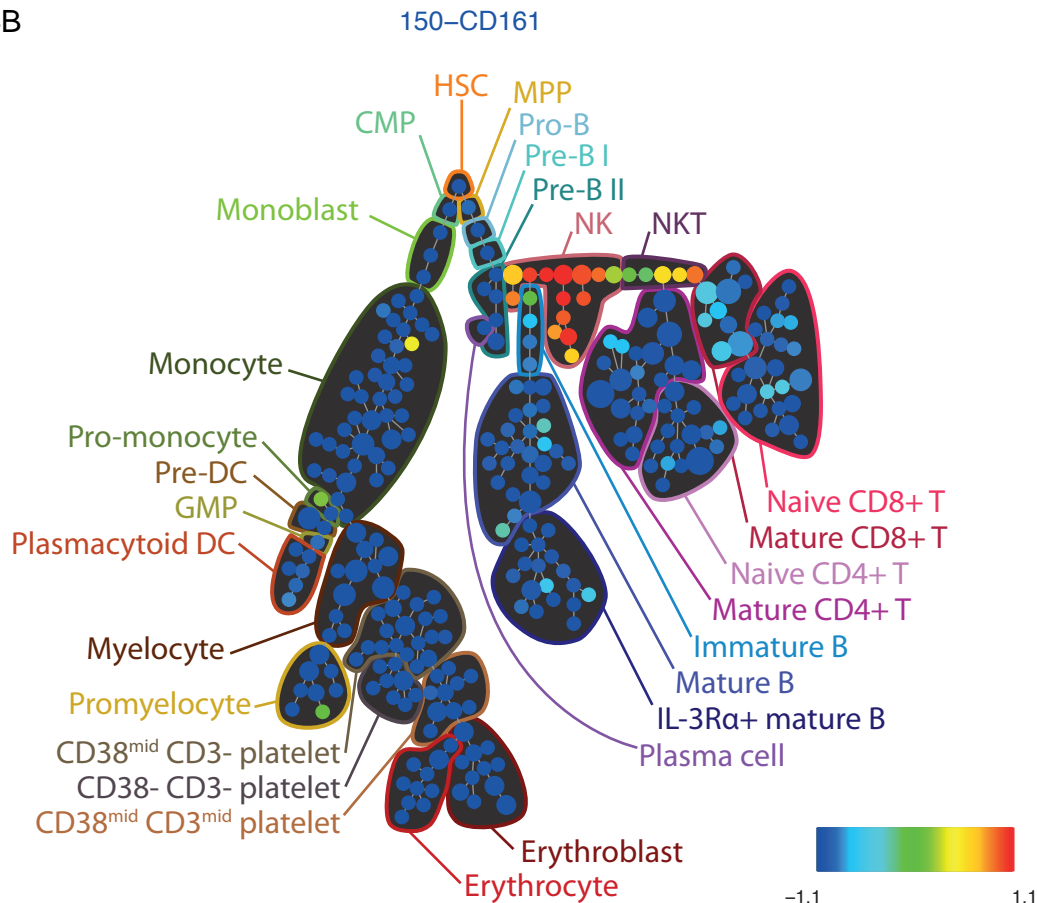


Figure S4B

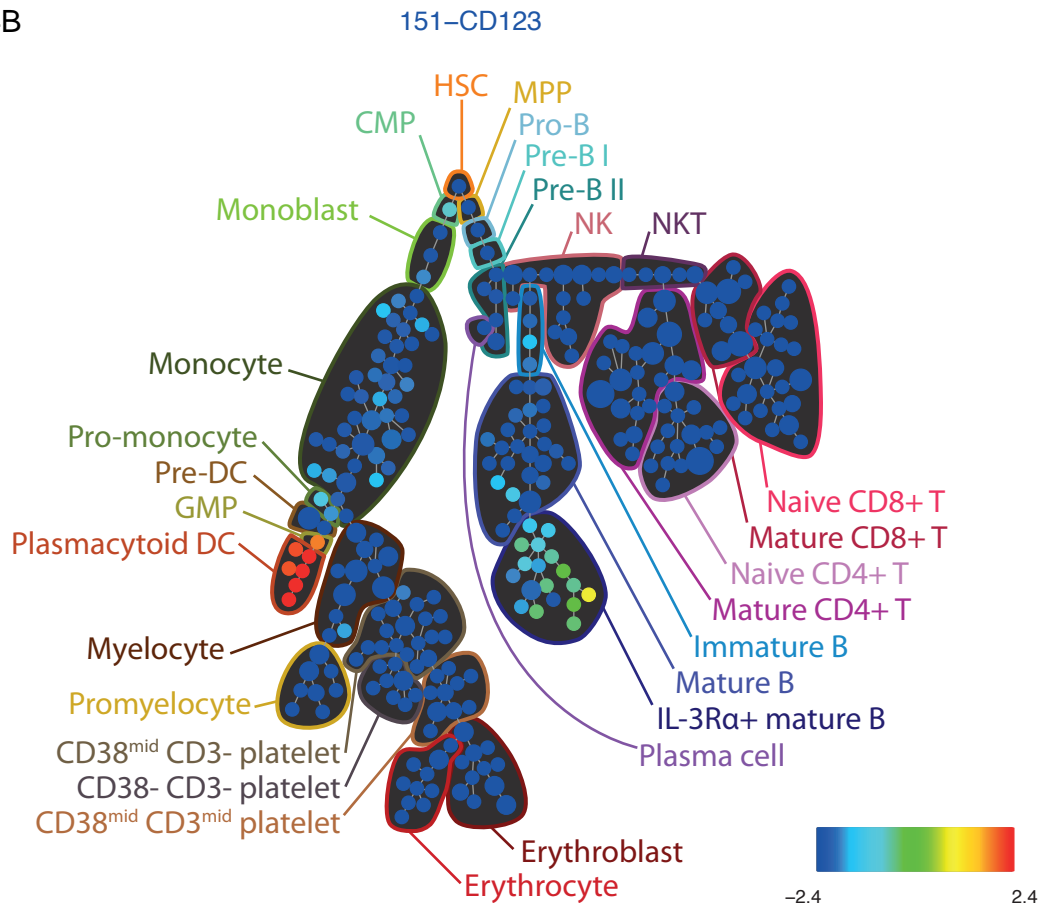


Figure S4B

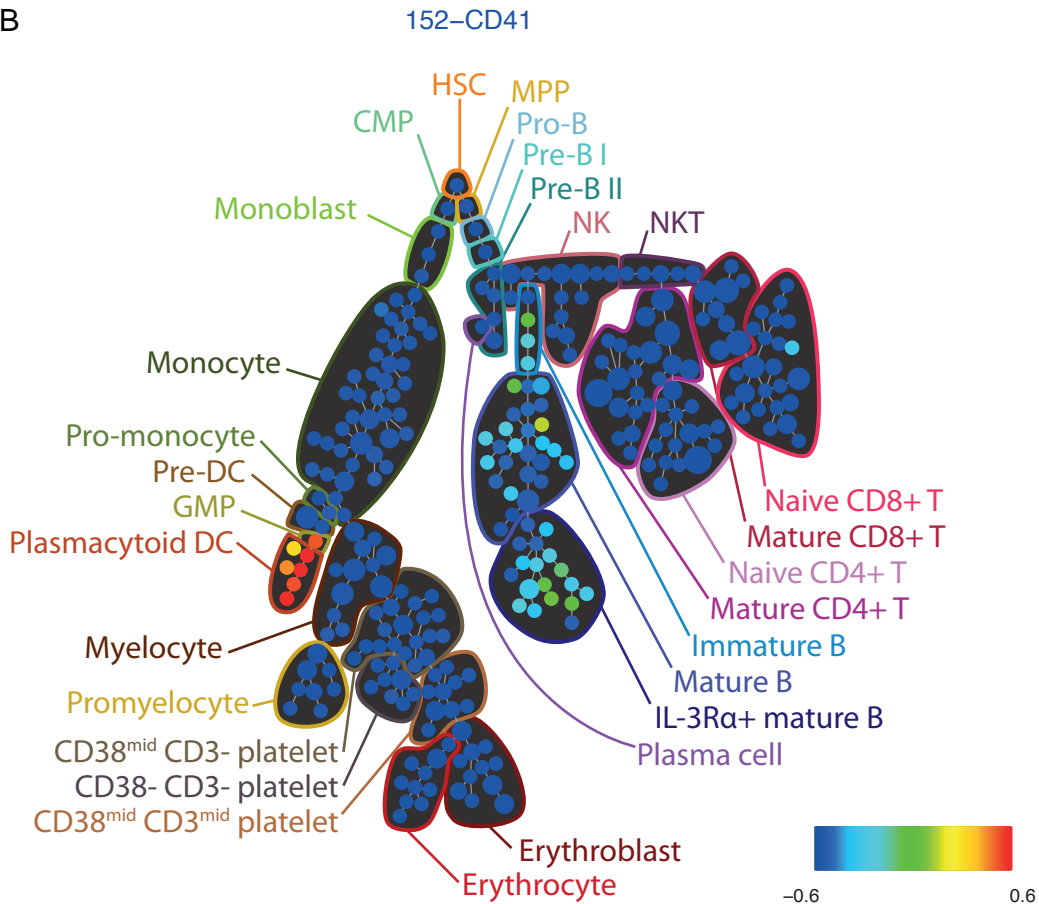


Figure S4B

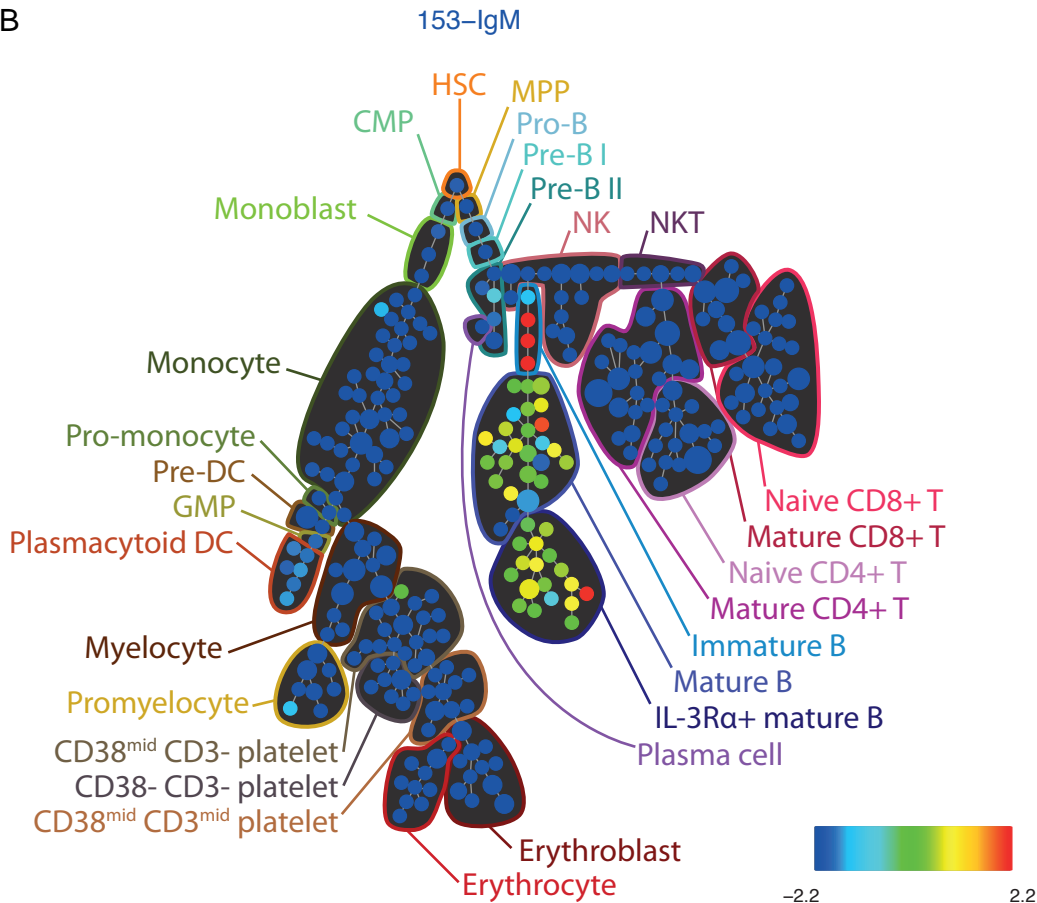


Figure S4B

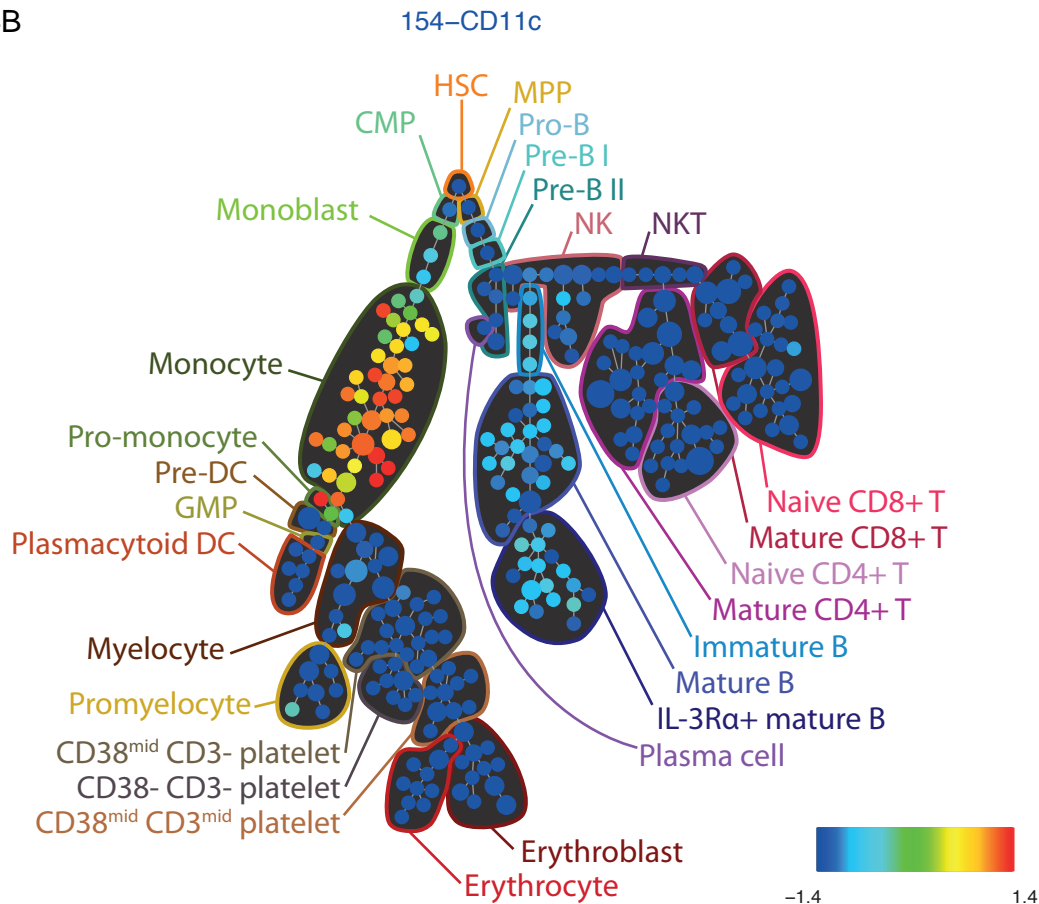


Figure S4B

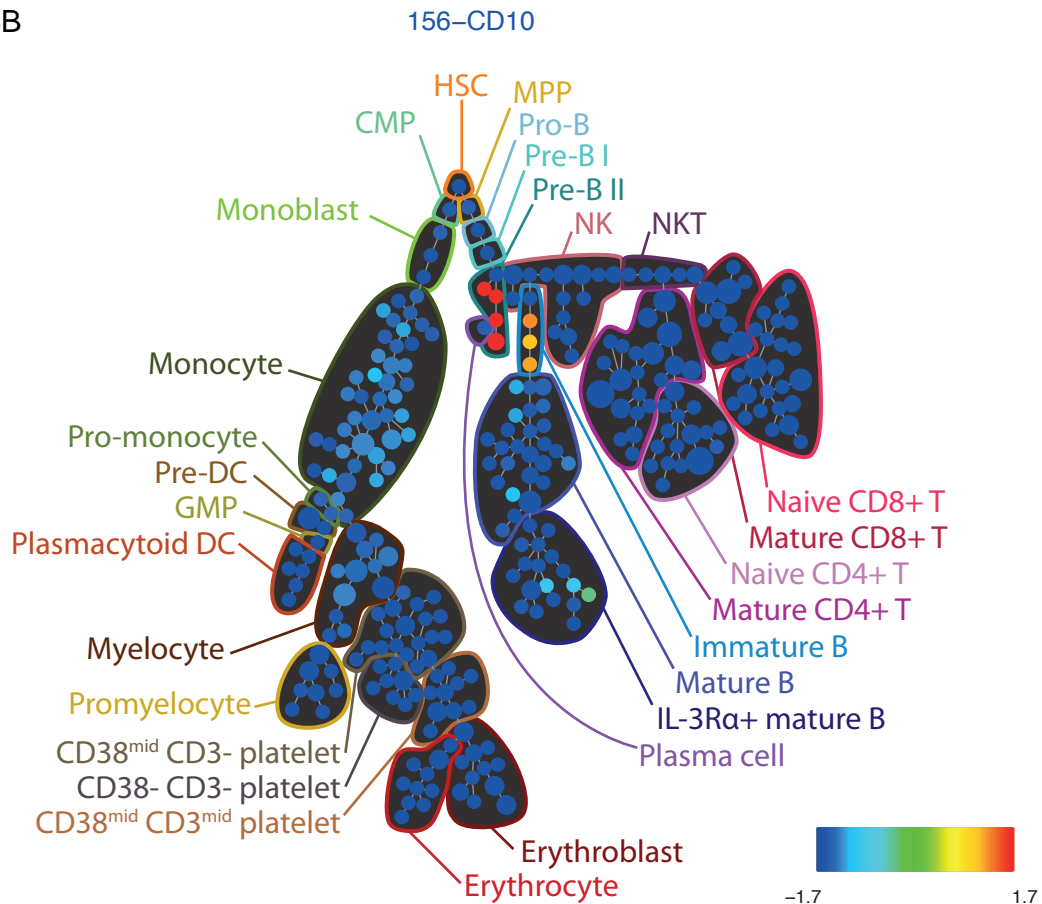


Figure S4B

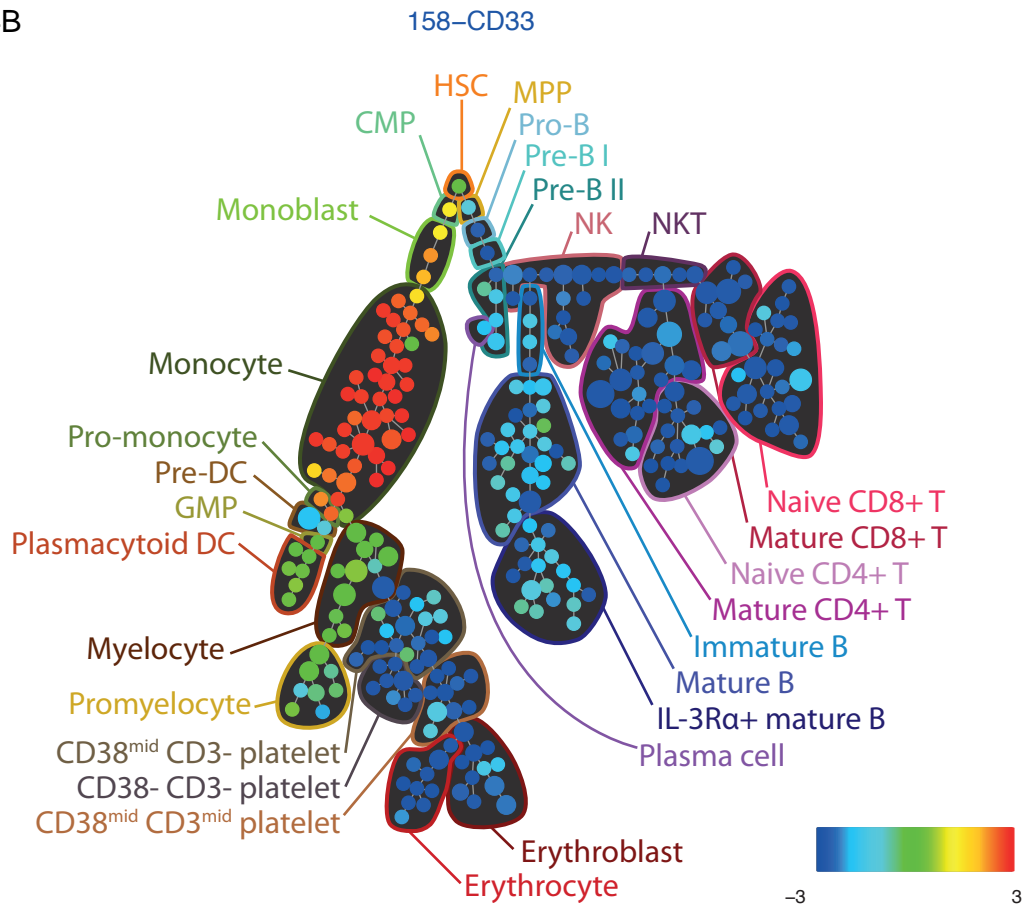


Figure S4B

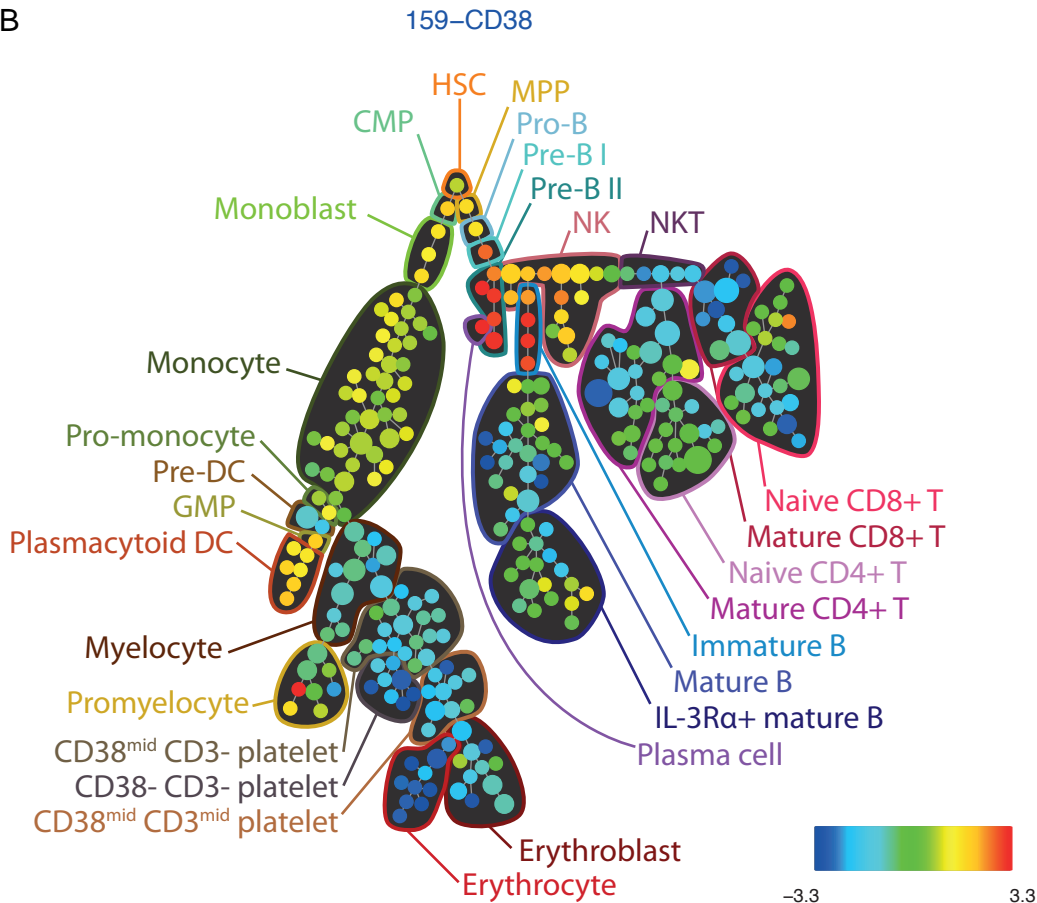


Figure S4B

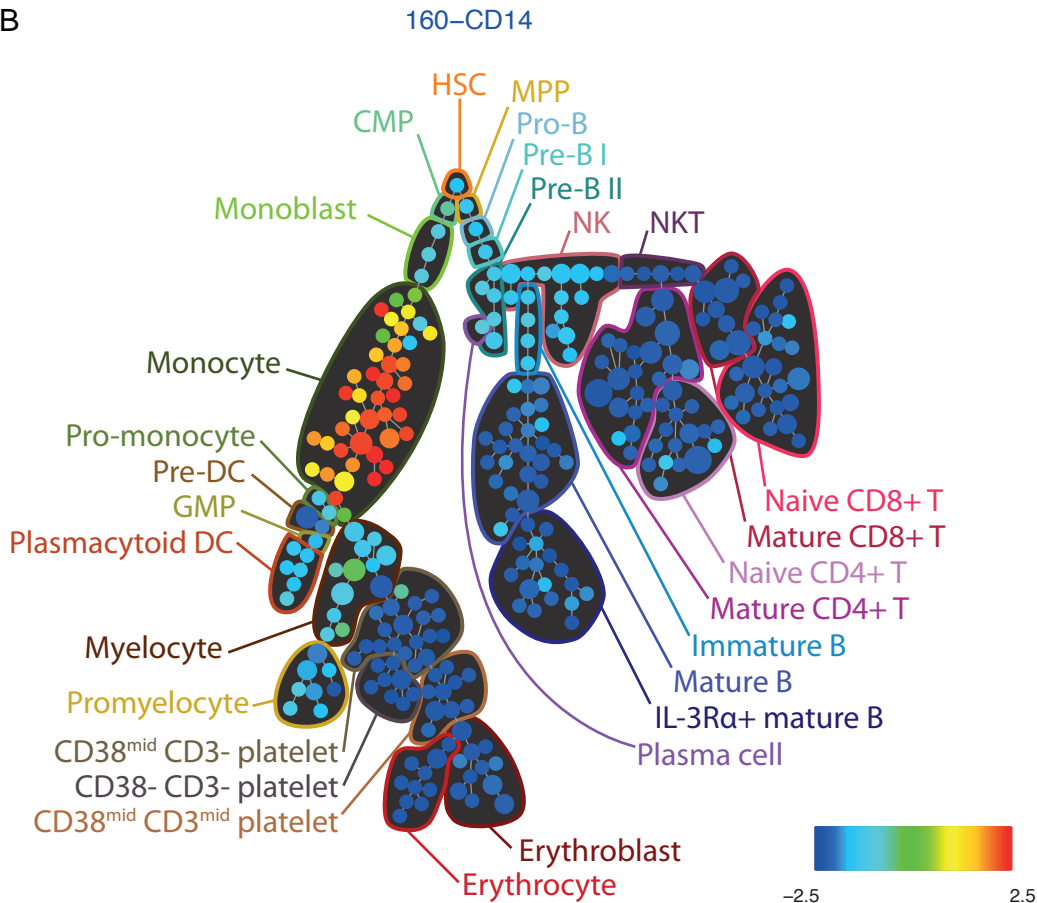


Figure S4B

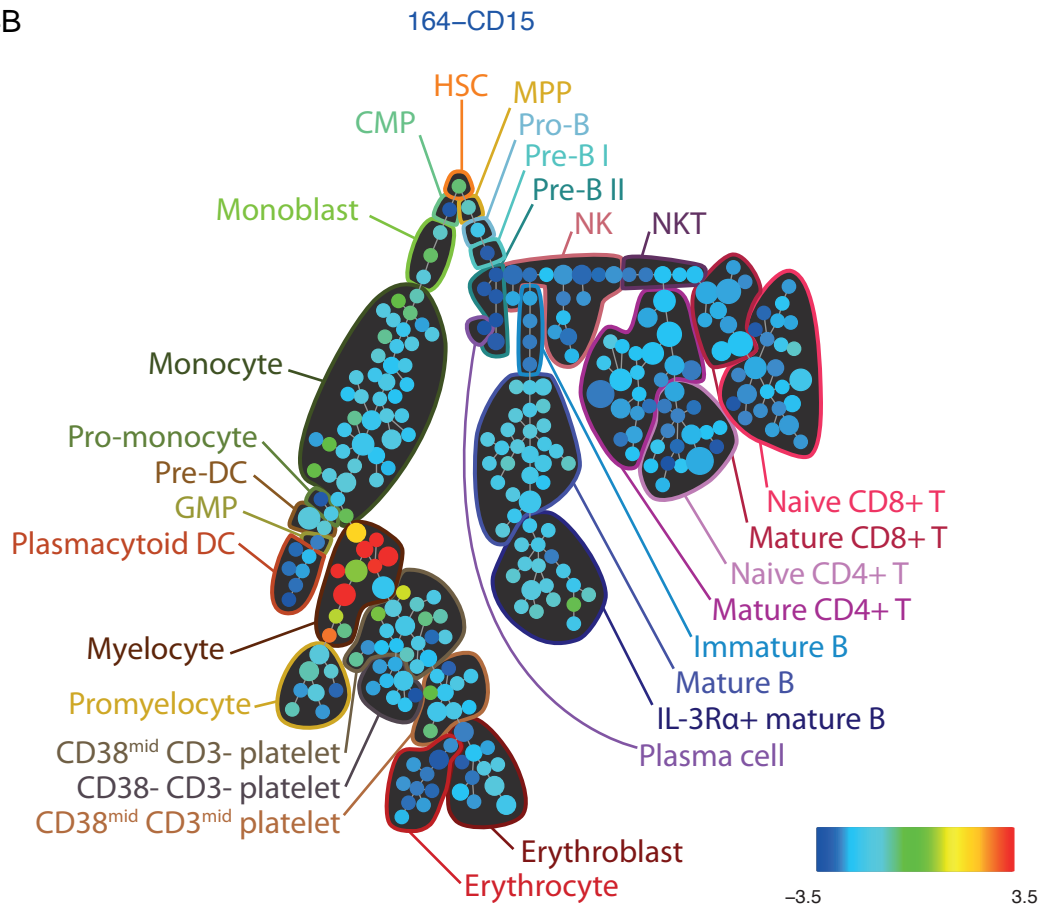


Figure S4B

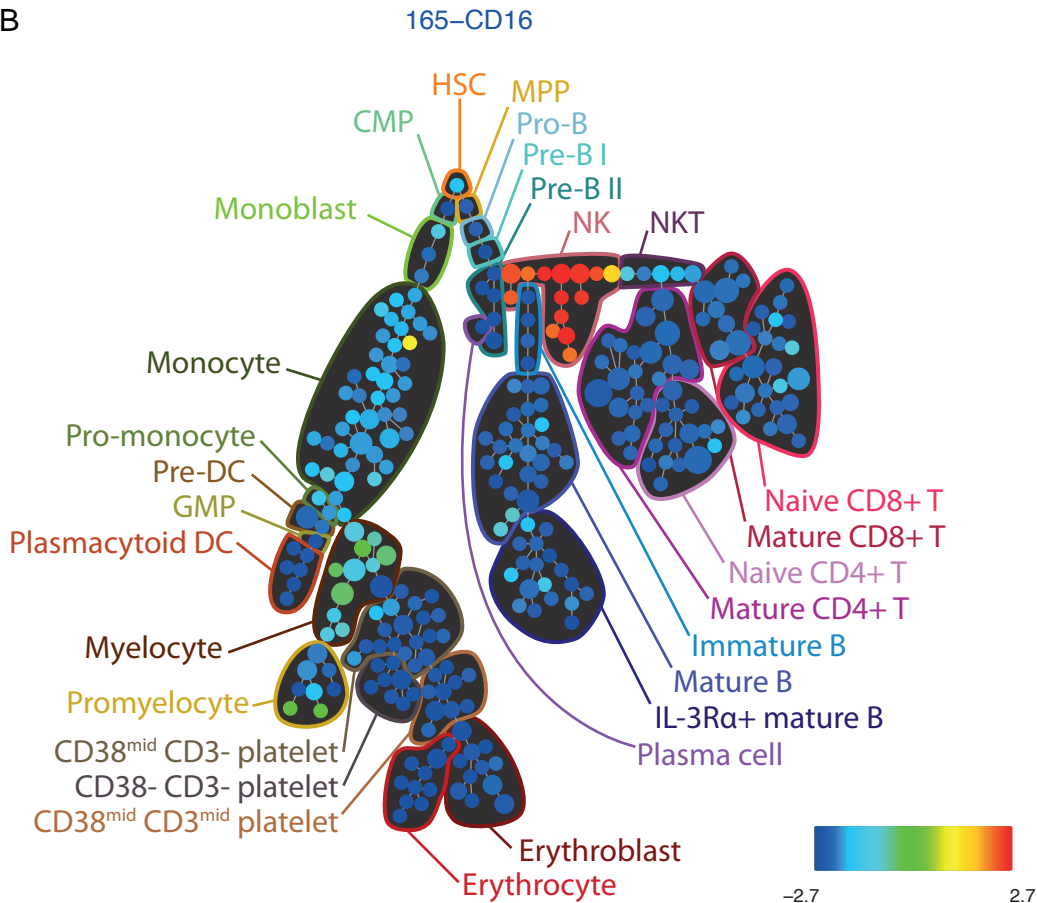


Figure S4B

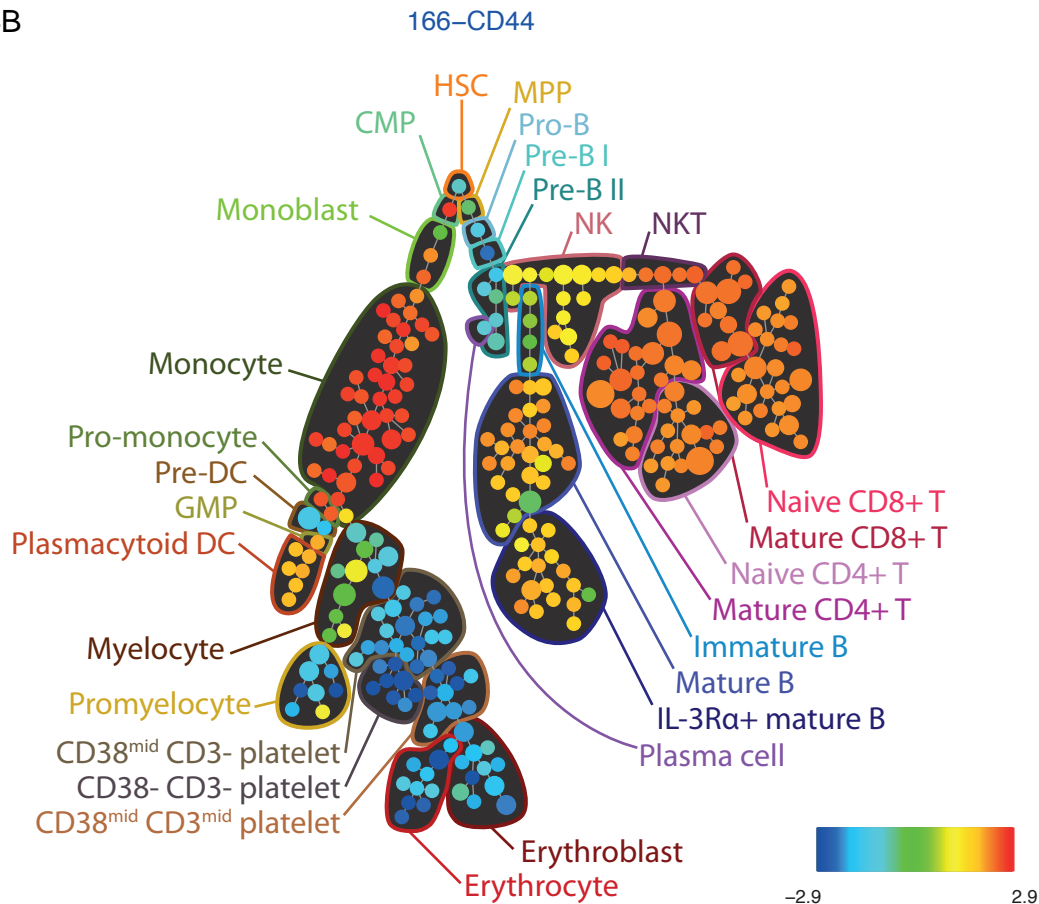


Figure S4B

167-CD7

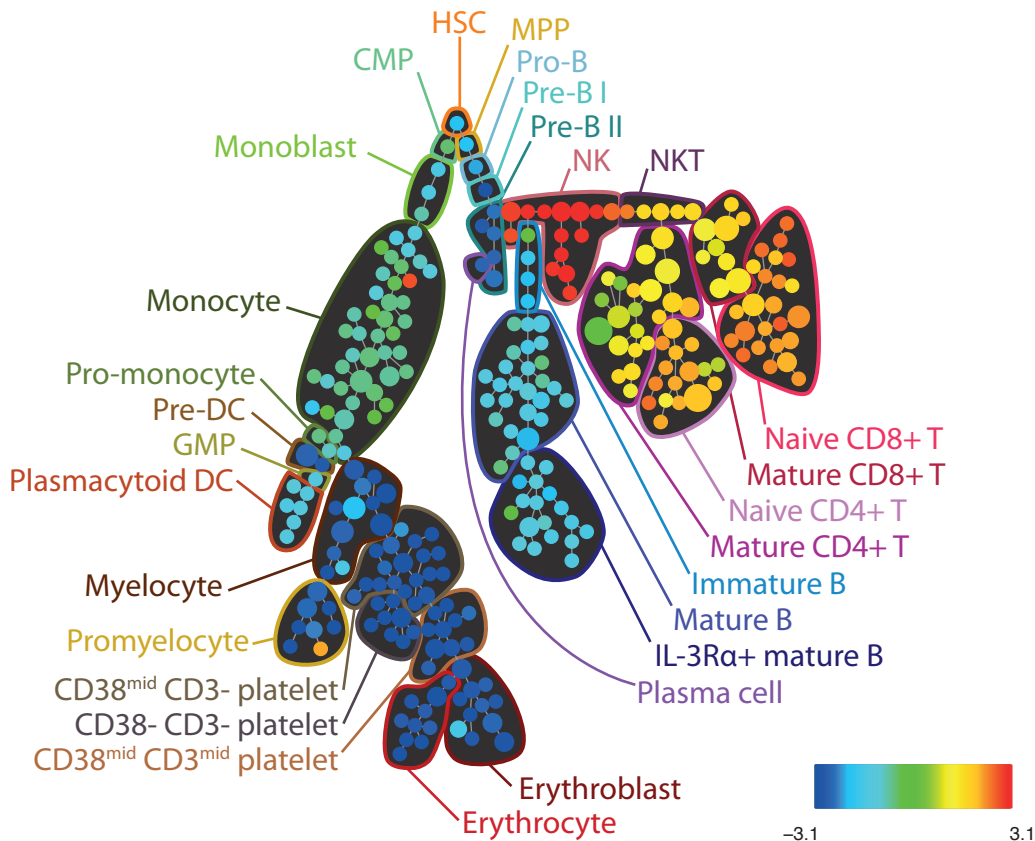


Figure S4B

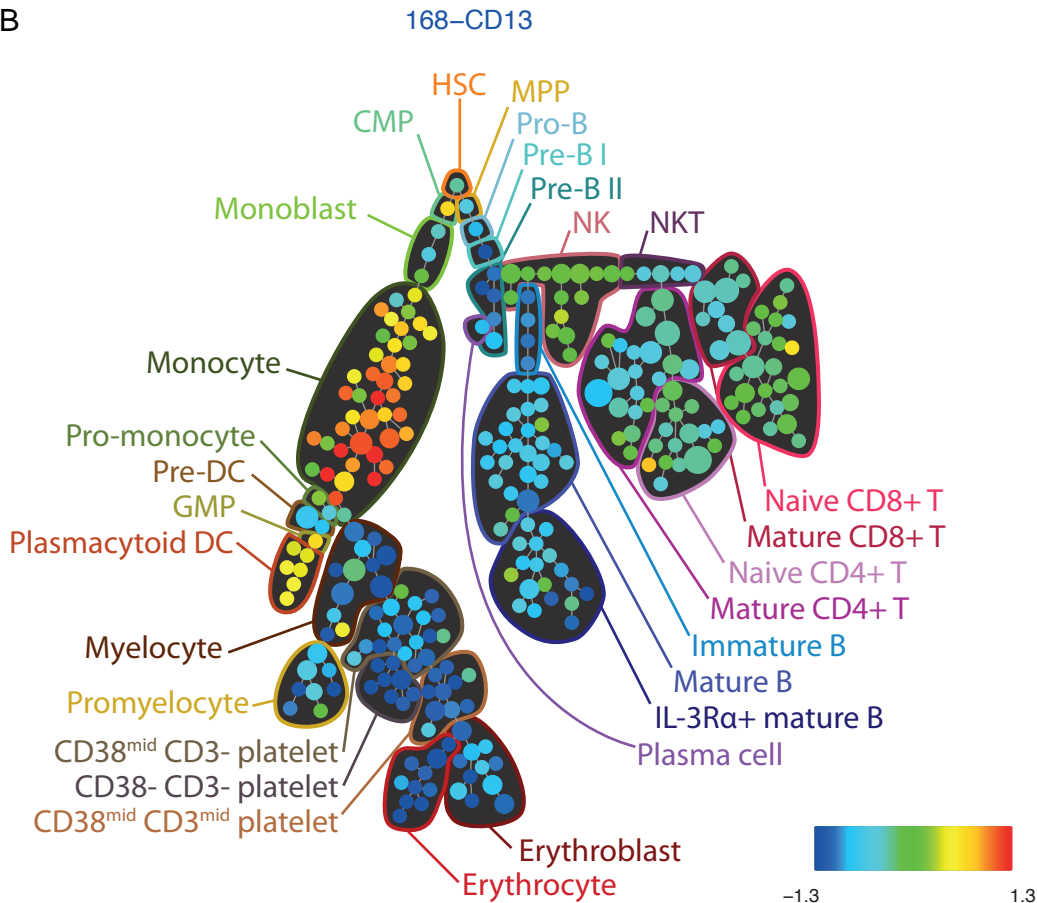


Figure S4B

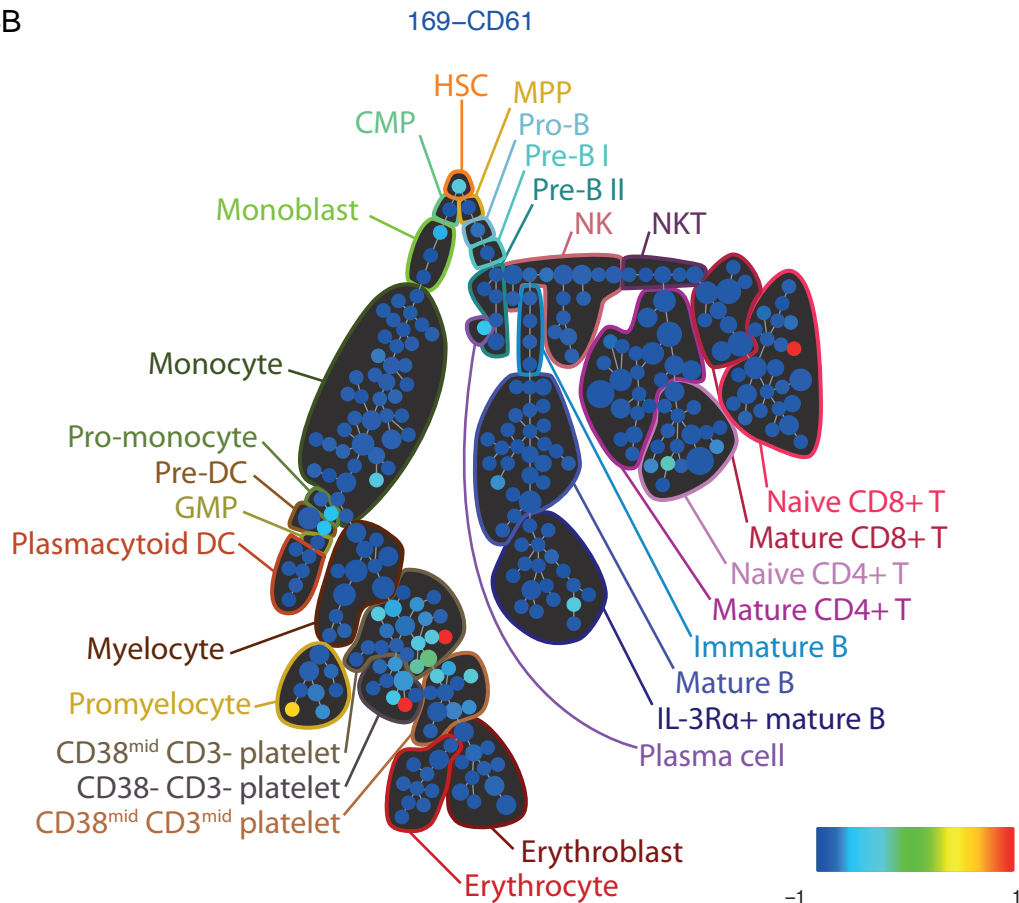


Figure S4B

170-CD56

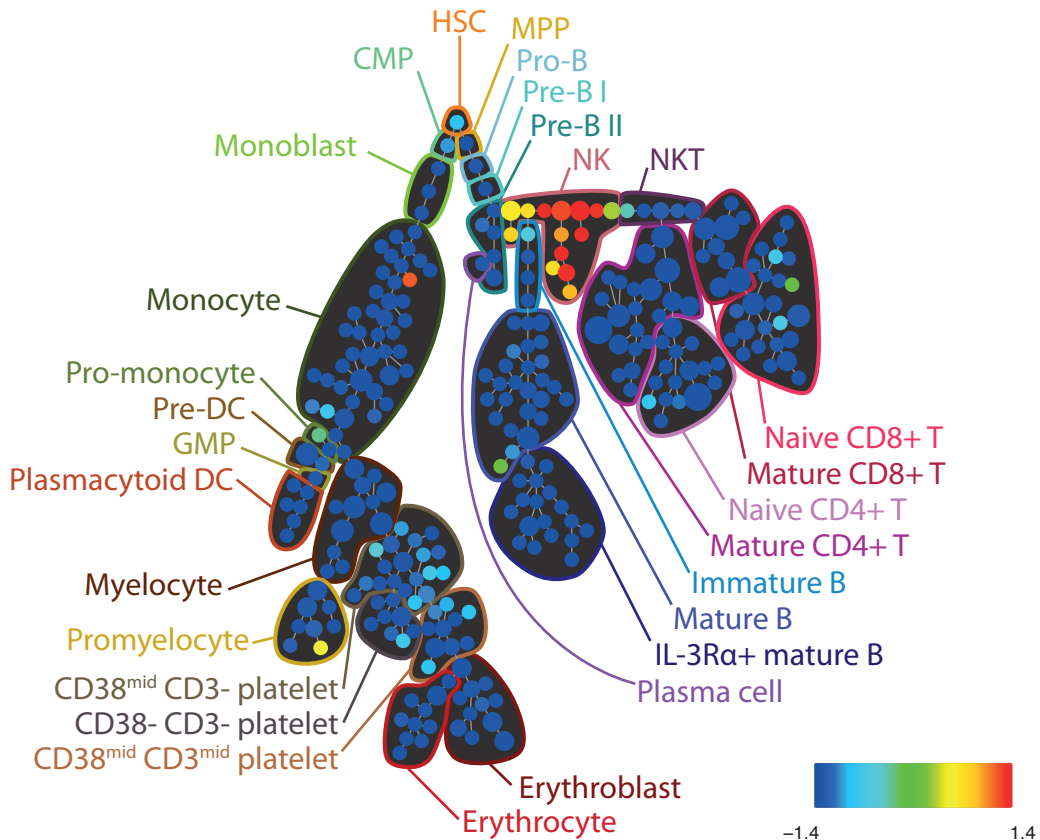


Figure S4B

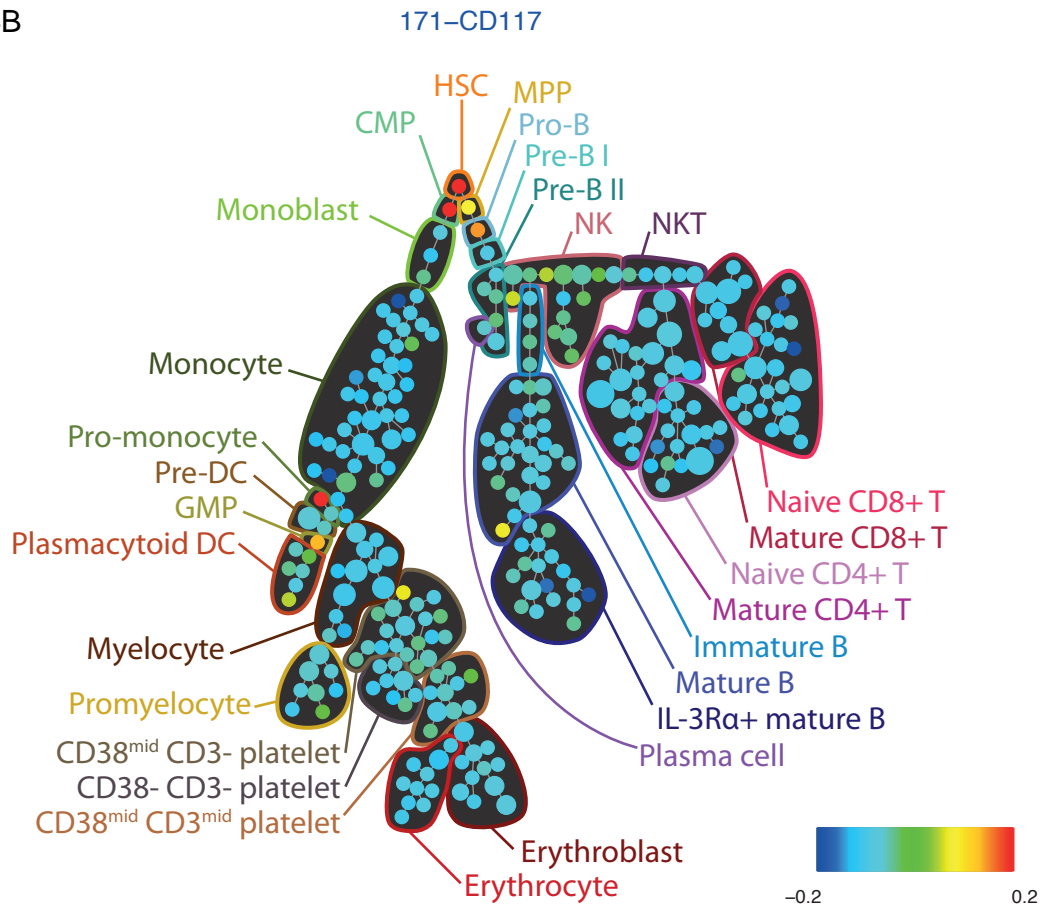


Figure S4B

172-CD47

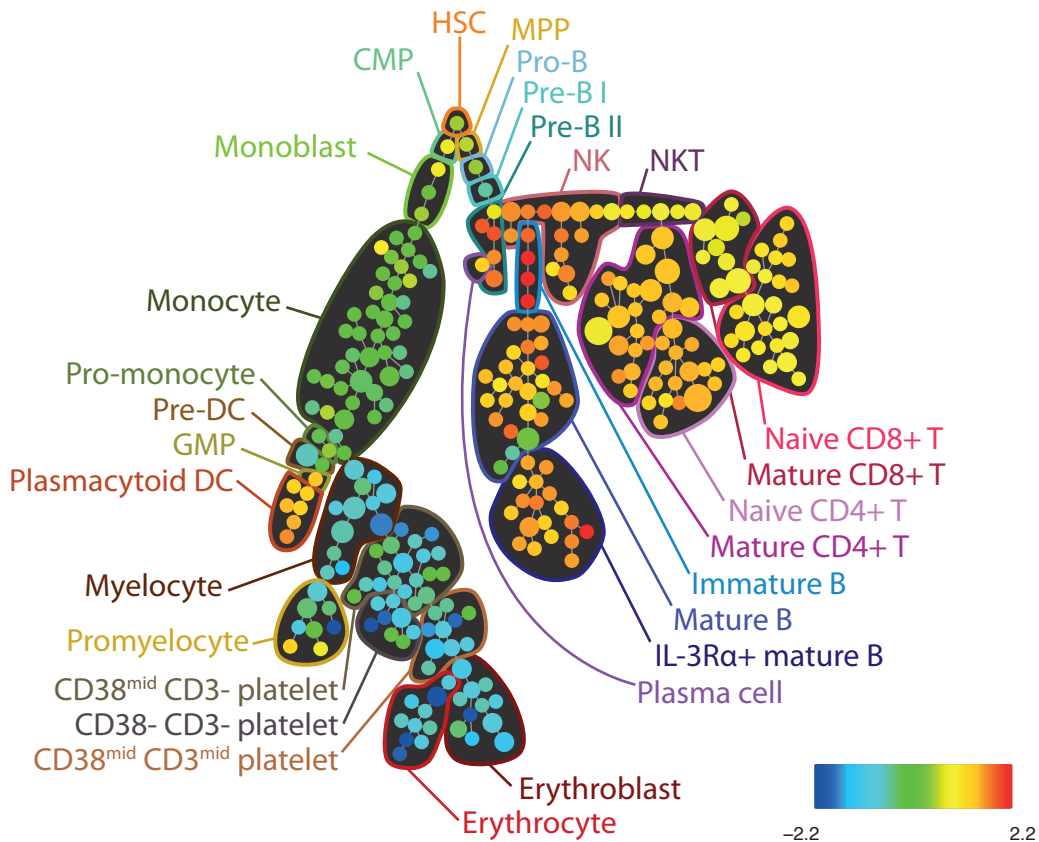


Figure S4B

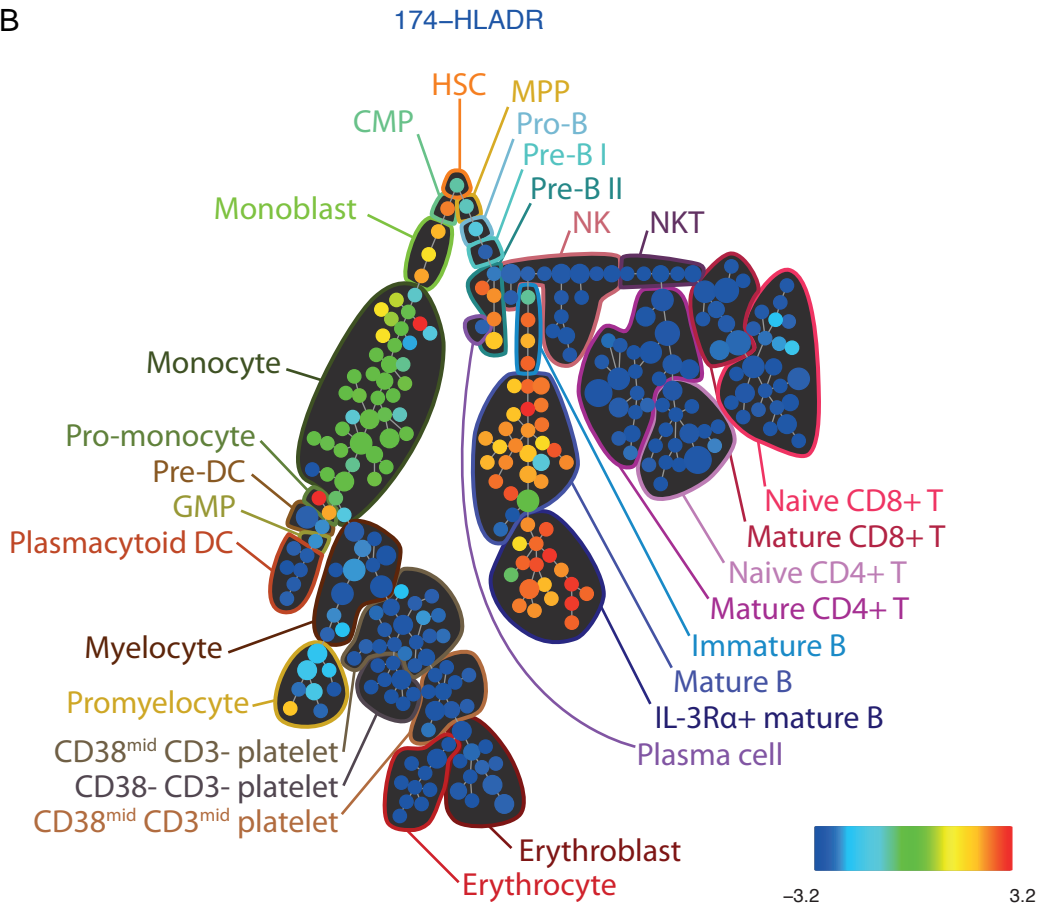


Figure S4B

175-CXCR4

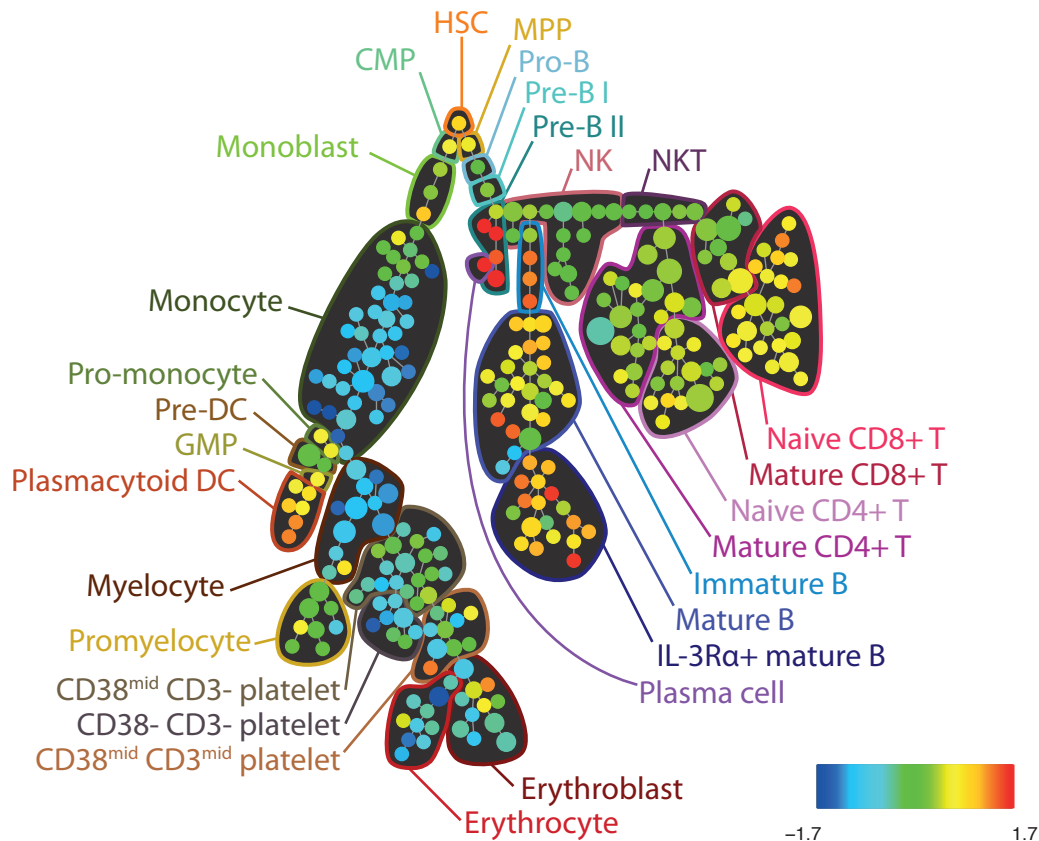


Figure S4B

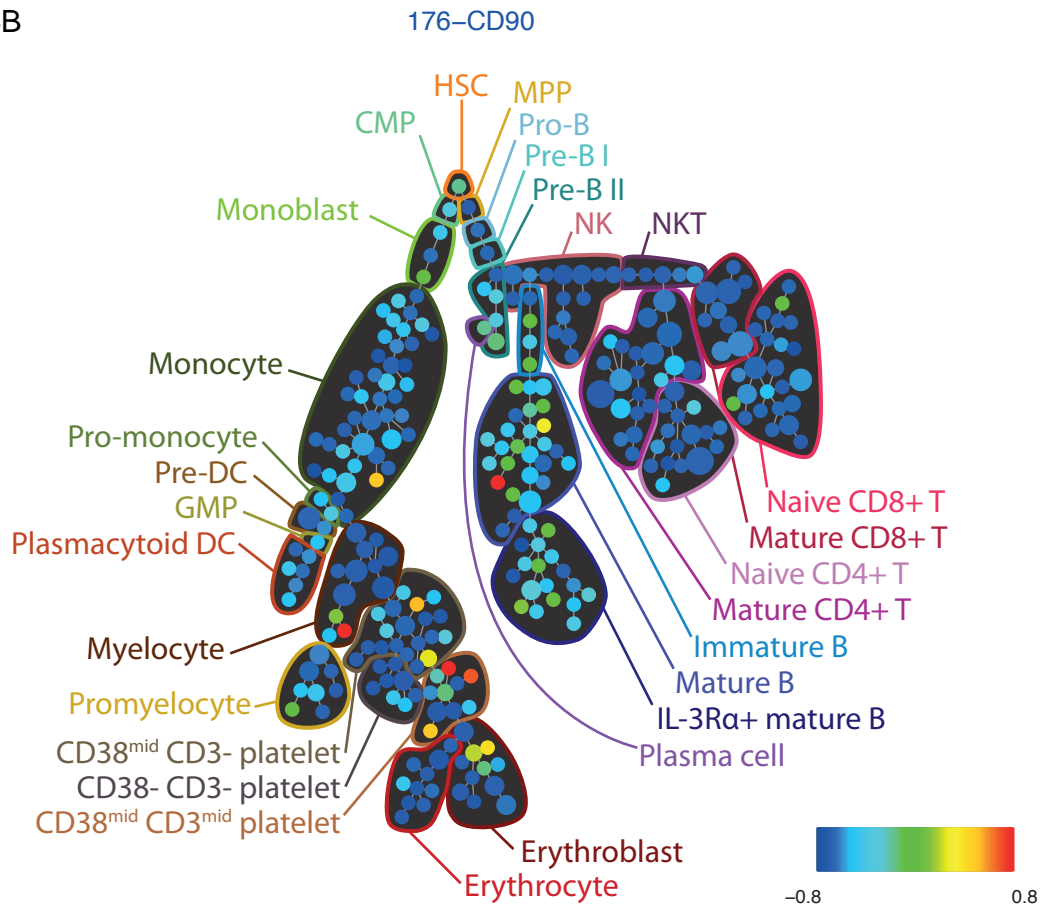


Figure S4B

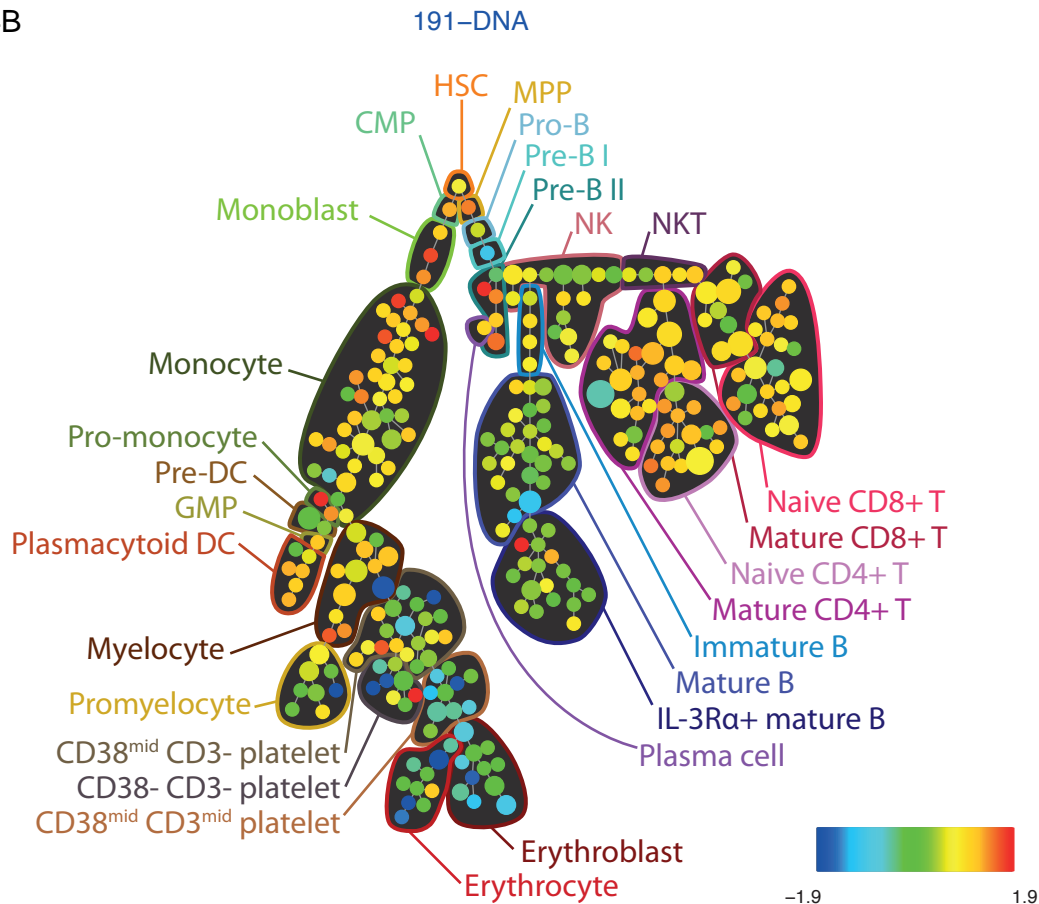


Figure S4B

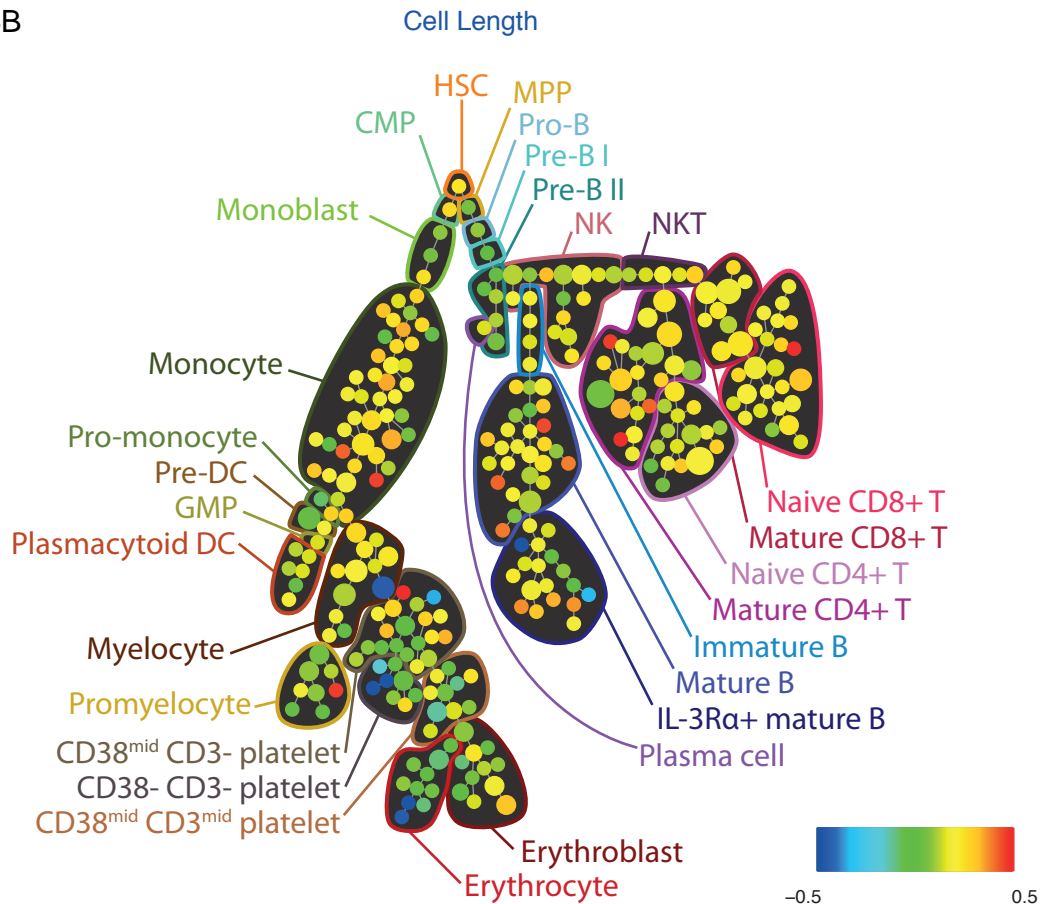


Figure S5

Gating strategy for populations used in heatmaps
(Figures 3, 5, S6, S7) and *t*-tests

Data shown from Marrow 1, Condition "Unstim1"

Legend

Population shown in plot

Population name
(from heatmap)

Gate shown in plot

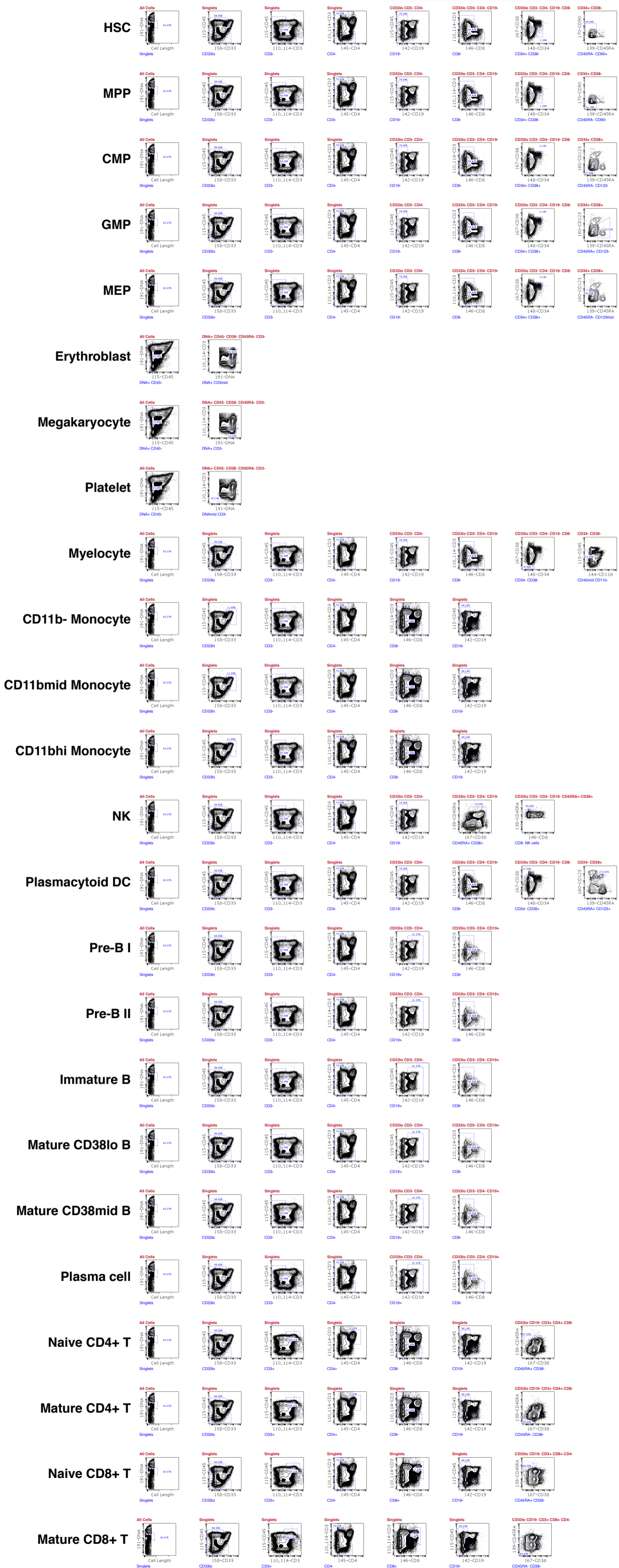
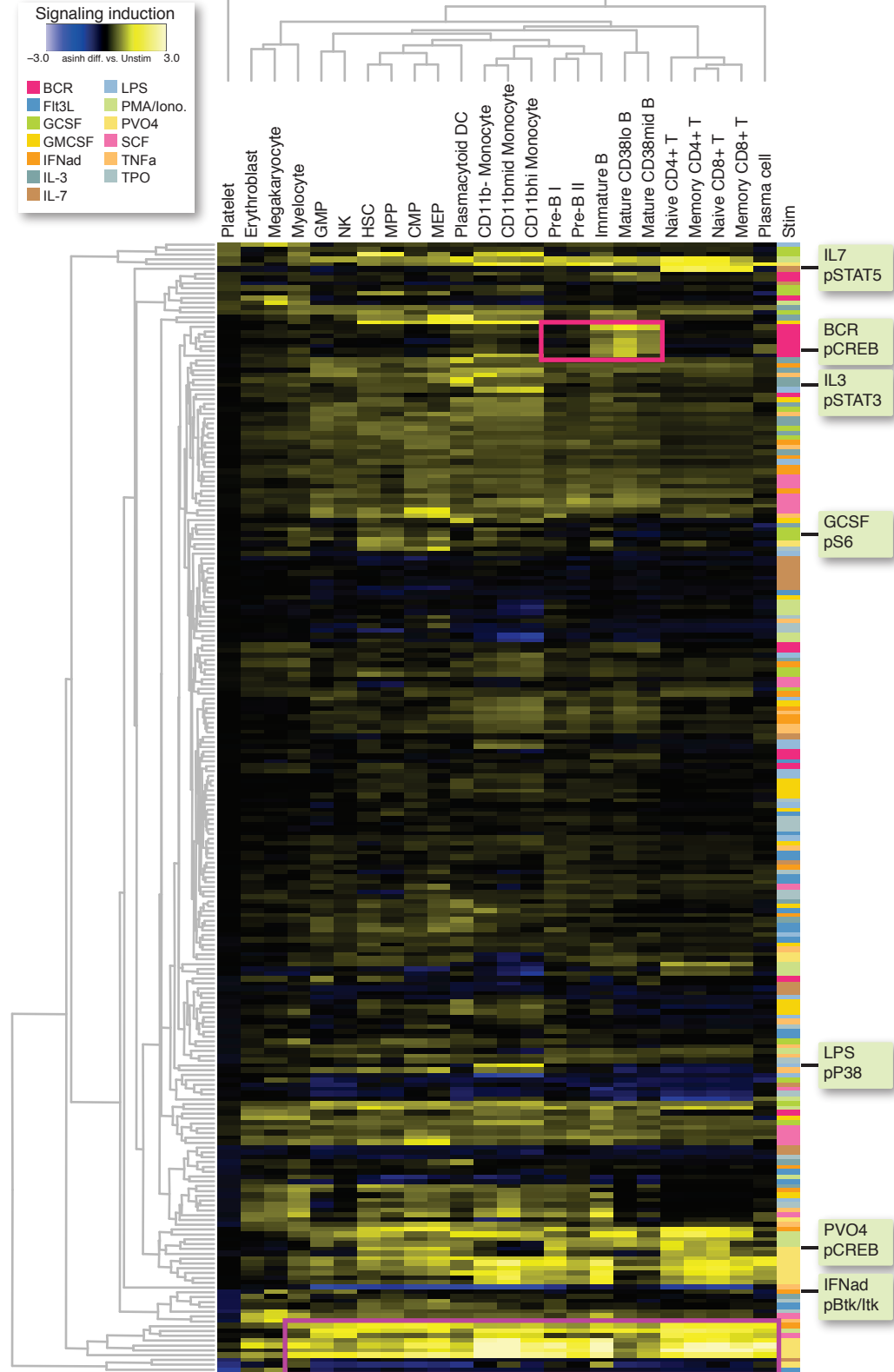


Figure S6

A



B



C

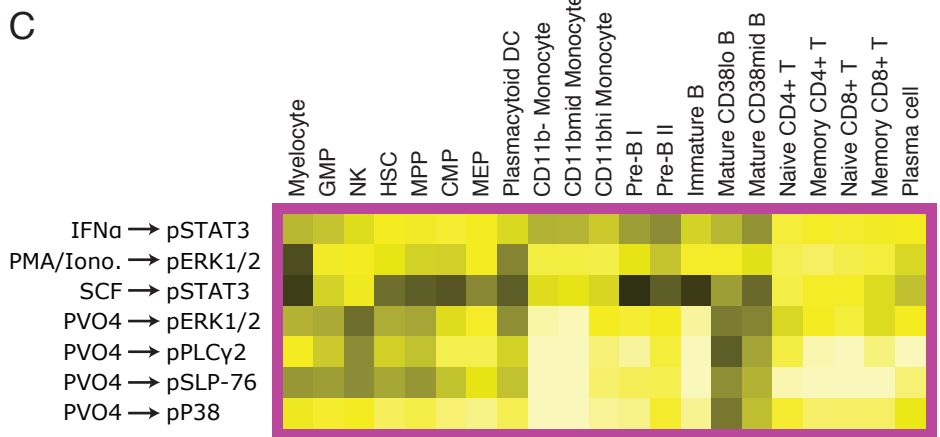


Figure S7

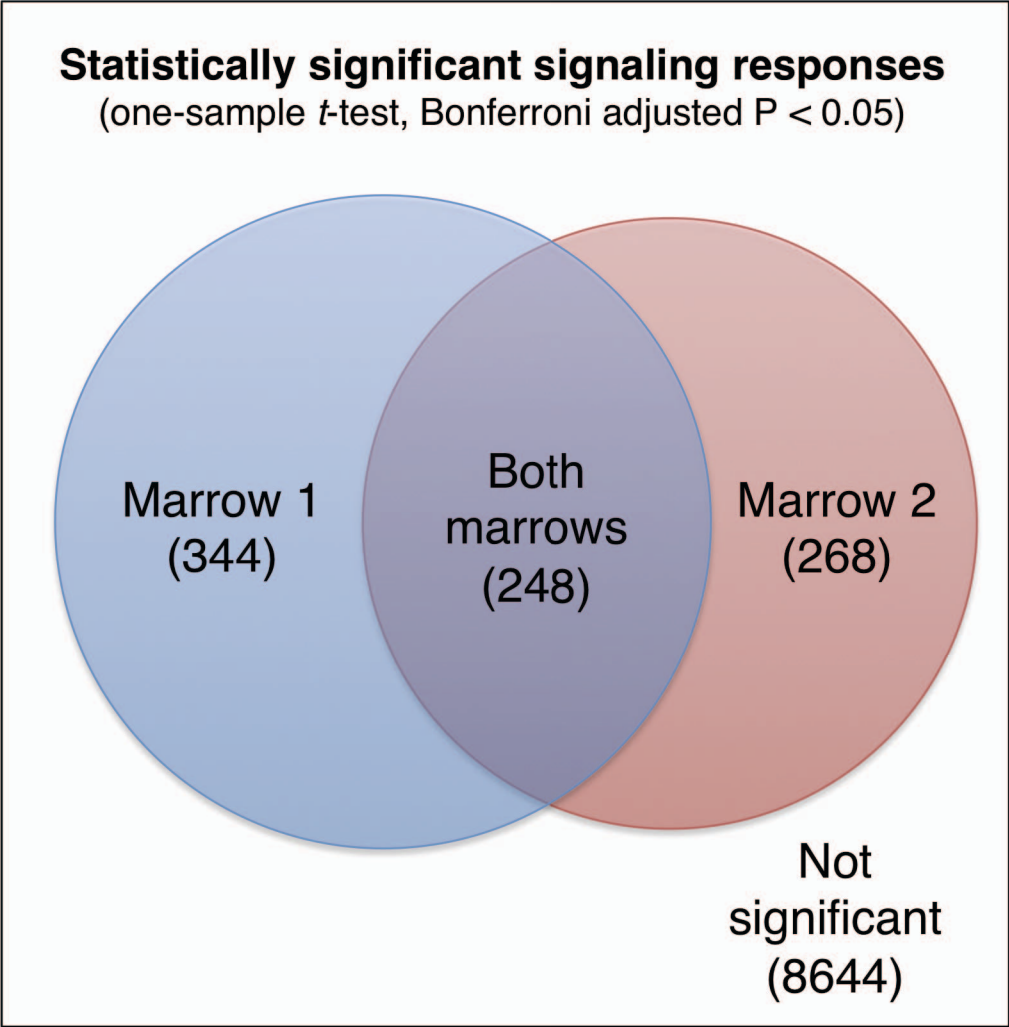


Figure S8A

141-pPLCgamma2 ---- BCR vs Ref Ratio

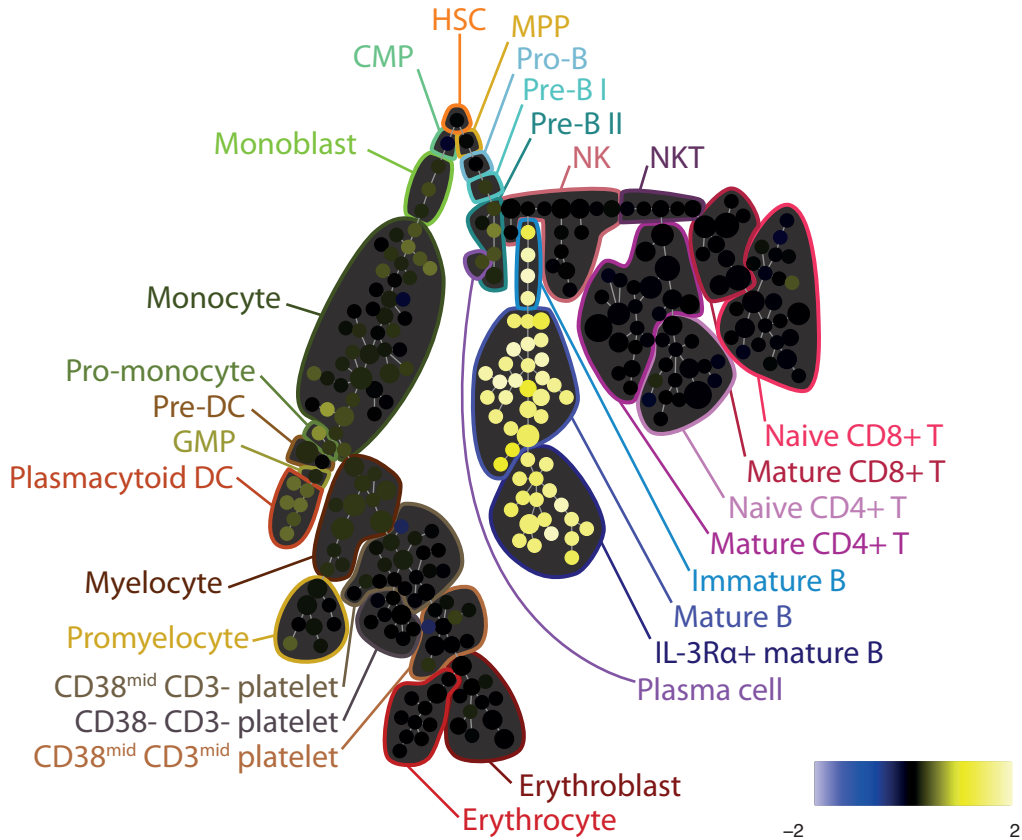


Figure S8A

141-pPLCgamma2 --- DMSO vs Ref Ratio

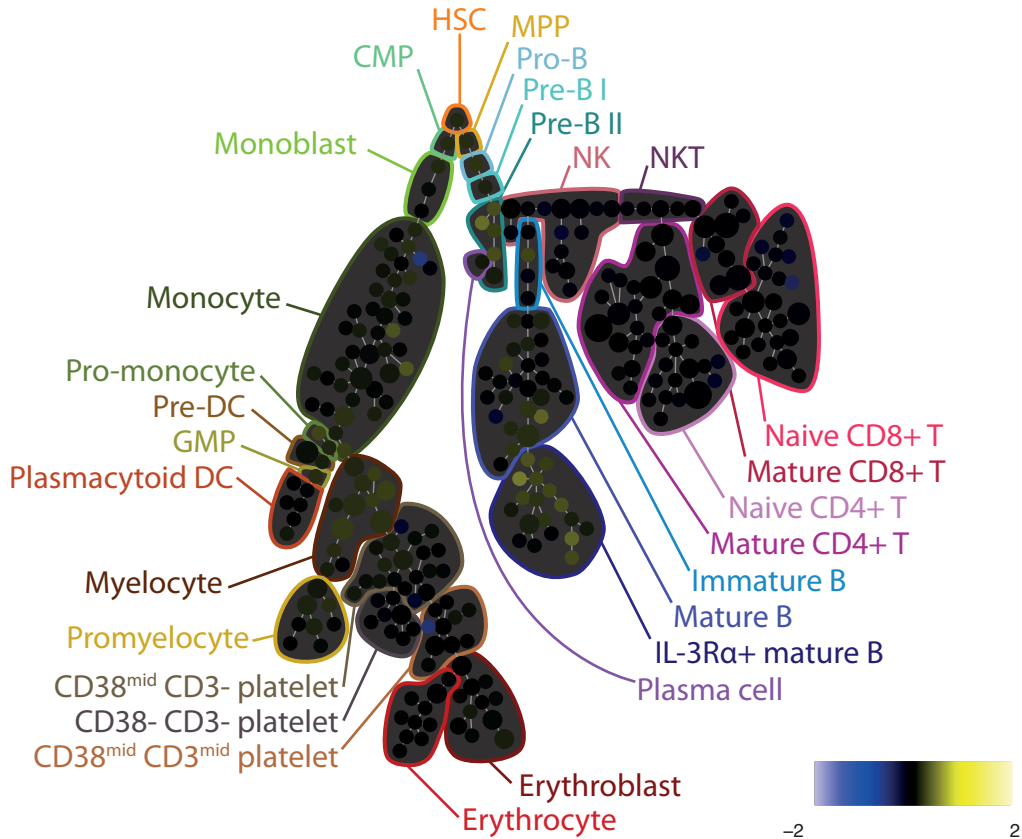


Figure S8A

141-pPLCgamma2 ---- Flt3L vs Ref Ratio

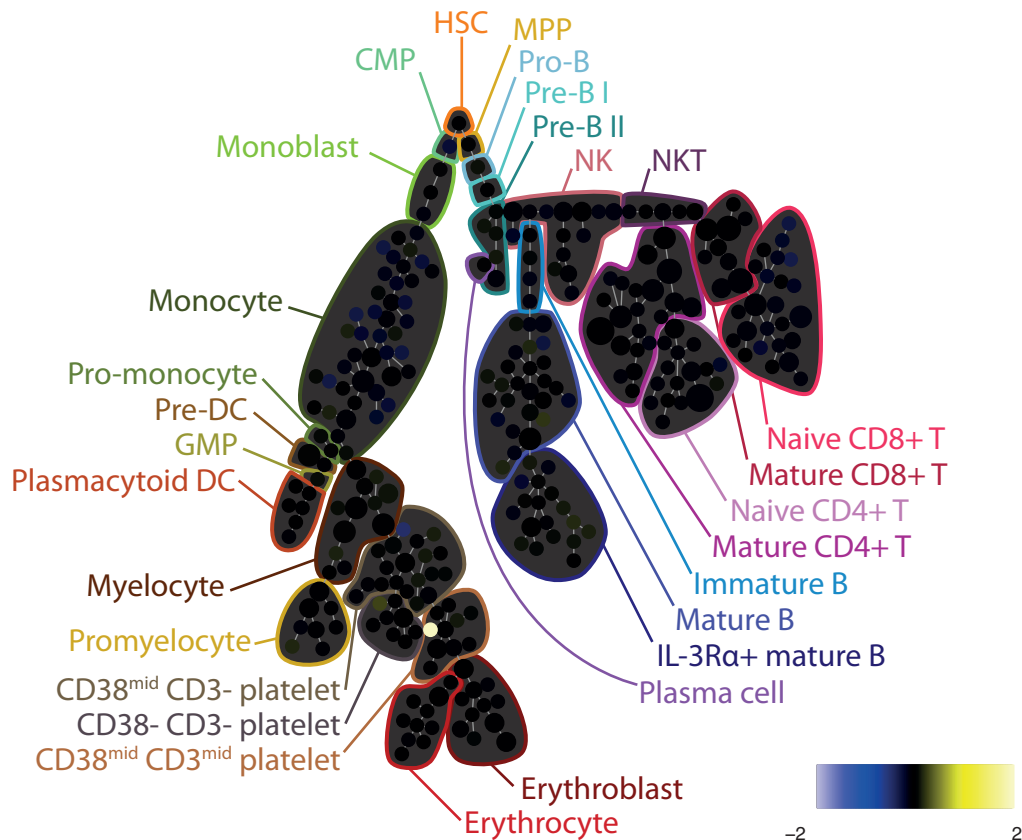


Figure S8A

141-pPLCgamma2 ---- GCSF vs Ref Ratio

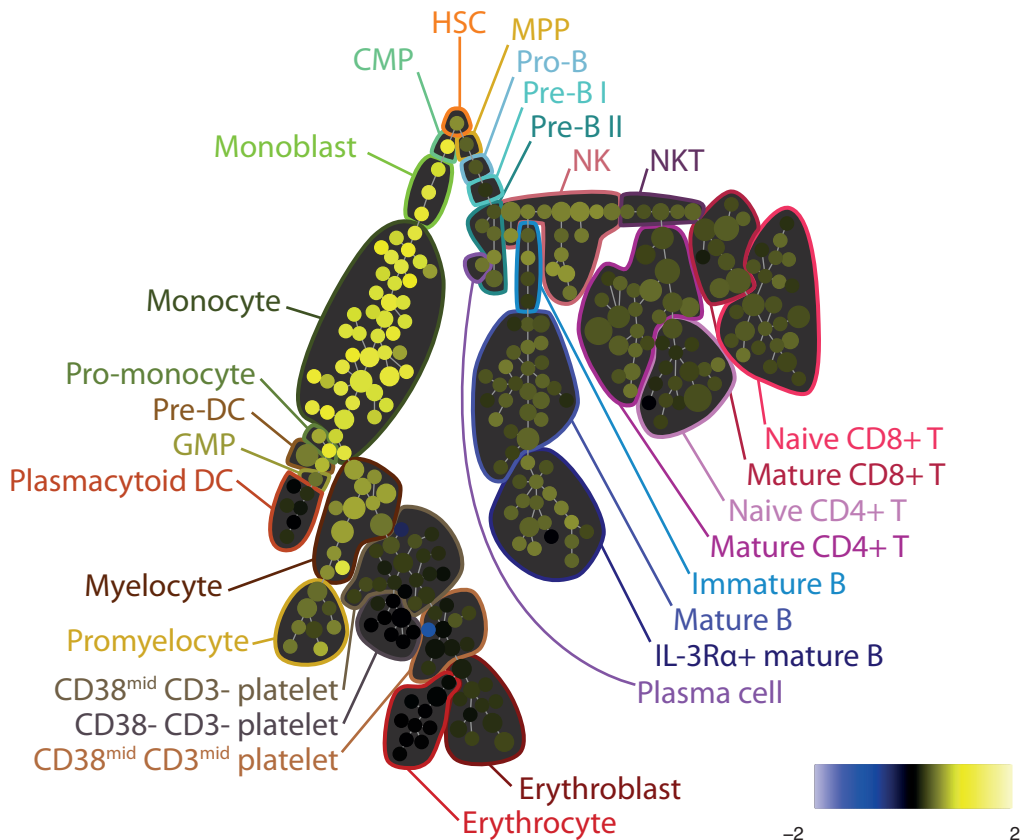


Figure S8A

141-pPLCgamma2 ---- GMCSF vs Ref Ratio

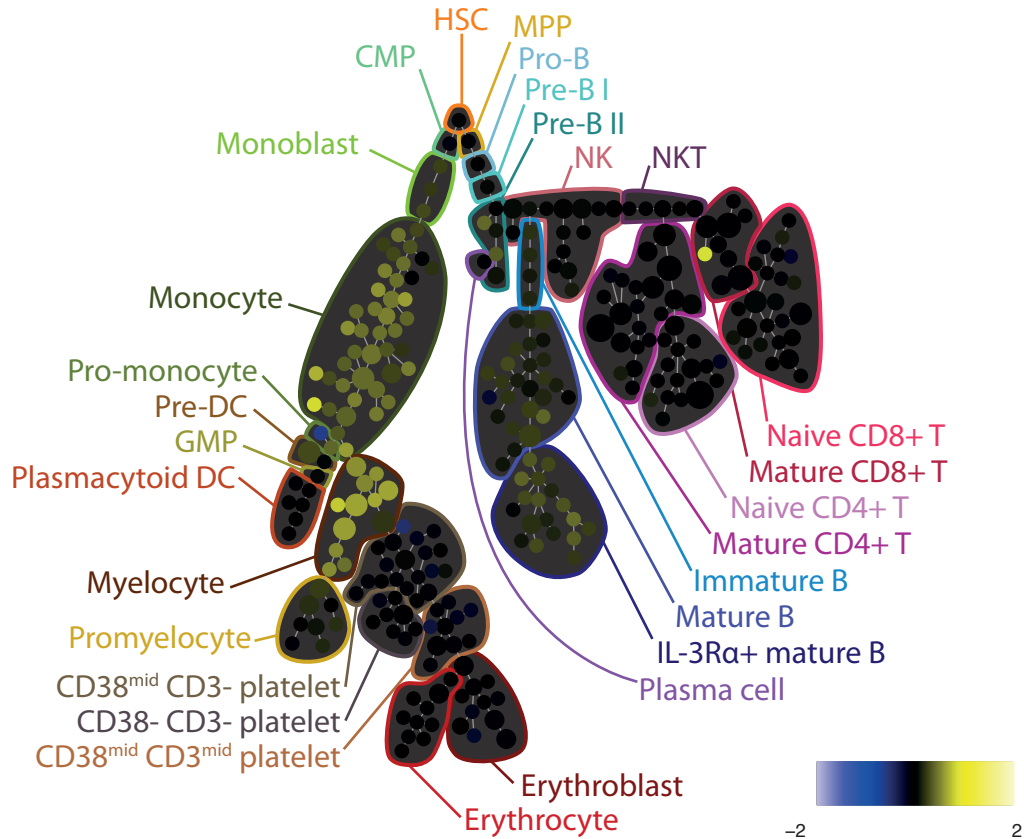


Figure S8A

141-pPLCgamma2 ---- IFNad vs Ref Ratio

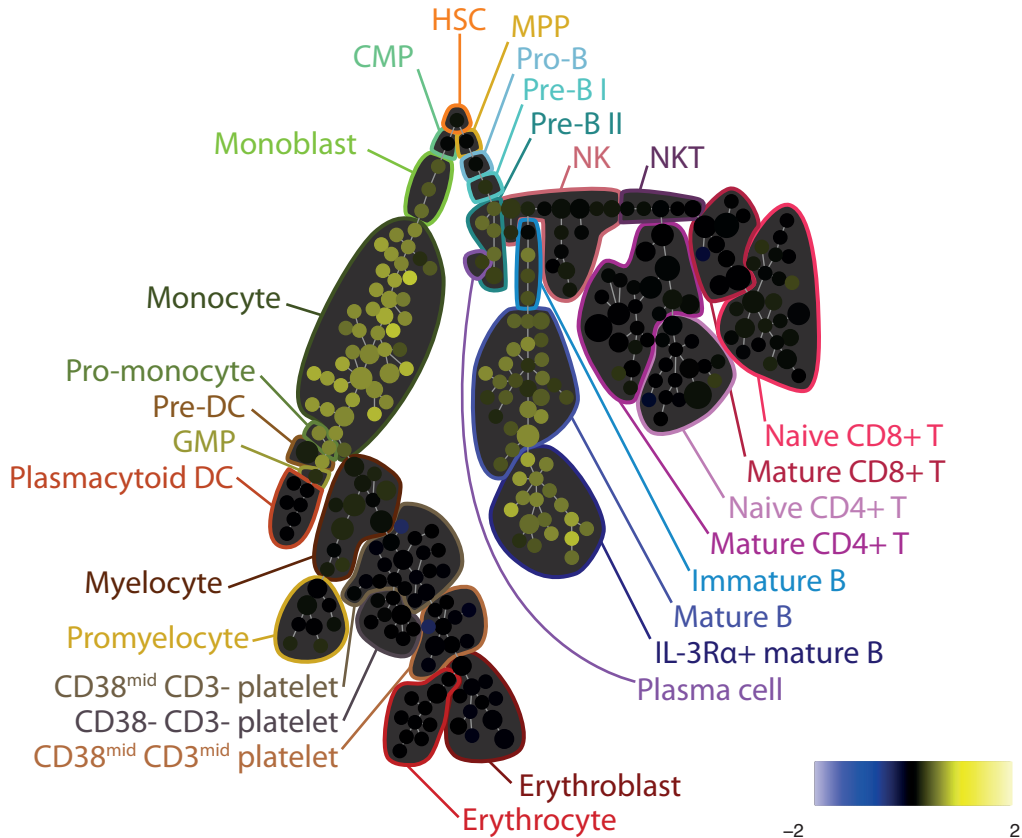


Figure S8A

141-pPLCgamma2 ---- IL3 vs Ref Ratio

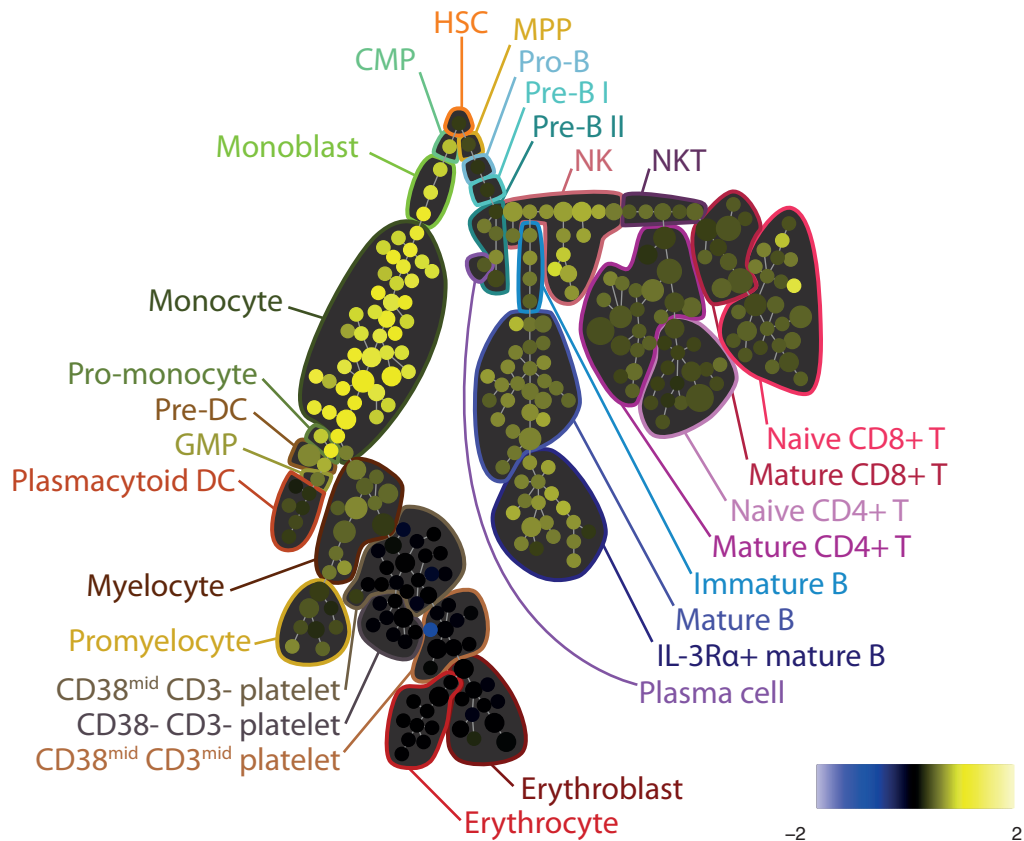


Figure S8A

141-pPLCgamma2 ---- IL7 vs Ref Ratio

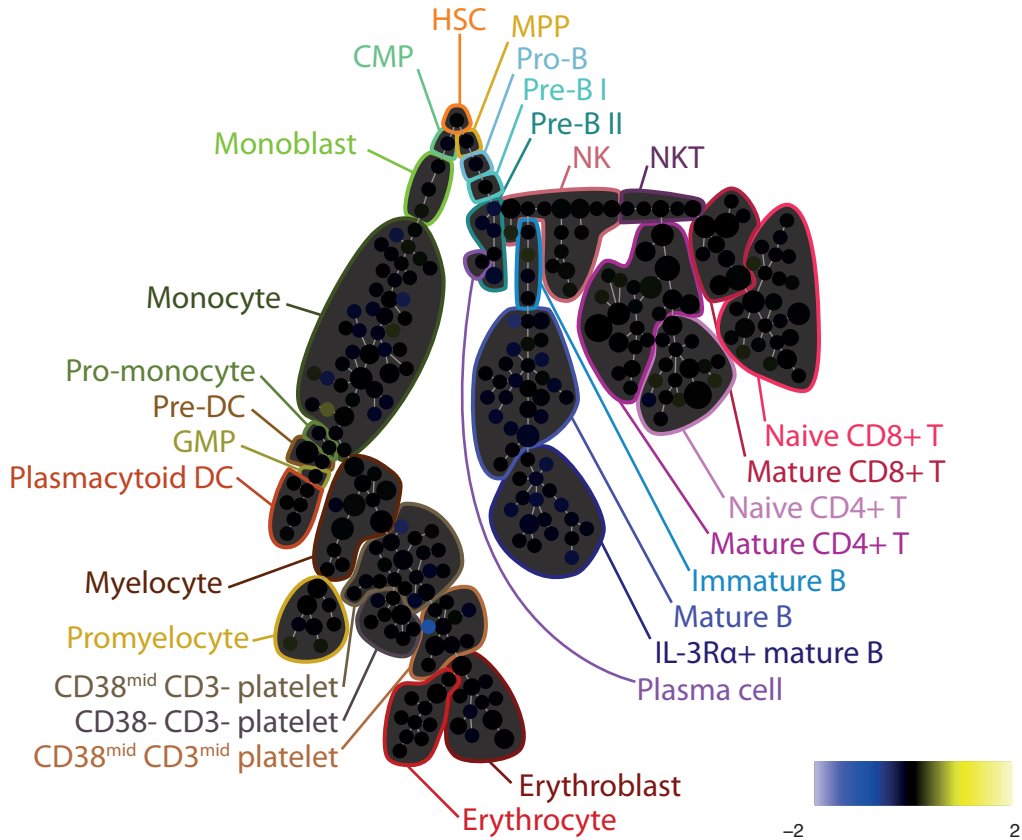


Figure S8A

141-pPLCgamma2 ---- LPS vs Ref Ratio

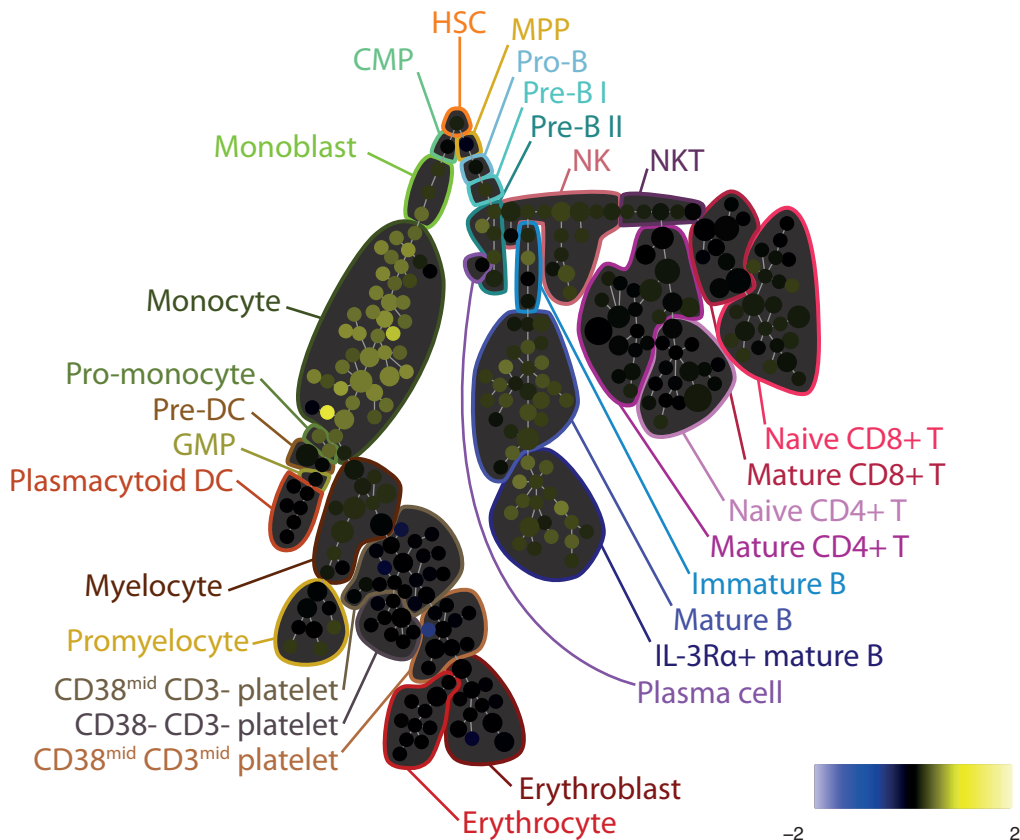


Figure S8A

141-pPLCGamma2 --- PMAiono vs Ref Ratio

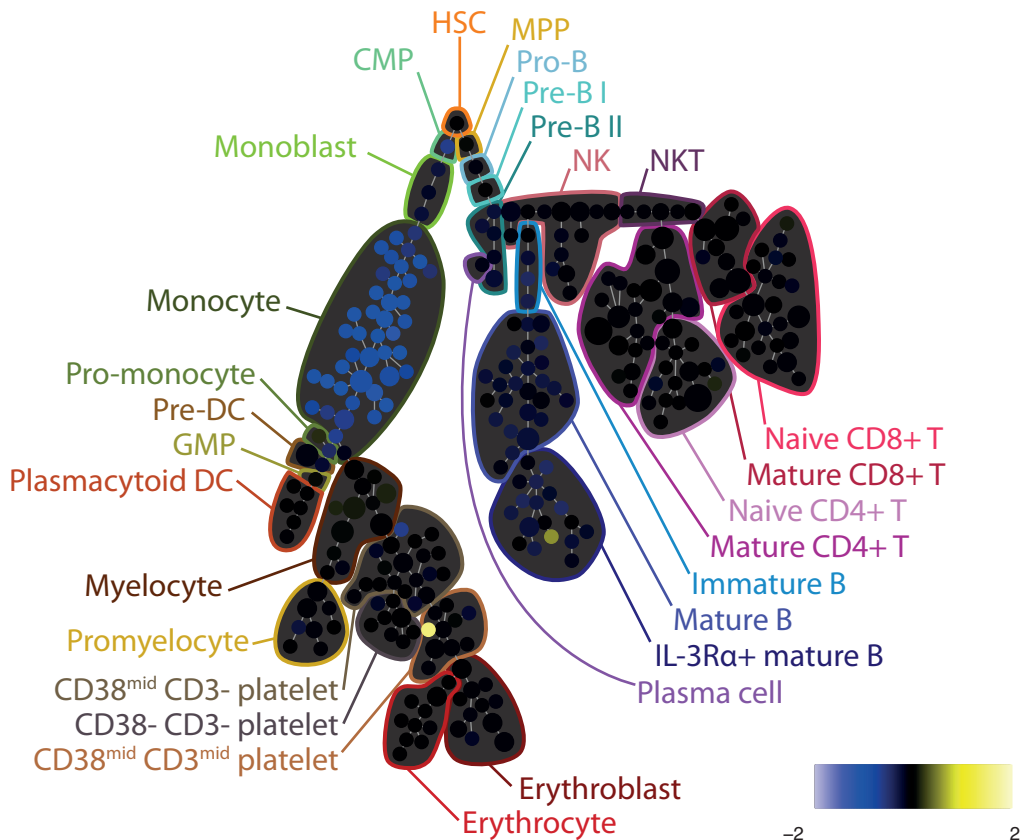


Figure S8A

141-pPLCgamma2 ---- PVO4 vs Ref Ratio

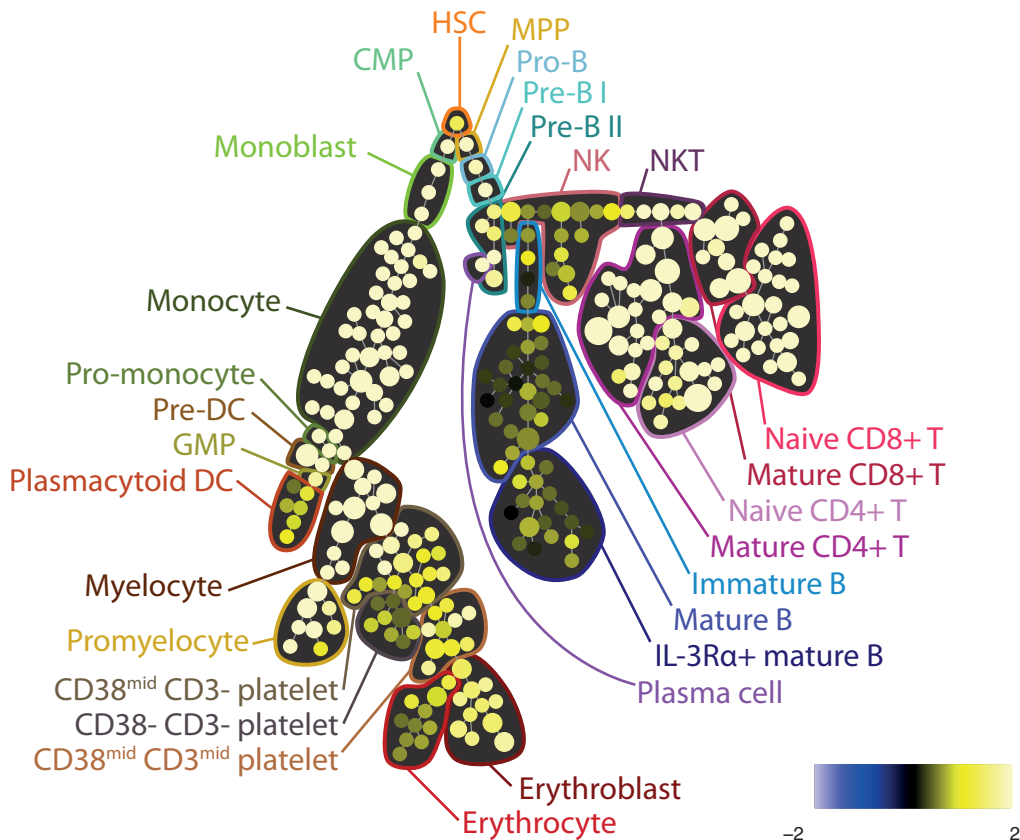


Figure S8A

141-pPLCgamma2 ---- SCF vs Ref Ratio

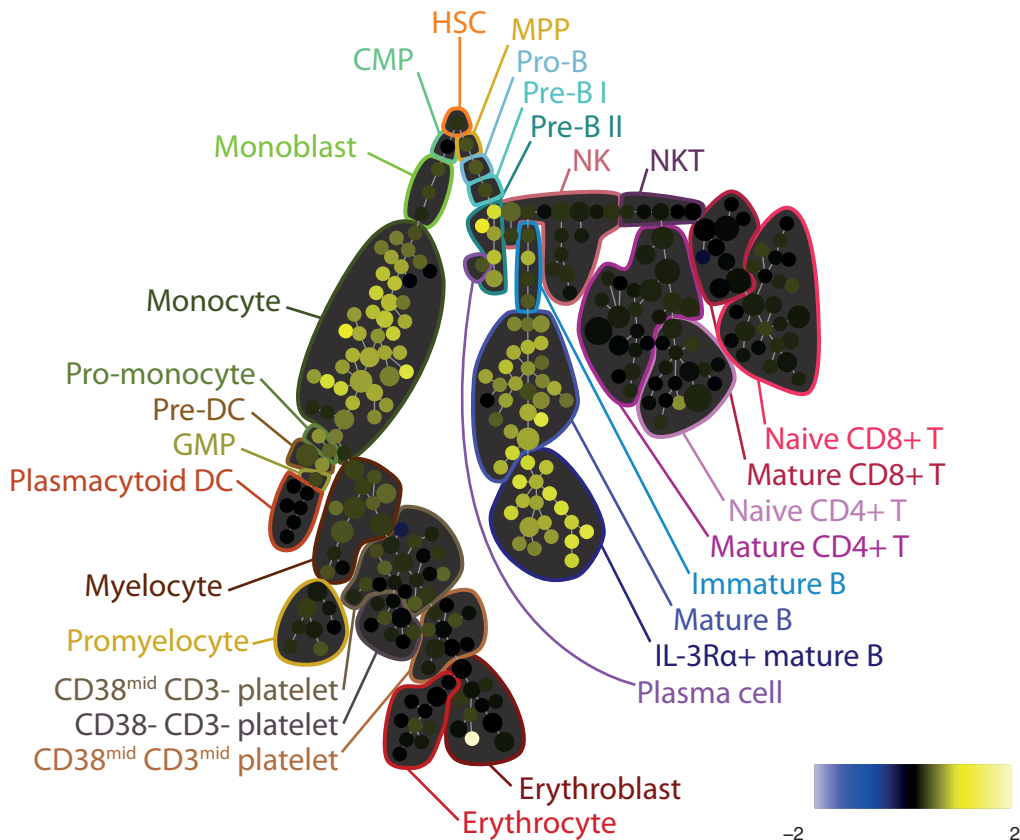


Figure S8A

141-pPLCgamma2 ---- TNFa vs Ref Ratio

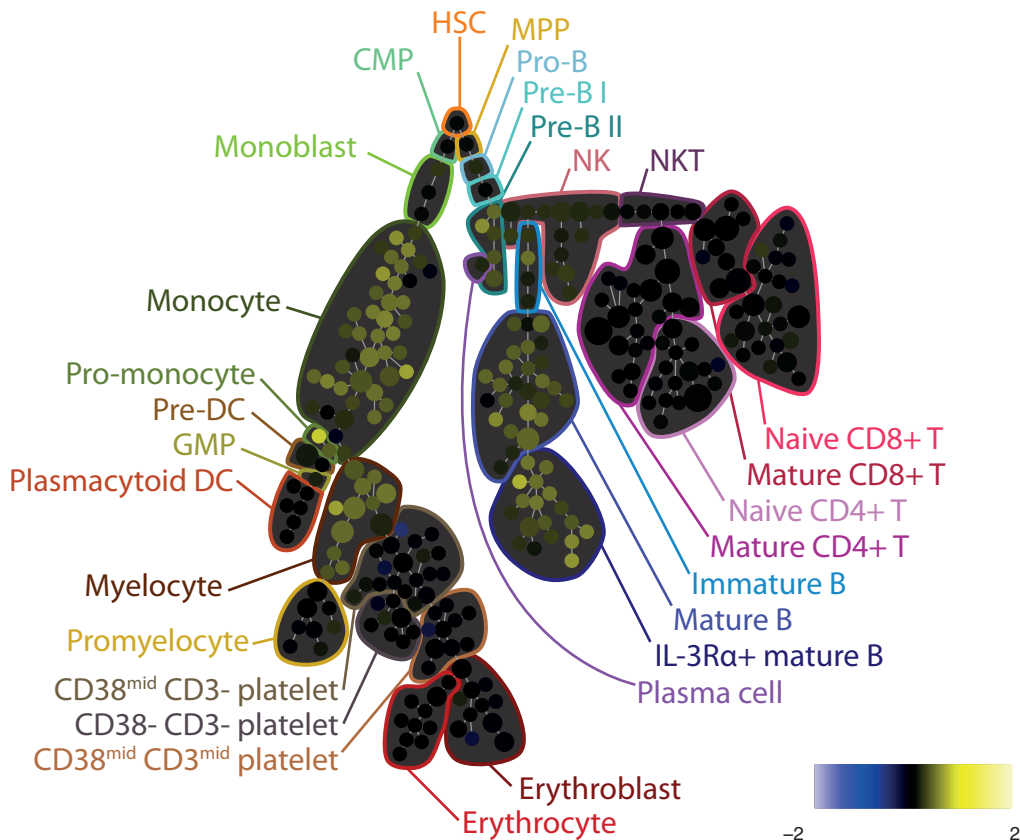


Figure S8A

141-pPLCGamma2 ---- TPO vs Ref Ratio

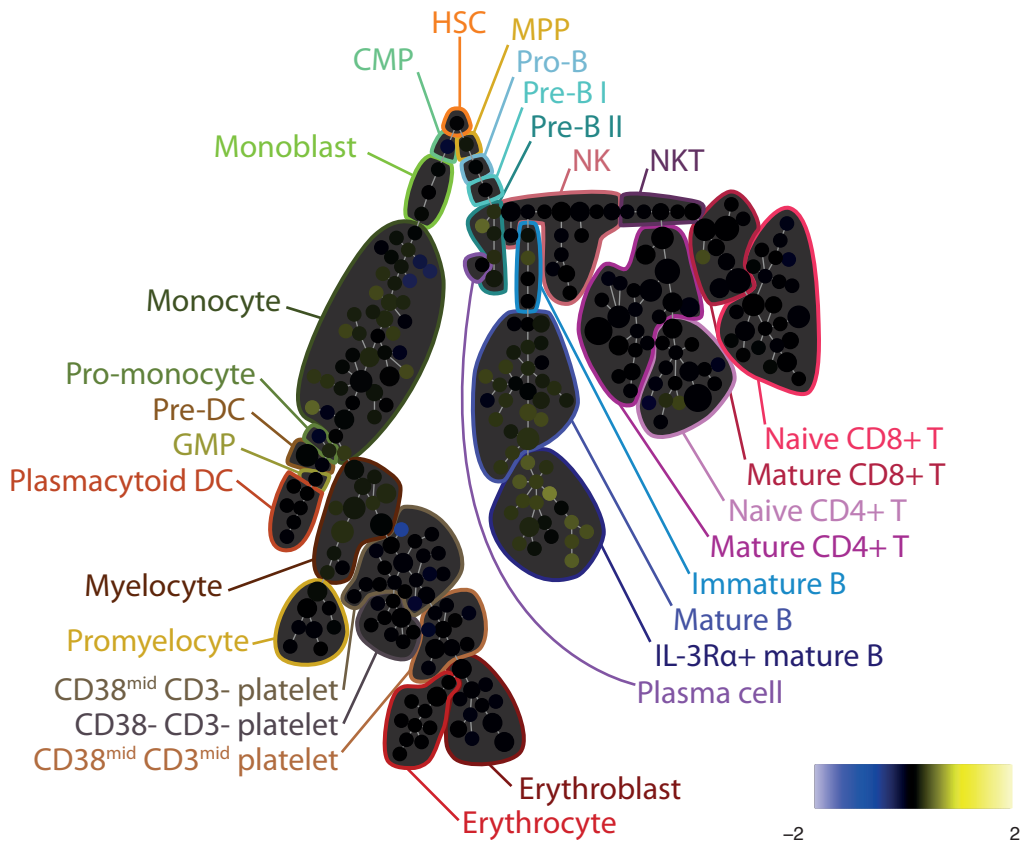


Figure S8A

150-pSTAT5 ---- BCR vs Ref Ratio

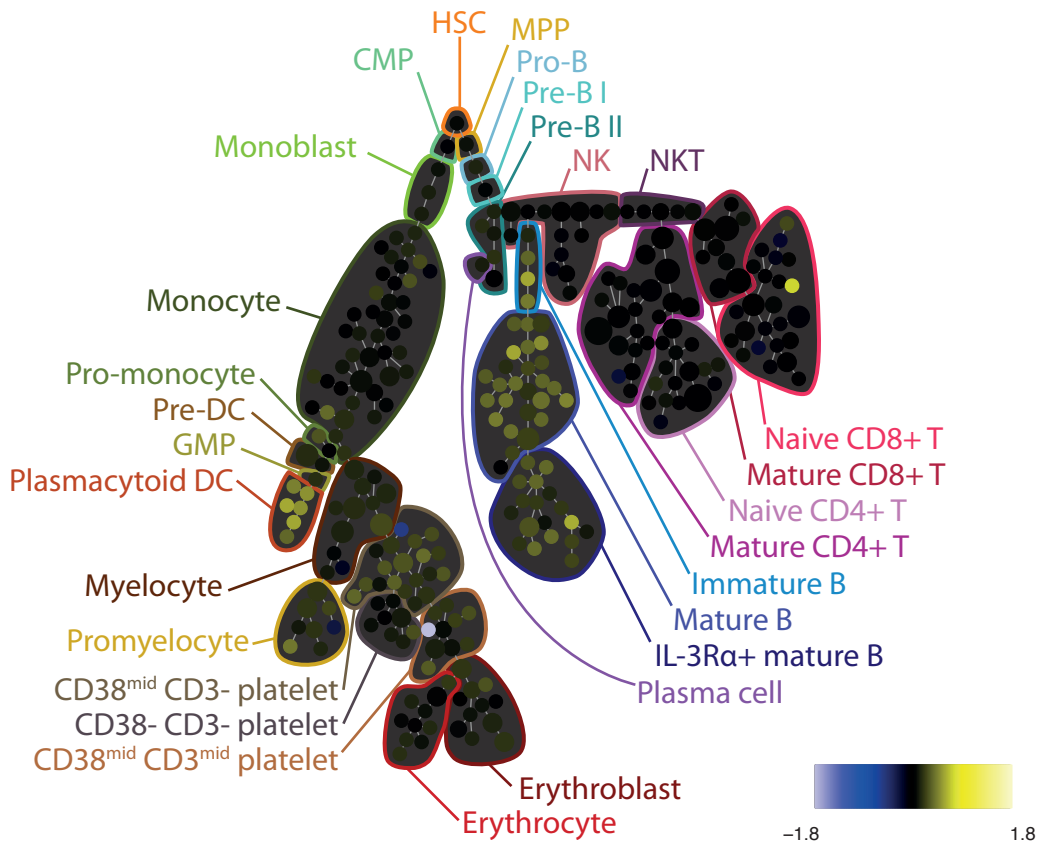


Figure S8A

150-pSTAT5 ---- DMSO vs Ref Ratio

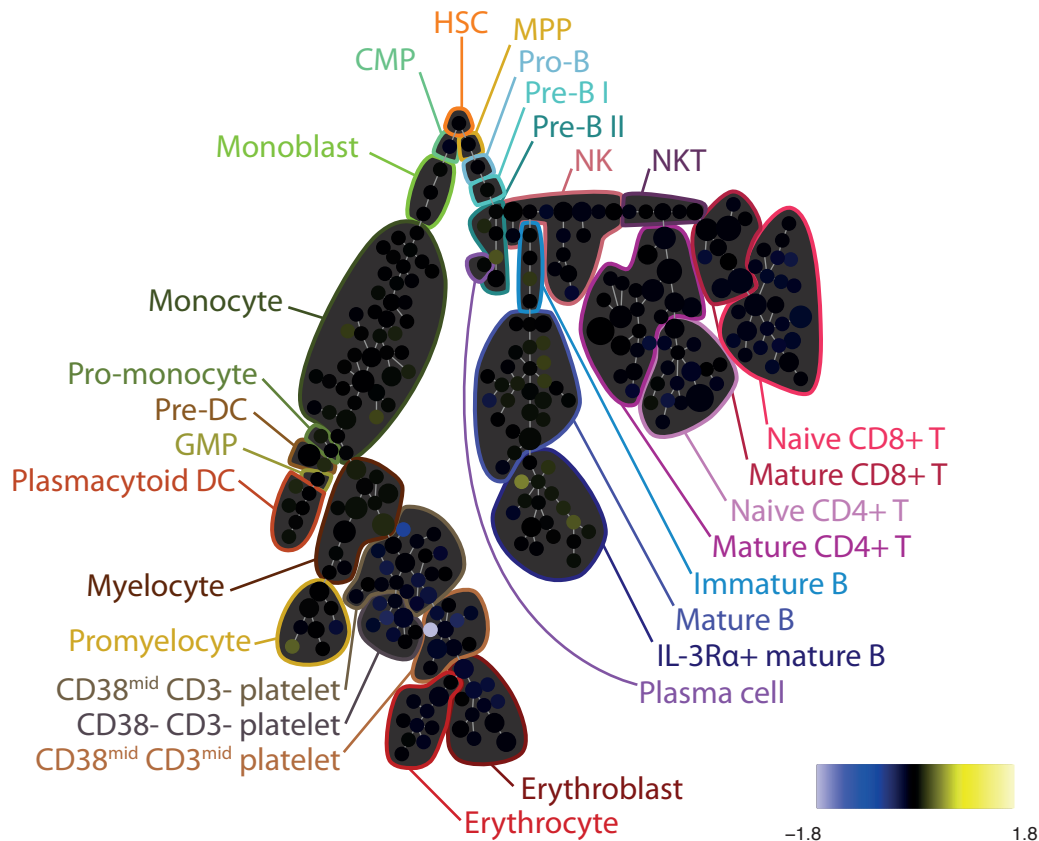


Figure S8A

150-pSTAT5 ---- Flt3L vs Ref Ratio

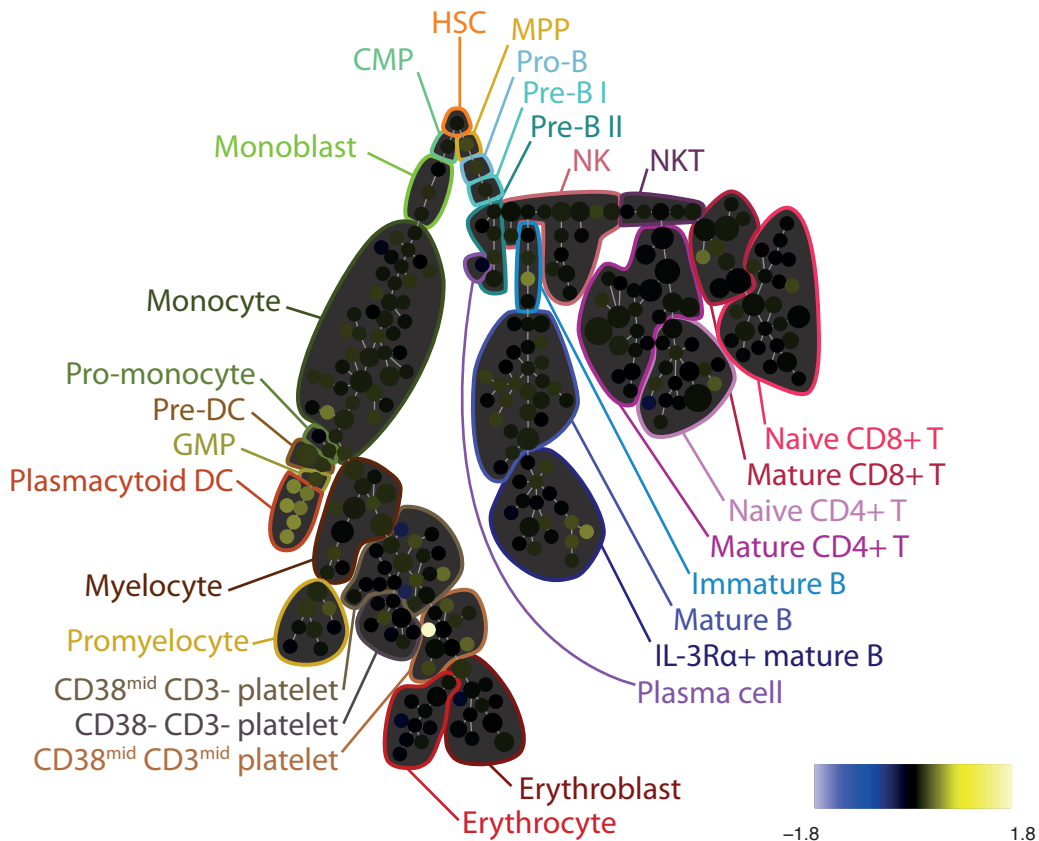


Figure S8A

150-pSTAT5 ---- GCSF vs Ref Ratio

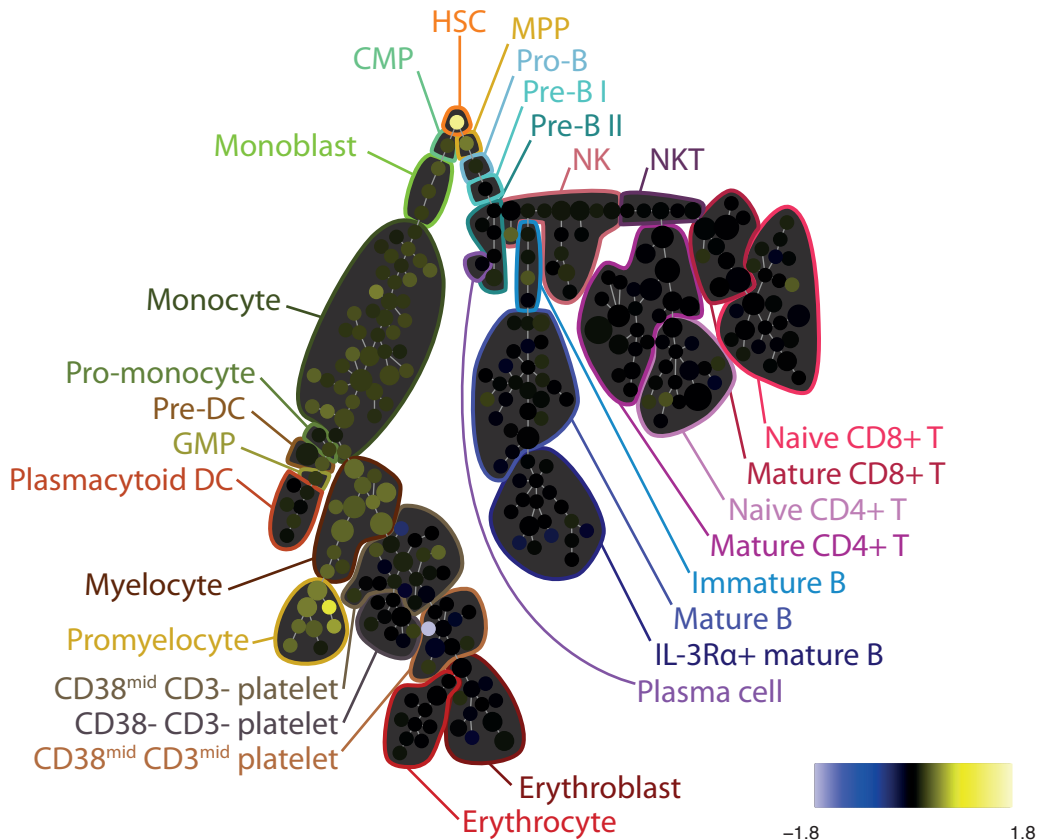


Figure S8A

150-pSTAT5 ---- GMCSF vs Ref Ratio

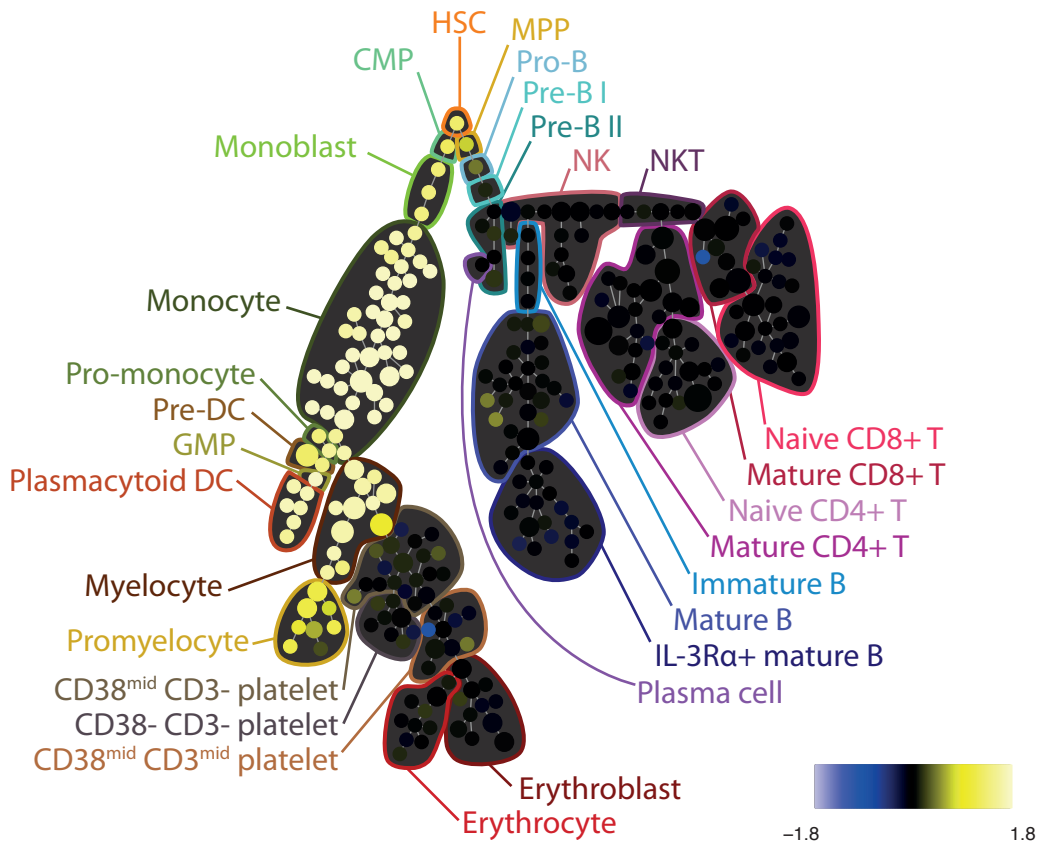


Figure S8A

150-pSTAT5 ---- IFNad vs Ref Ratio

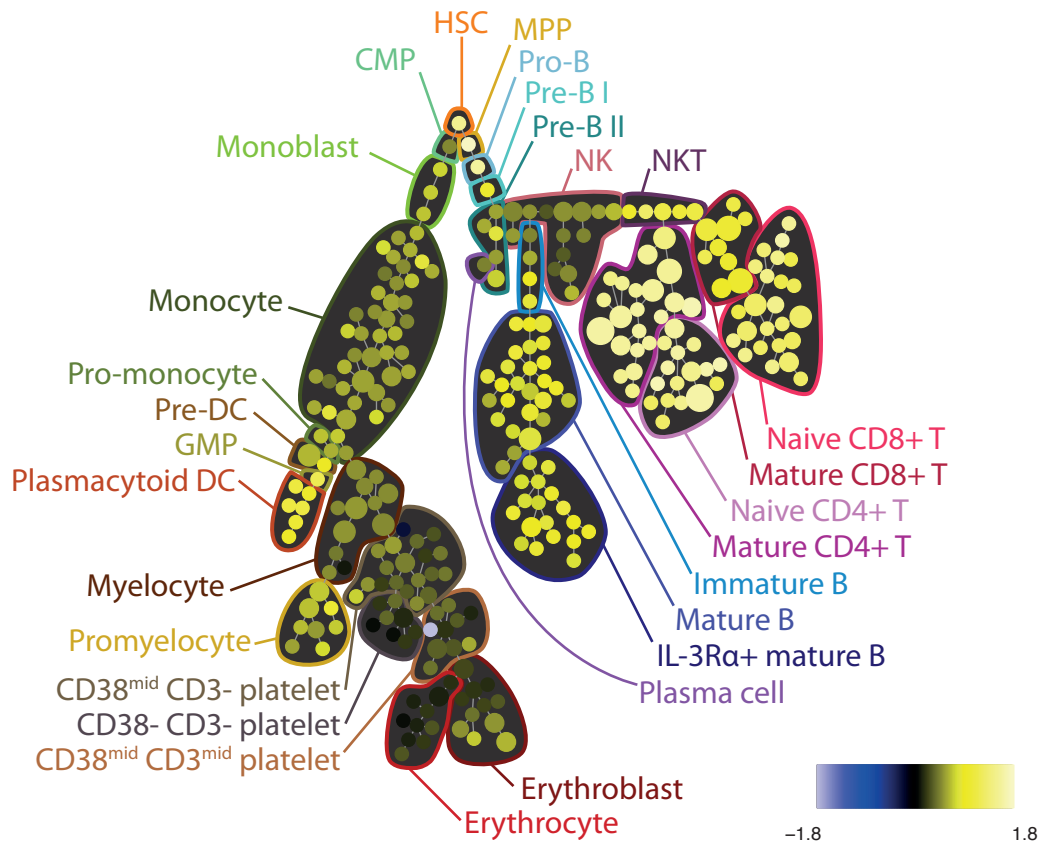


Figure S8A

150-pSTAT5 ---- IL3 vs Ref Ratio

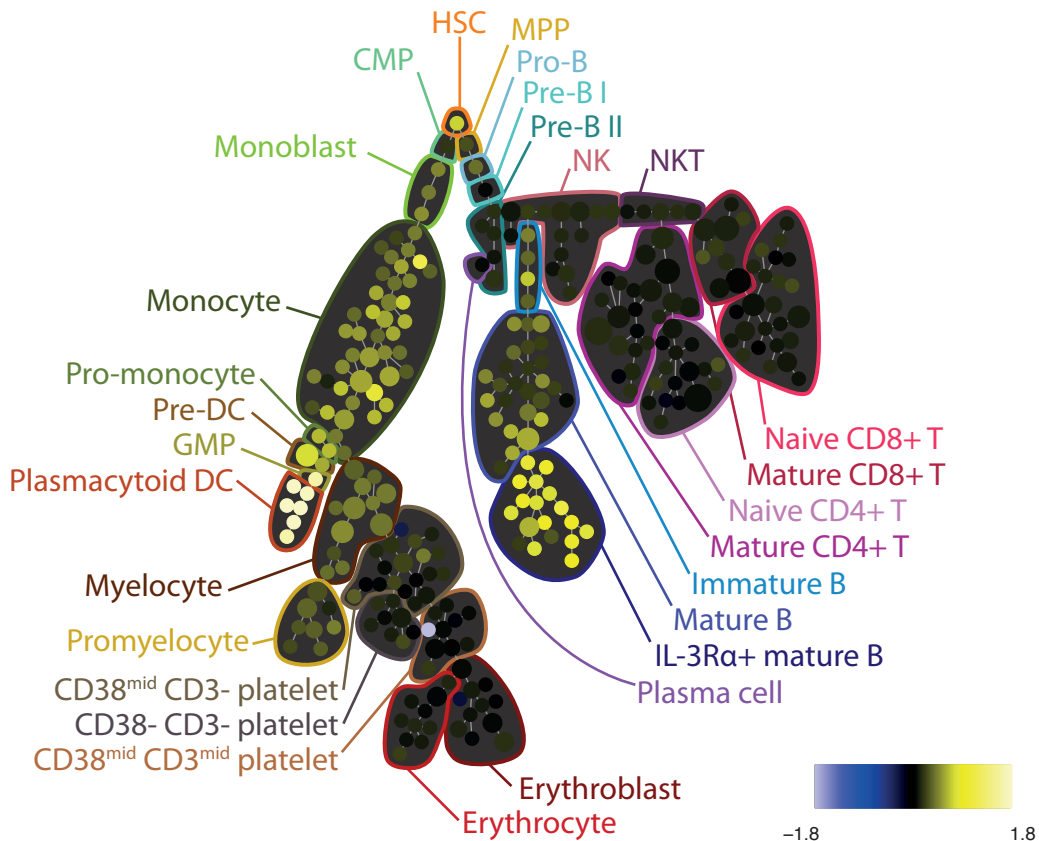


Figure S8A

150-pSTAT5 ---- IL7 vs Ref Ratio

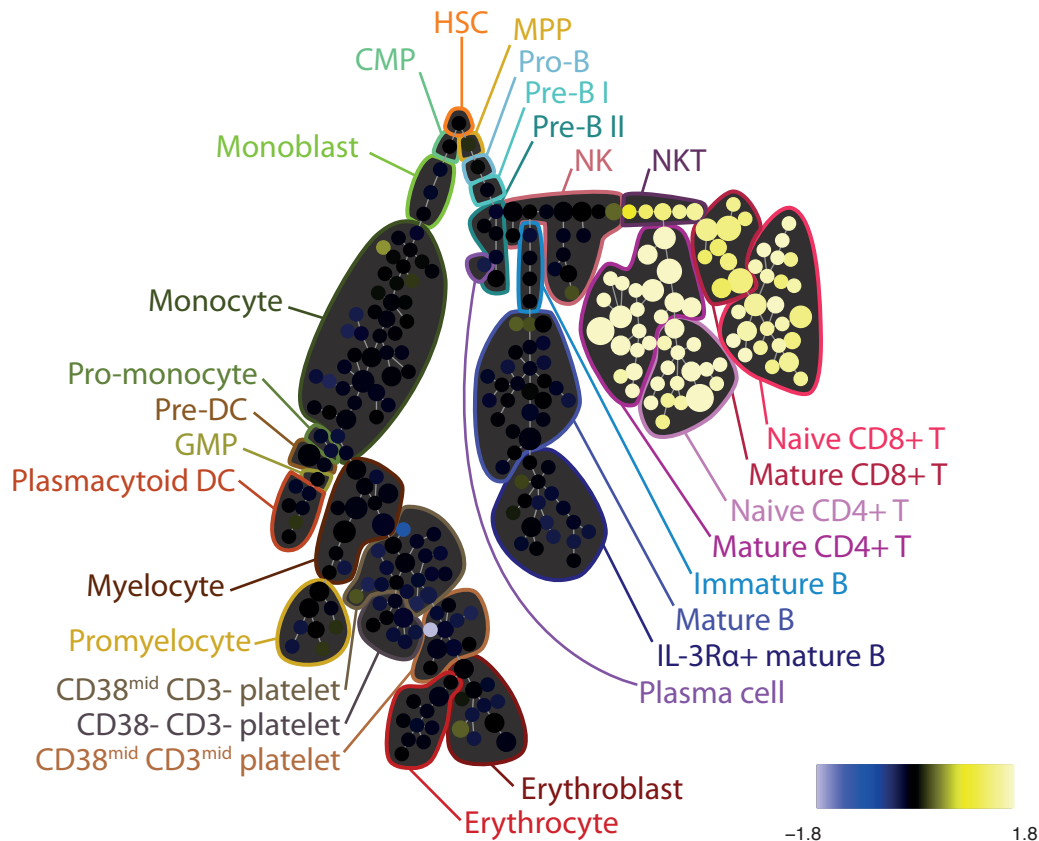


Figure S8A

150-pSTAT5 ---- LPS vs Ref Ratio

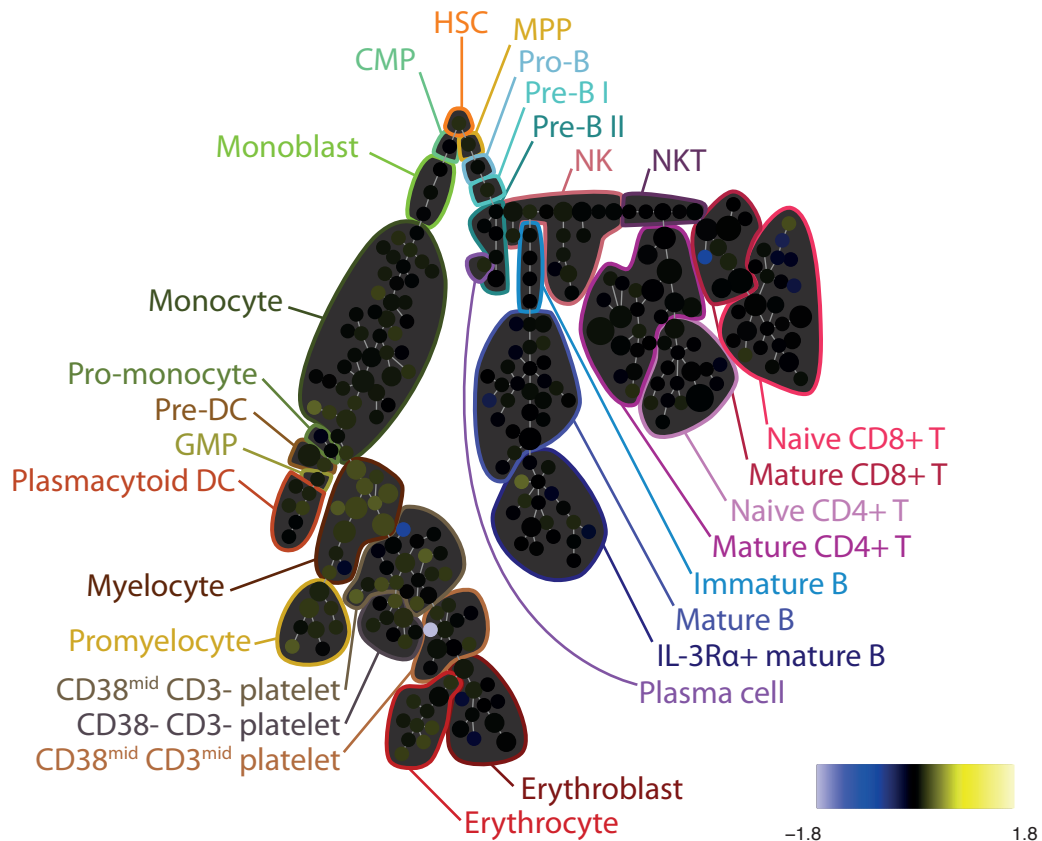


Figure S8A

150-pSTAT5 ---- PMAi on vs Ref Ratio

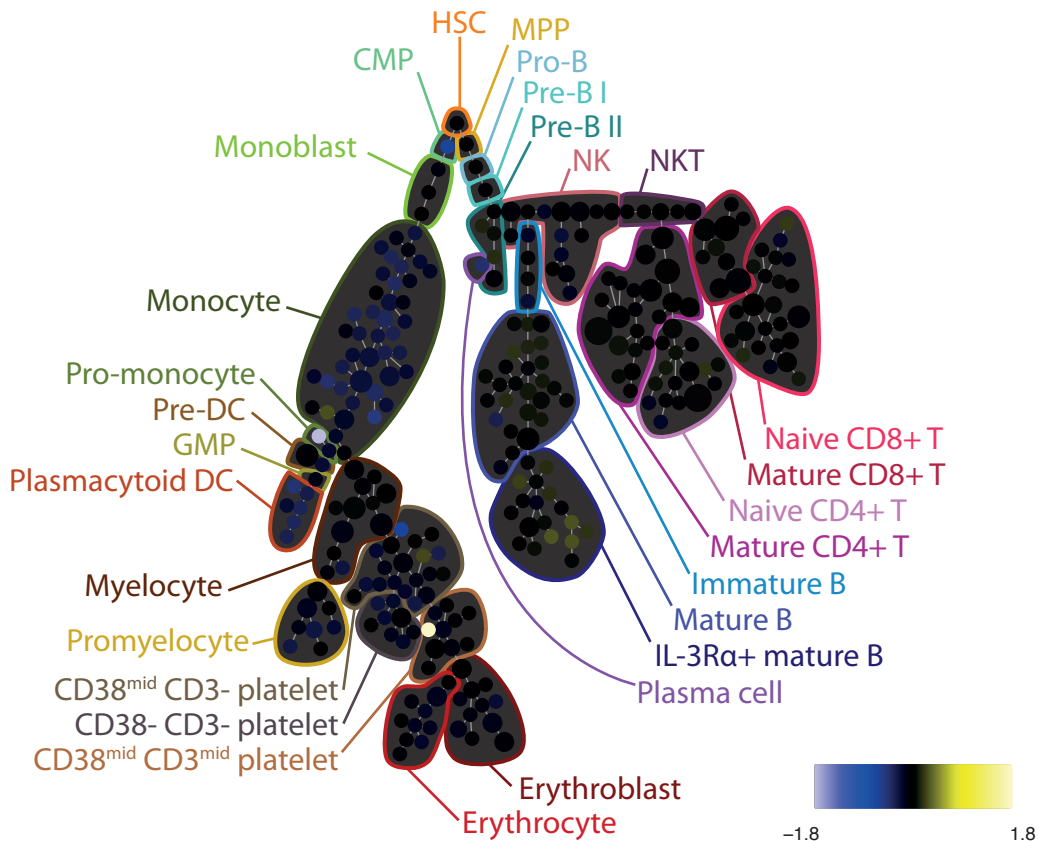


Figure S8A

150-pSTAT5 ---- PVO4 vs Ref Ratio

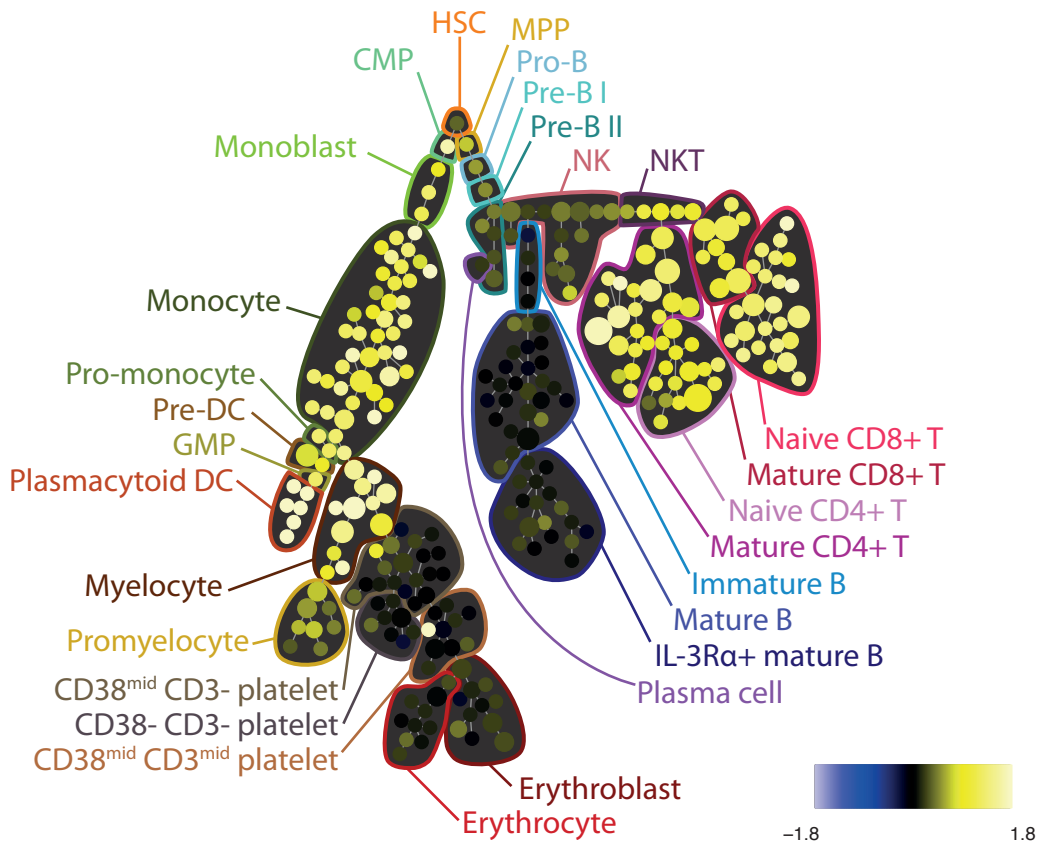


Figure S8A

150-pSTAT5 ---- SCF vs Ref Ratio

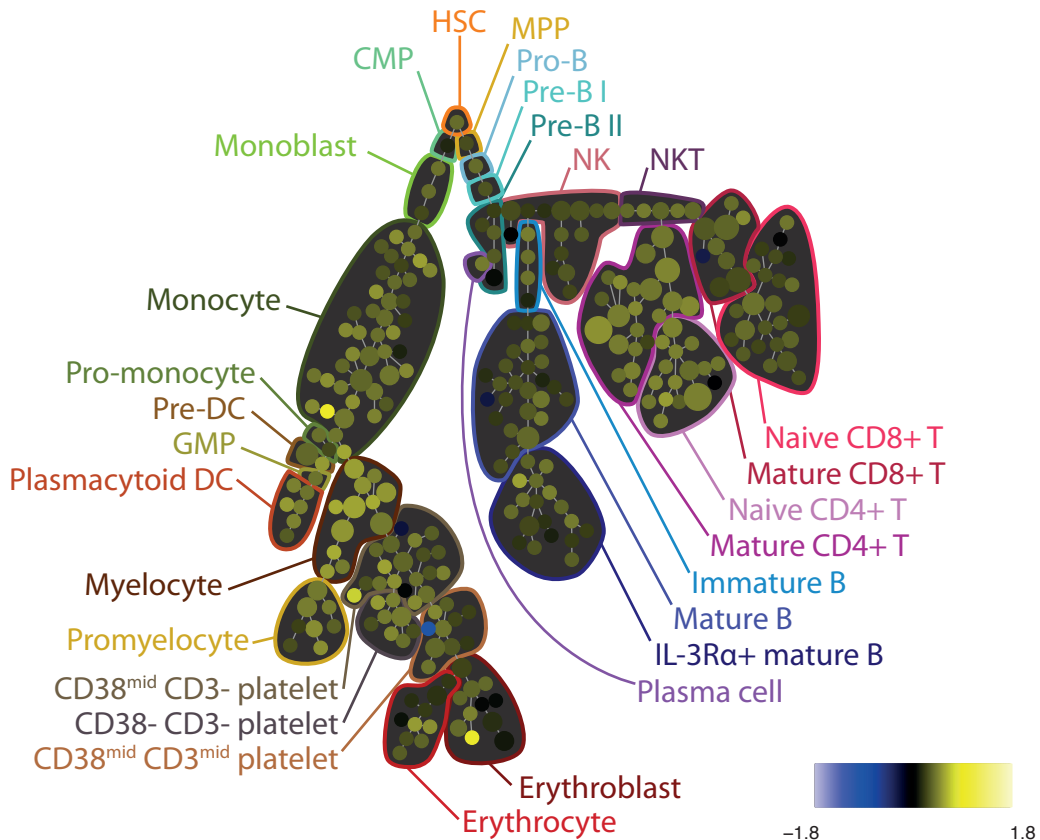


Figure S8A

150-pSTAT5 ---- TNFa vs Ref Ratio

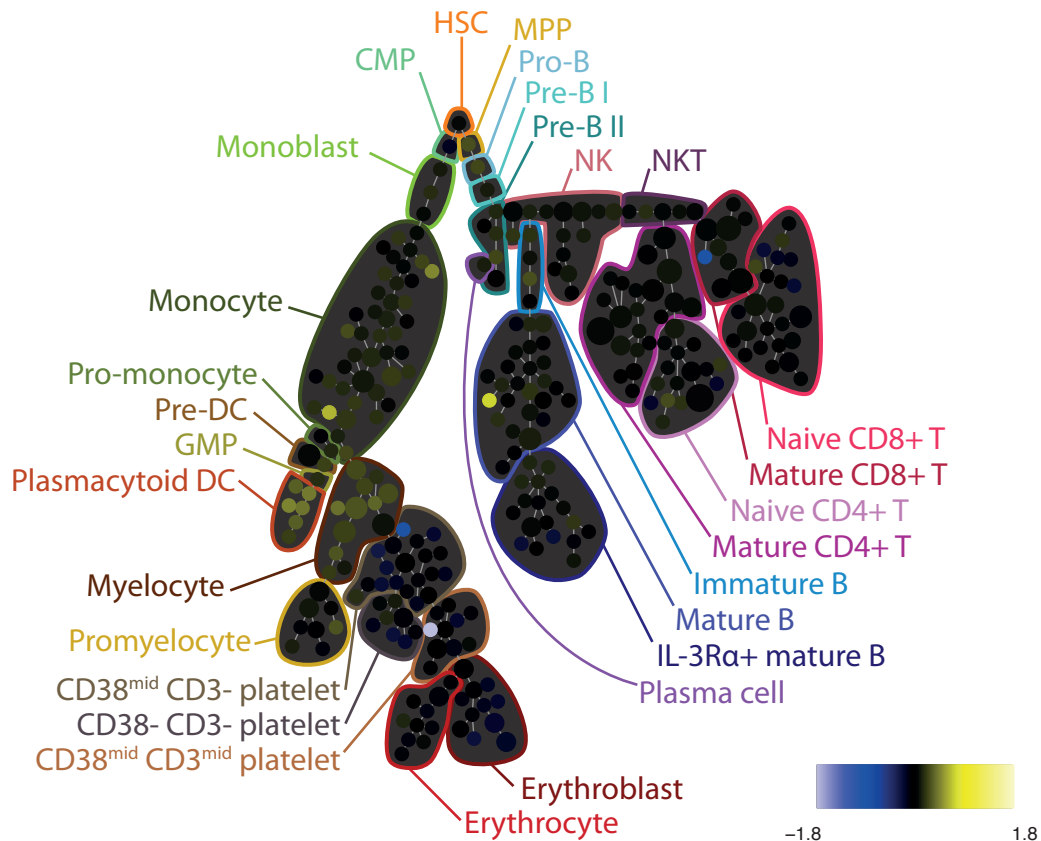


Figure S8A

150-pSTAT5 ---- TPO vs Ref Ratio

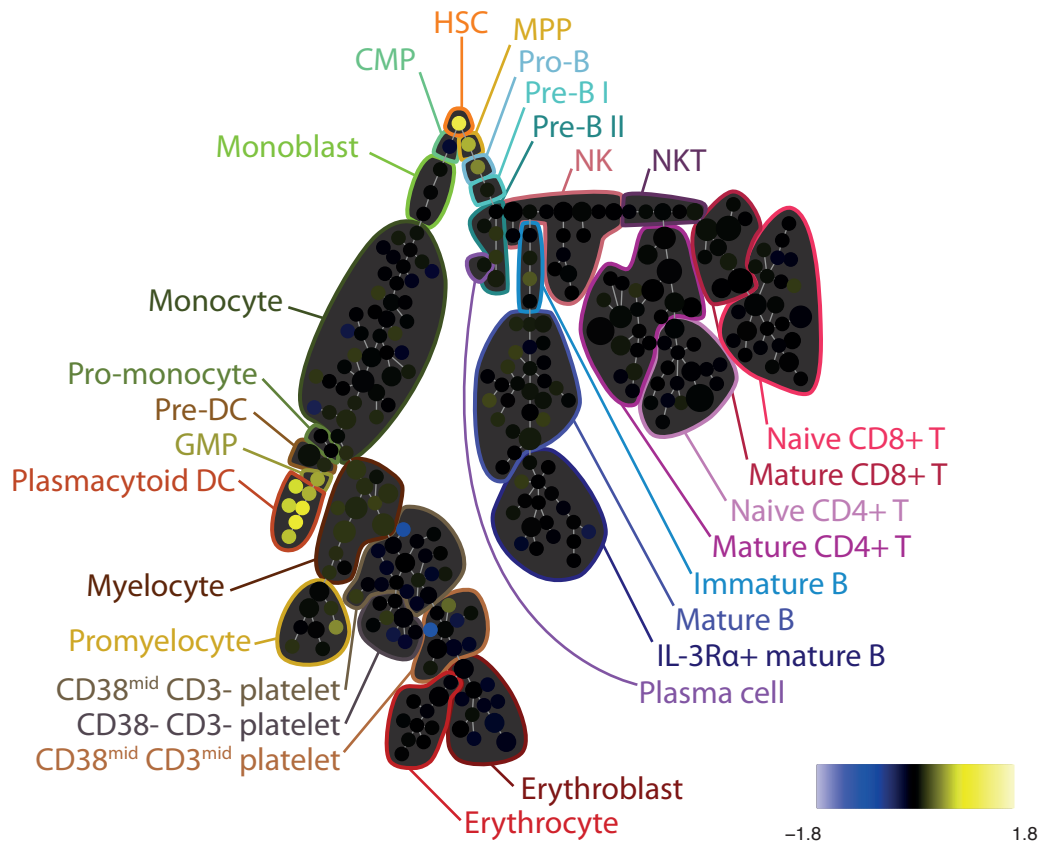


Figure S8A

151-pERK1/2 ---- BCR vs Ref Ratio

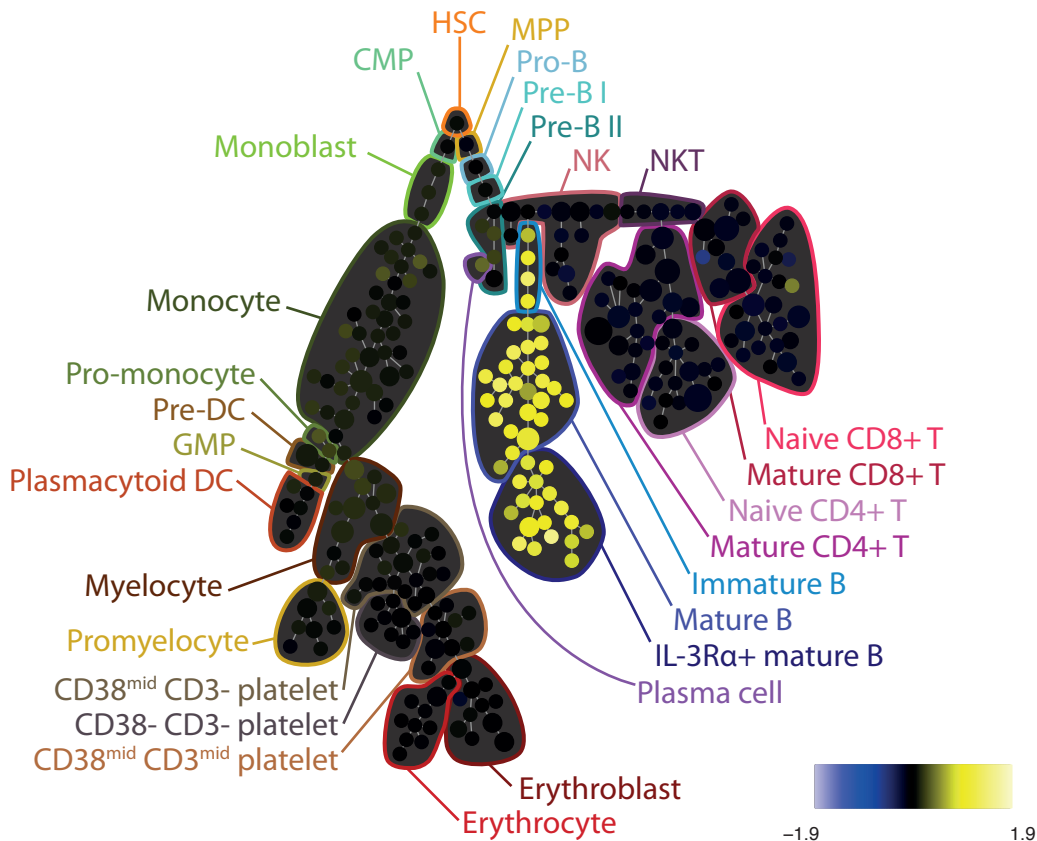


Figure S8A

151-pERK1/2 --- DMSO vs Ref Ratio

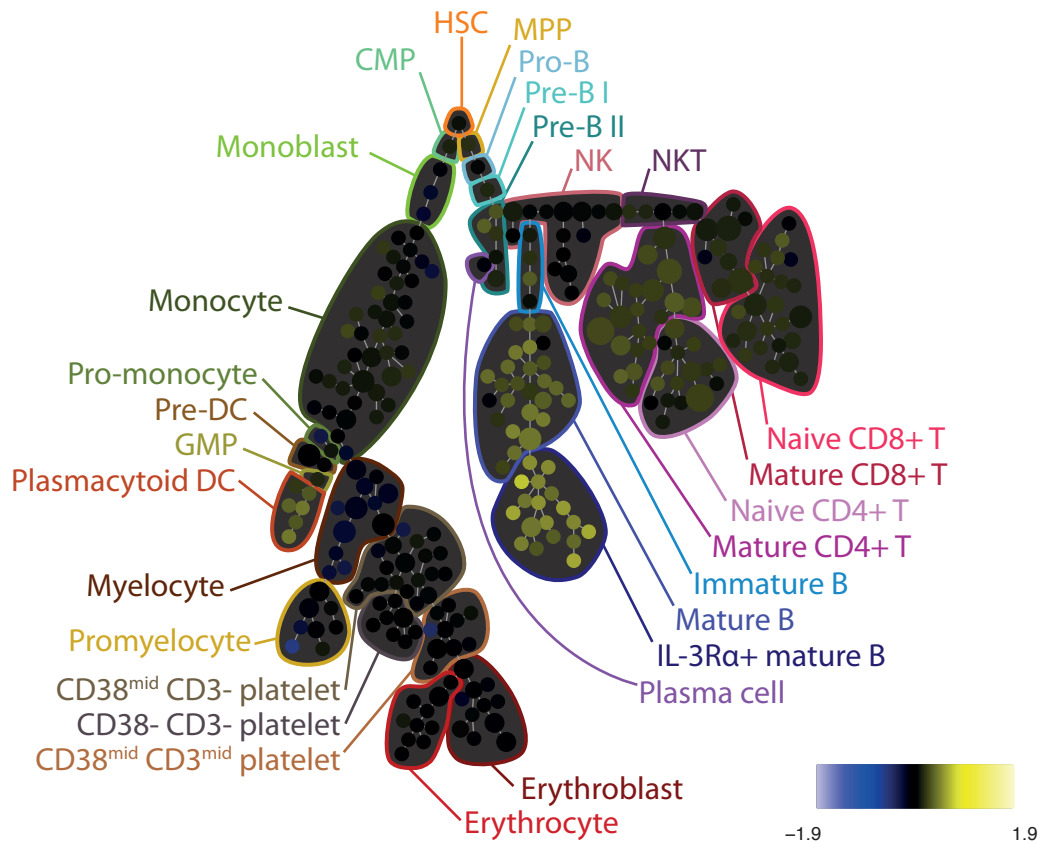


Figure S8A

151-pERK1/2 ---- Flt3L vs Ref Ratio

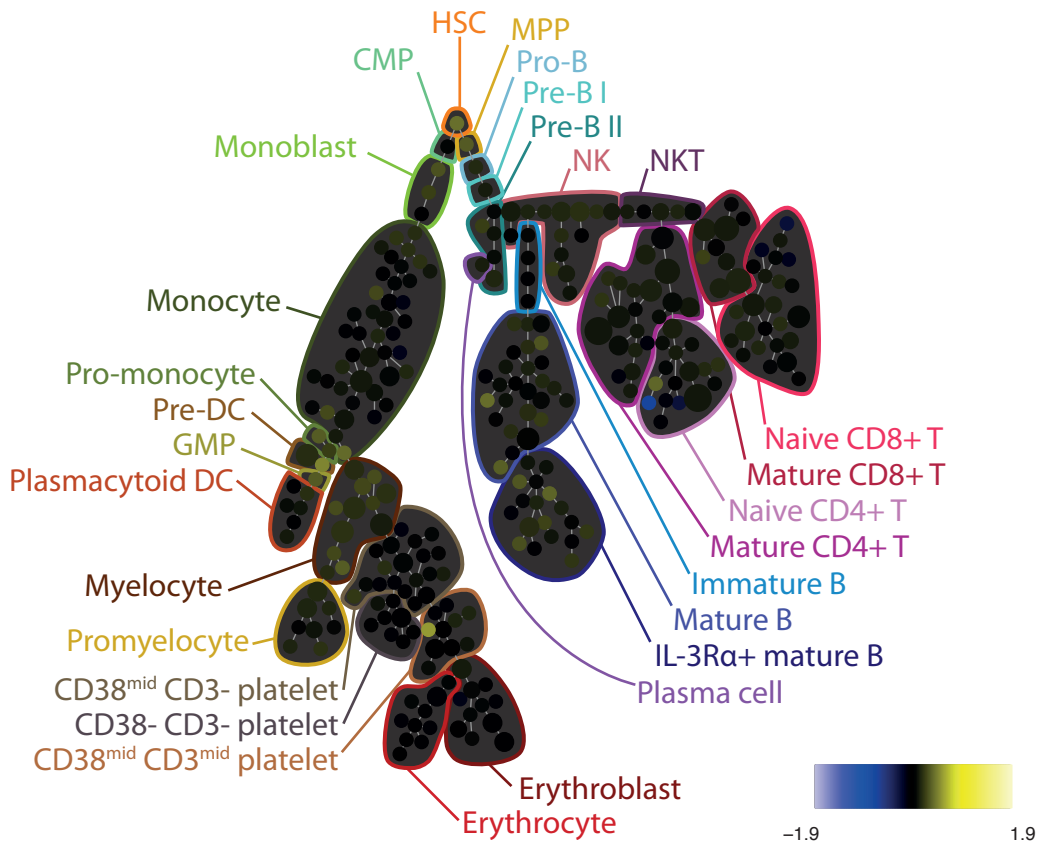


Figure S8A

151-pERK1/2 ---- GCSF vs Ref Ratio

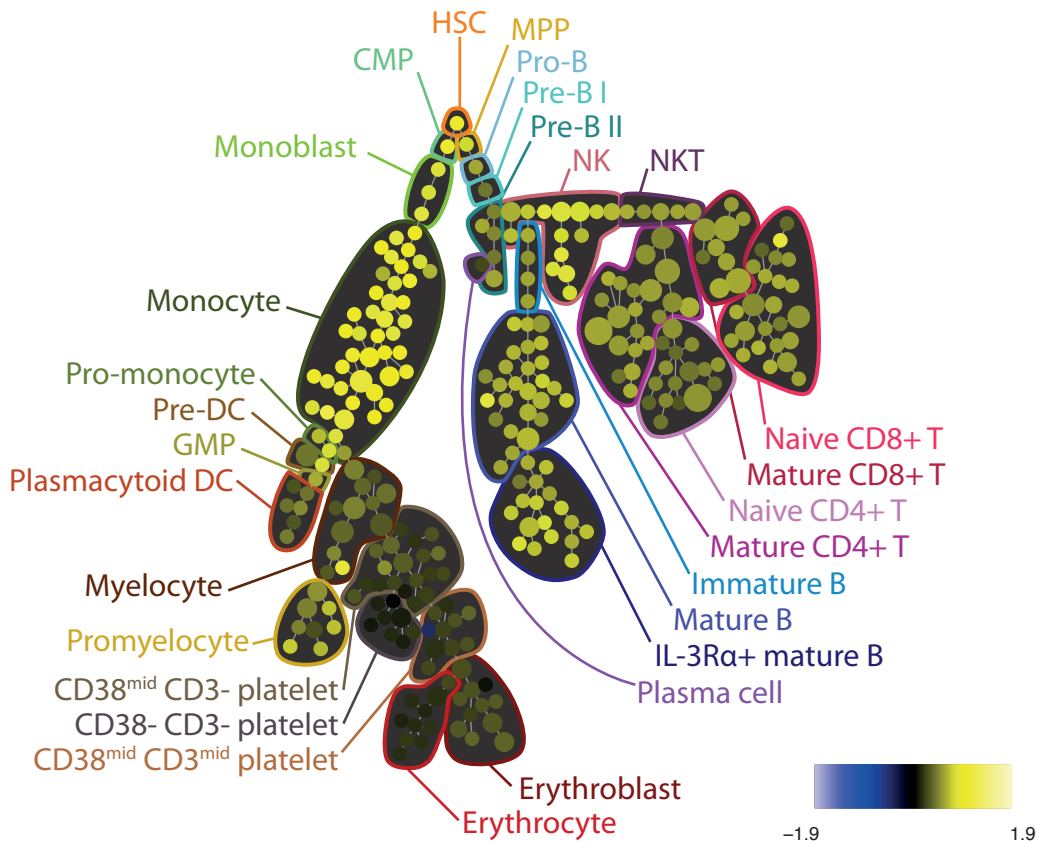


Figure S8A

151-pERK1/2 ---- GMCSF vs Ref Ratio

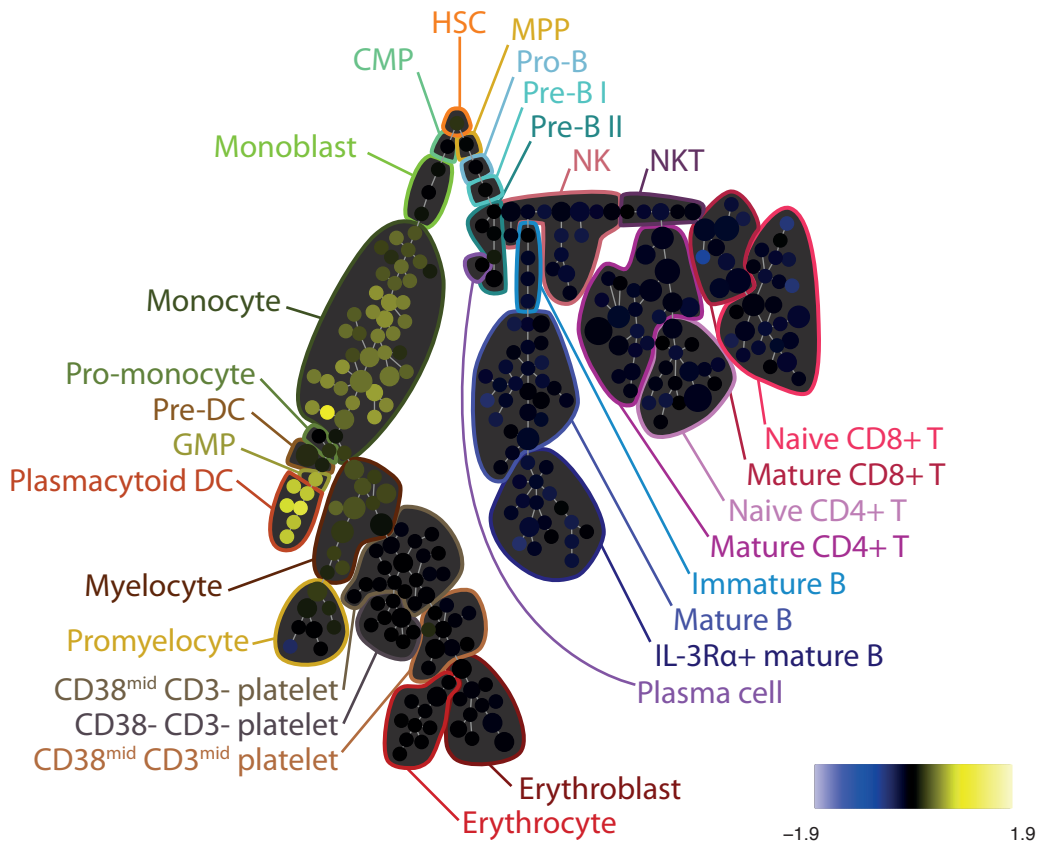


Figure S8A

151-pERK1/2 ---- IFNad vs Ref Ratio

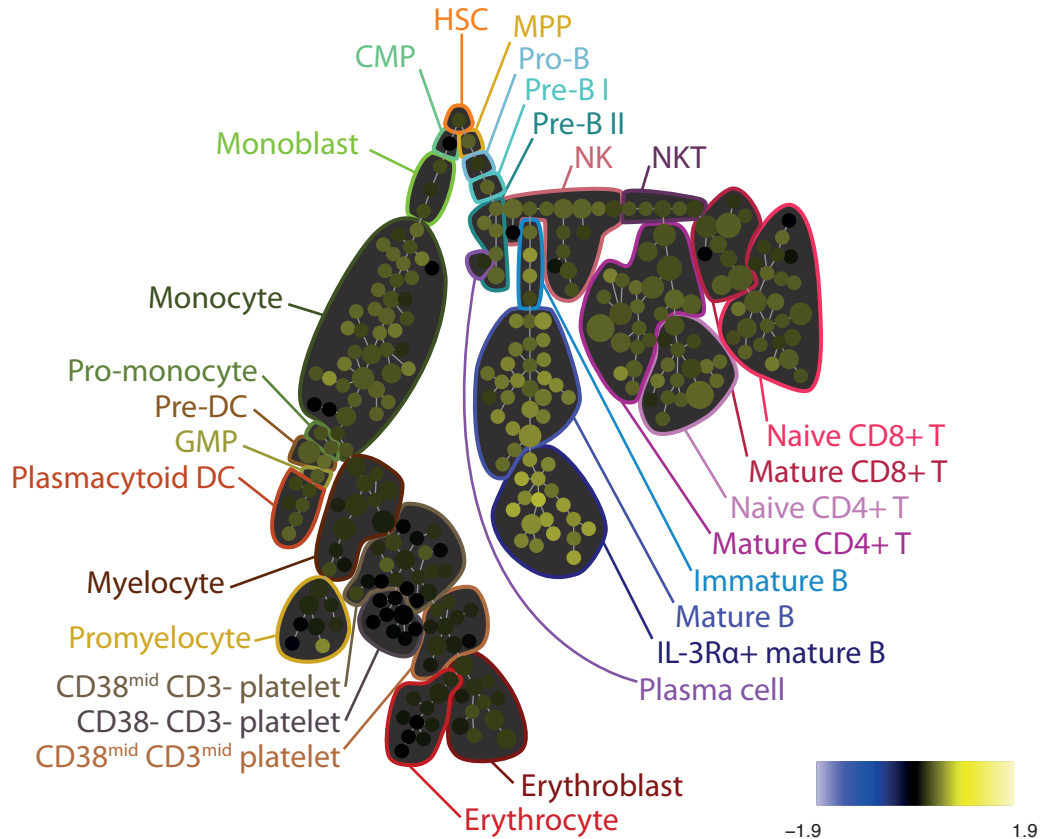


Figure S8A

151-pERK1/2 --- IL3 vs Ref Ratio

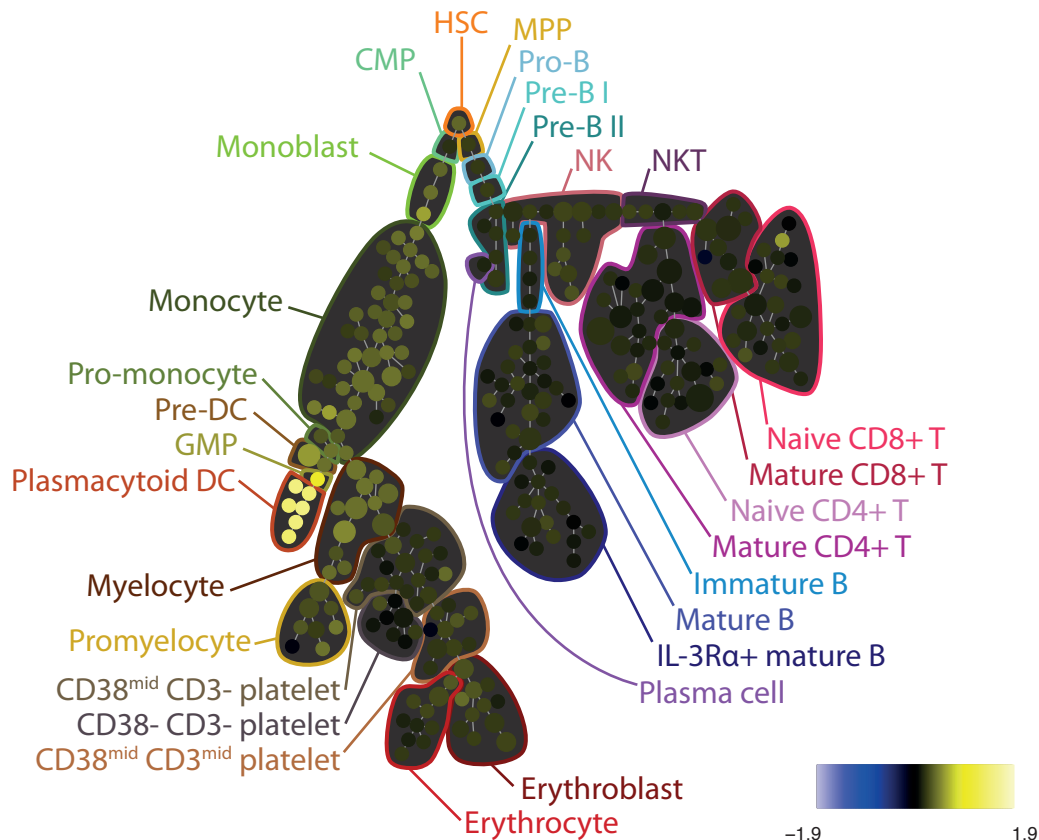


Figure S8A

151-pERK1/2 --- IL7 vs Ref Ratio

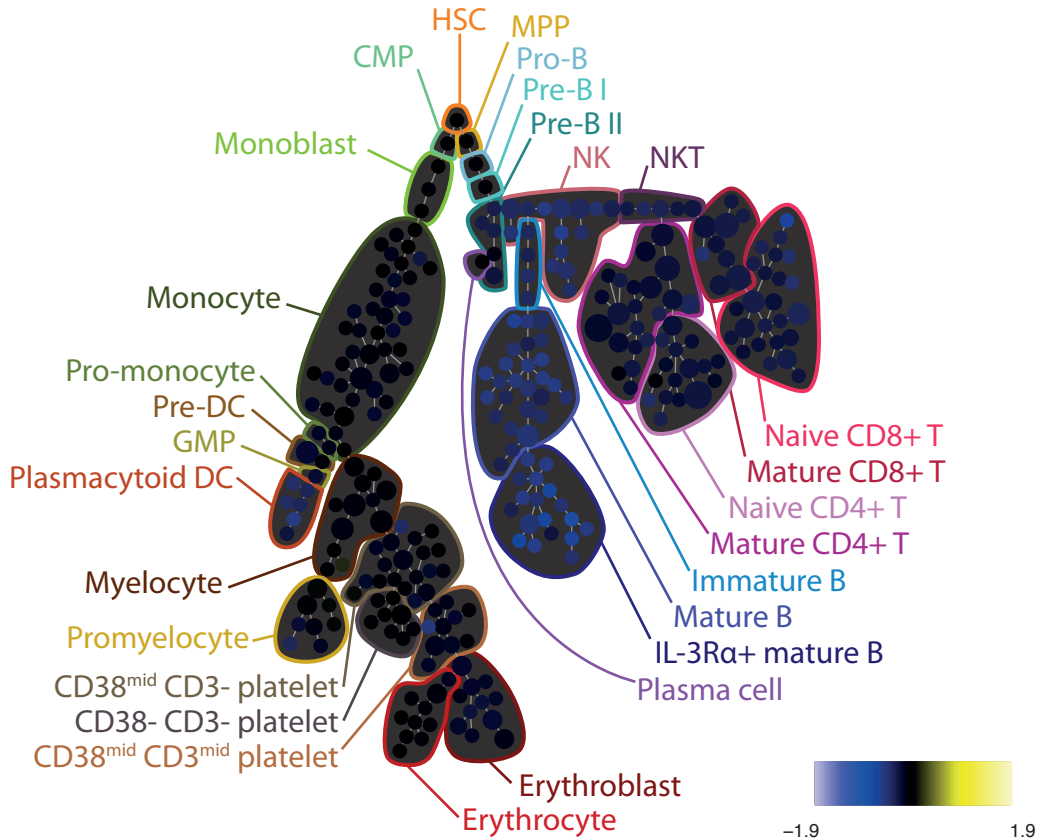


Figure S8A

151-pERK1/2 ---- LPS vs Ref Ratio

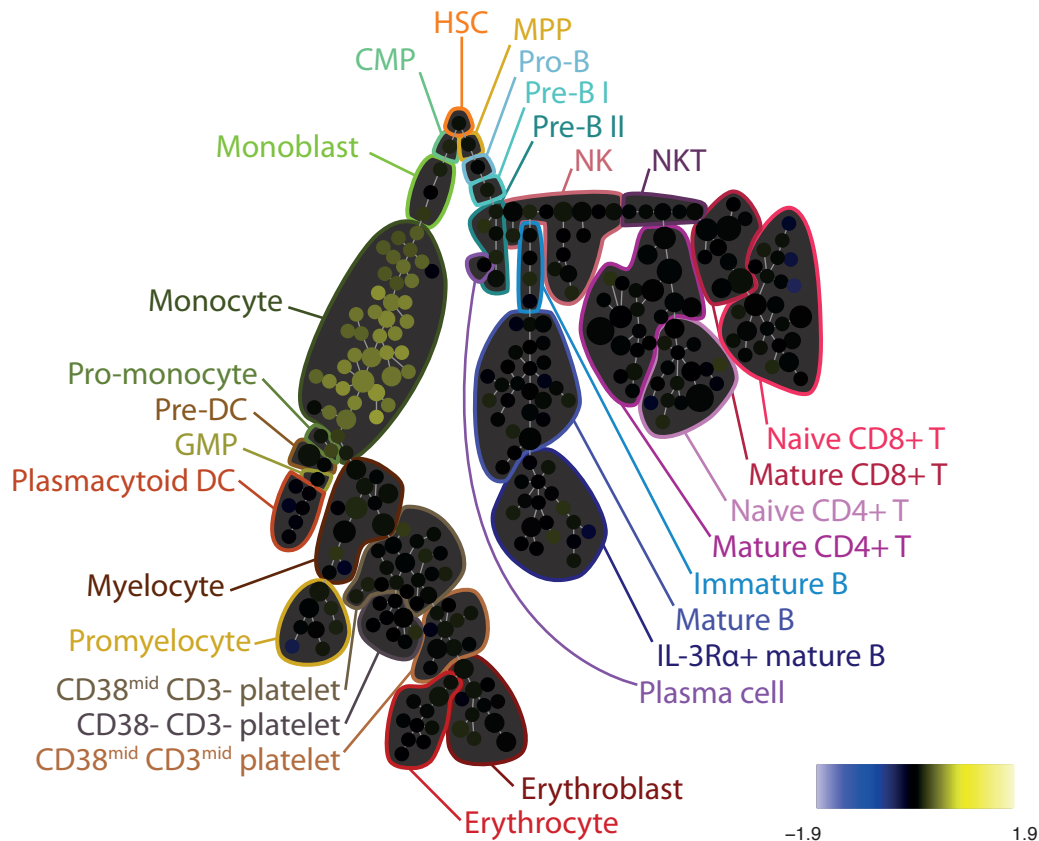


Figure S8A

151-pERK1/2 ---- PMAiono vs Ref Ratio

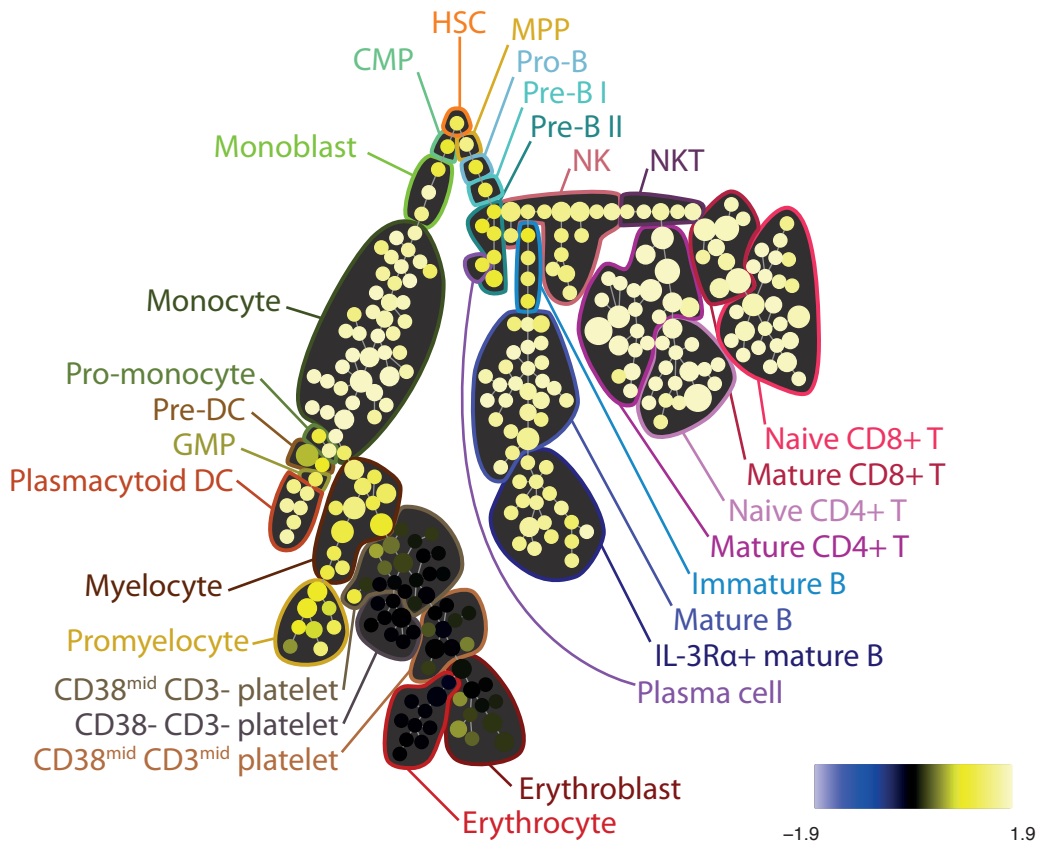


Figure S8A

151-pERK1/2 ---- PVO4 vs Ref Ratio

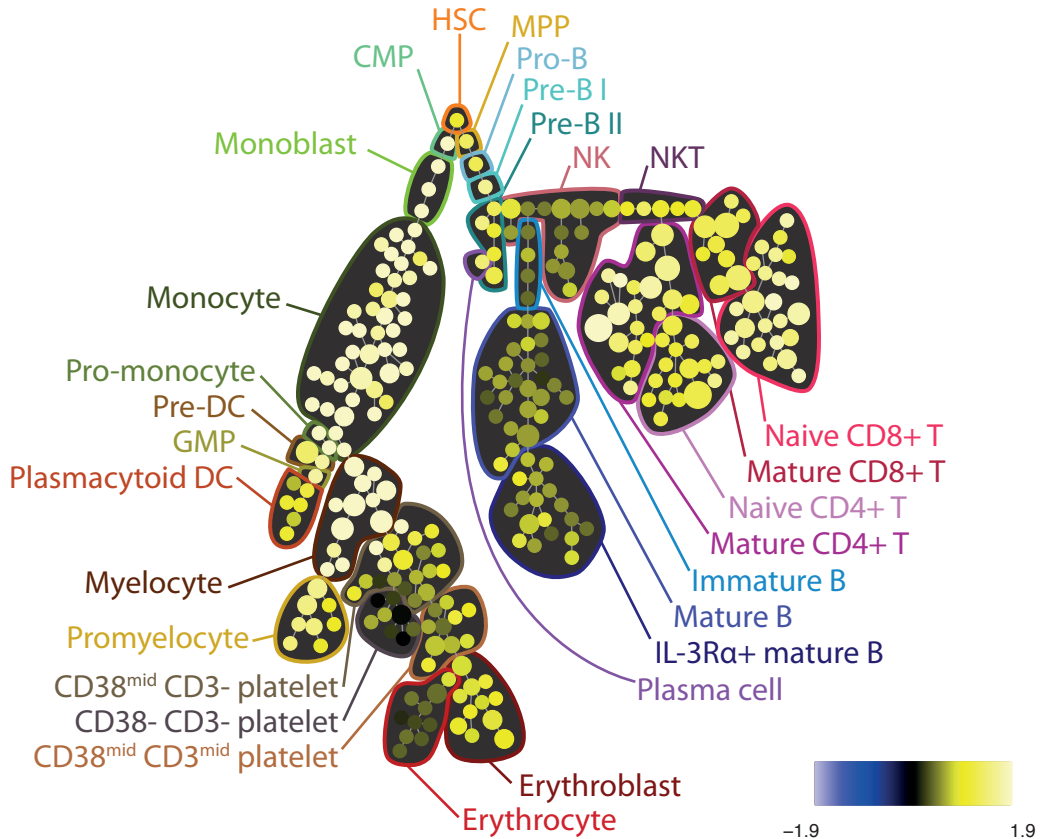


Figure S8A

151-pERK1/2 ---- SCF vs Ref Ratio

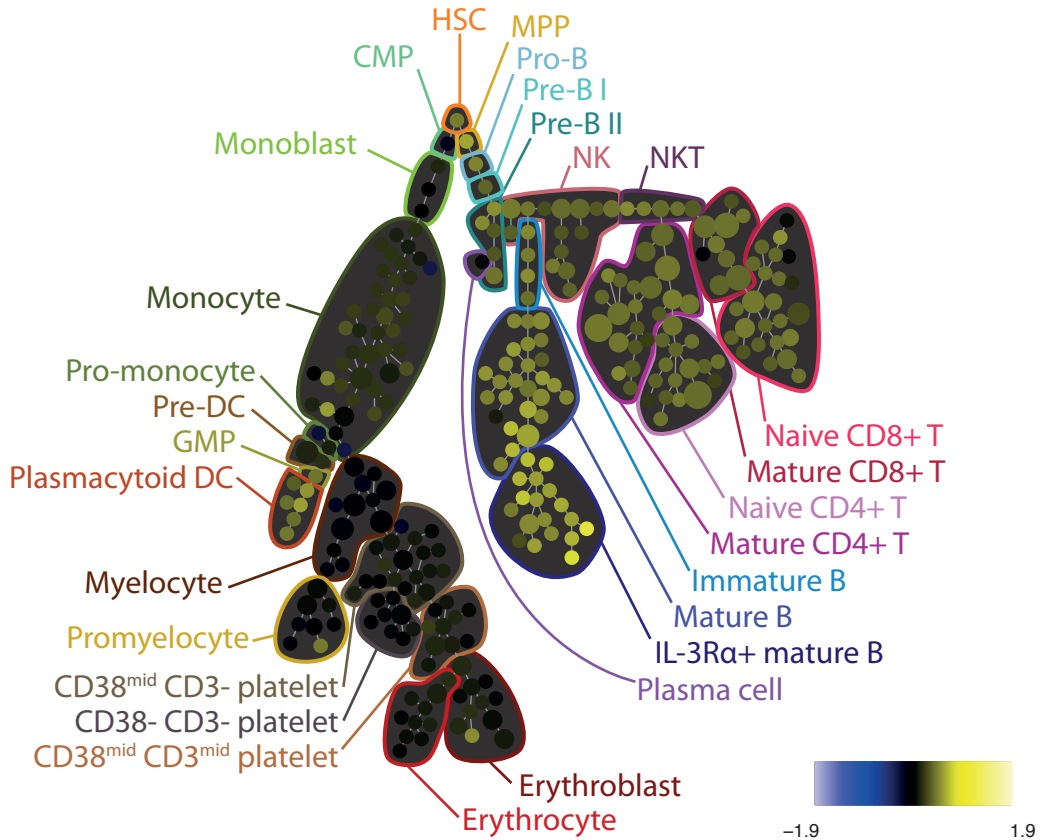


Figure S8A

151-pERK1/2 ---- TNFa vs Ref Ratio

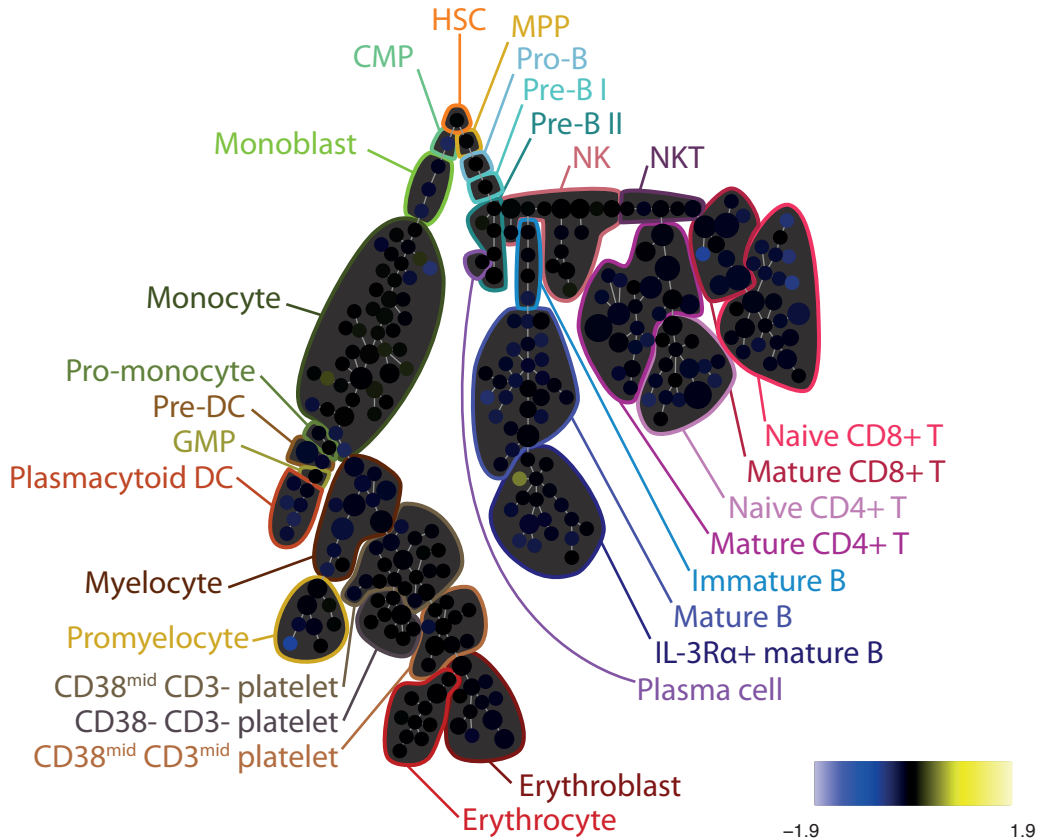


Figure S8A

151-pERK1/2 ---- TPO vs Ref Ratio

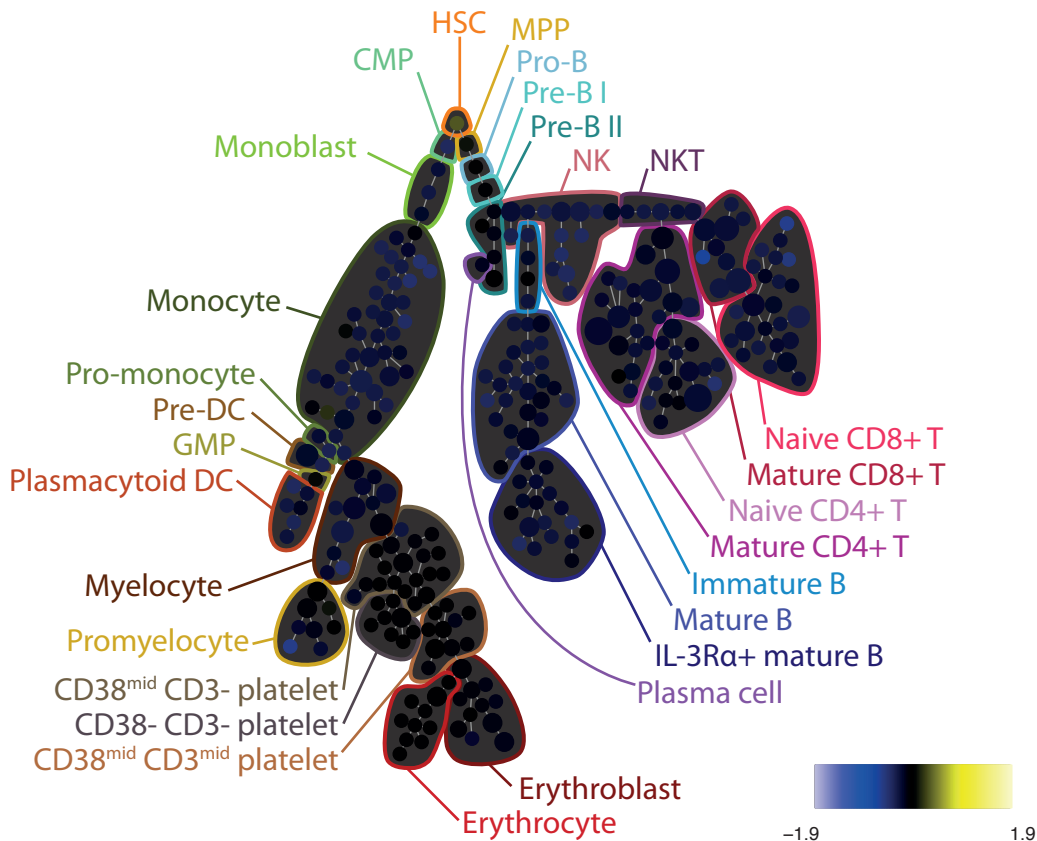


Figure S8A

152-Ki67 ---- BCR vs Ref Ratio

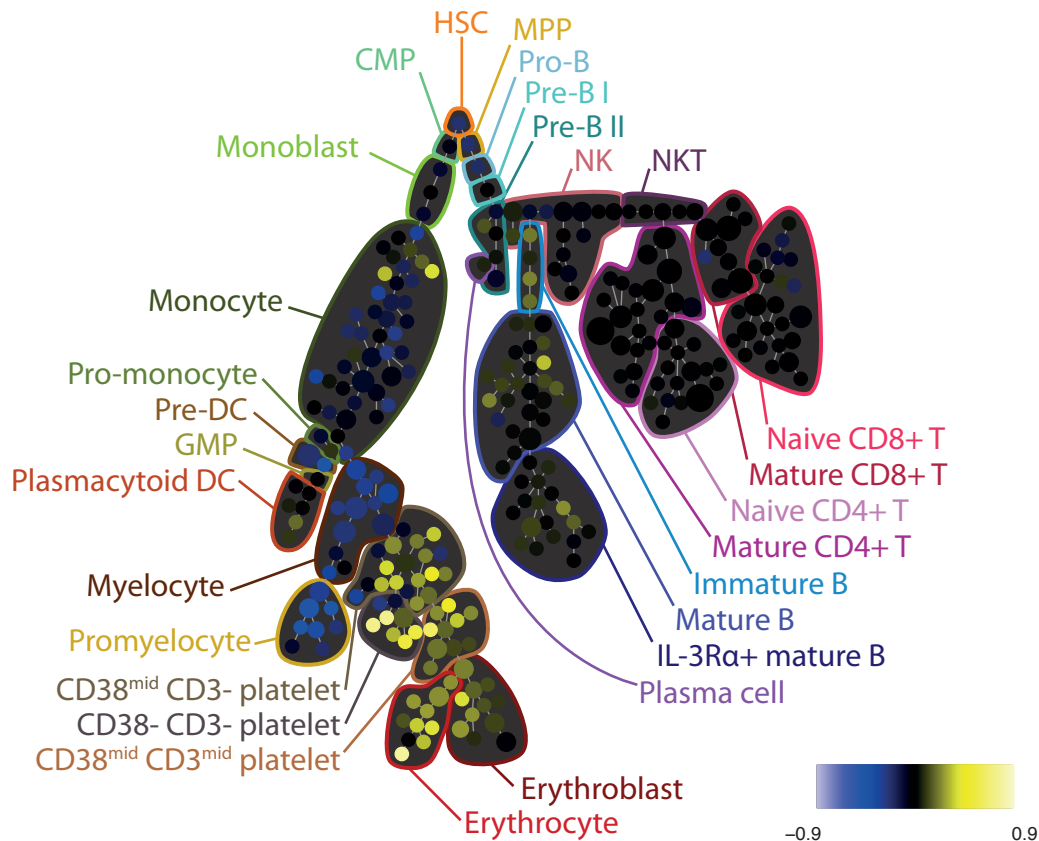


Figure S8A

152-Ki67 ---- DMSO vs Ref Ratio

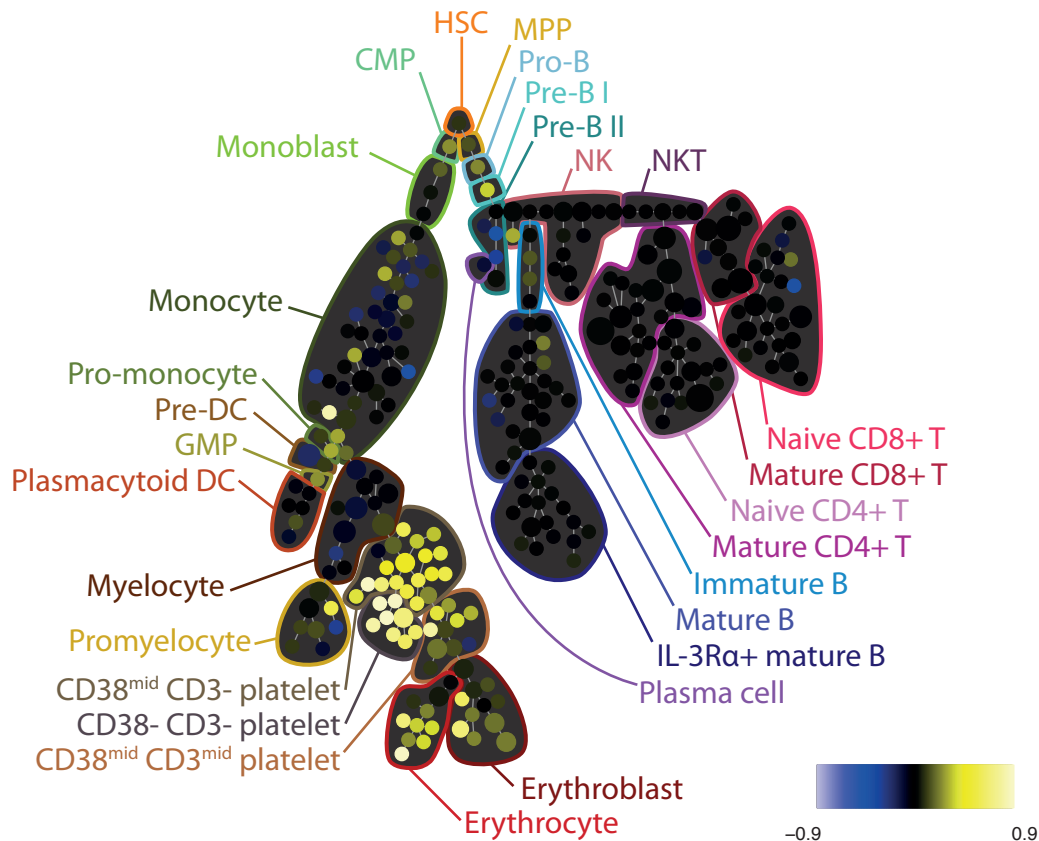


Figure S8A

152-Ki67 ---- Flt3L vs Ref Ratio

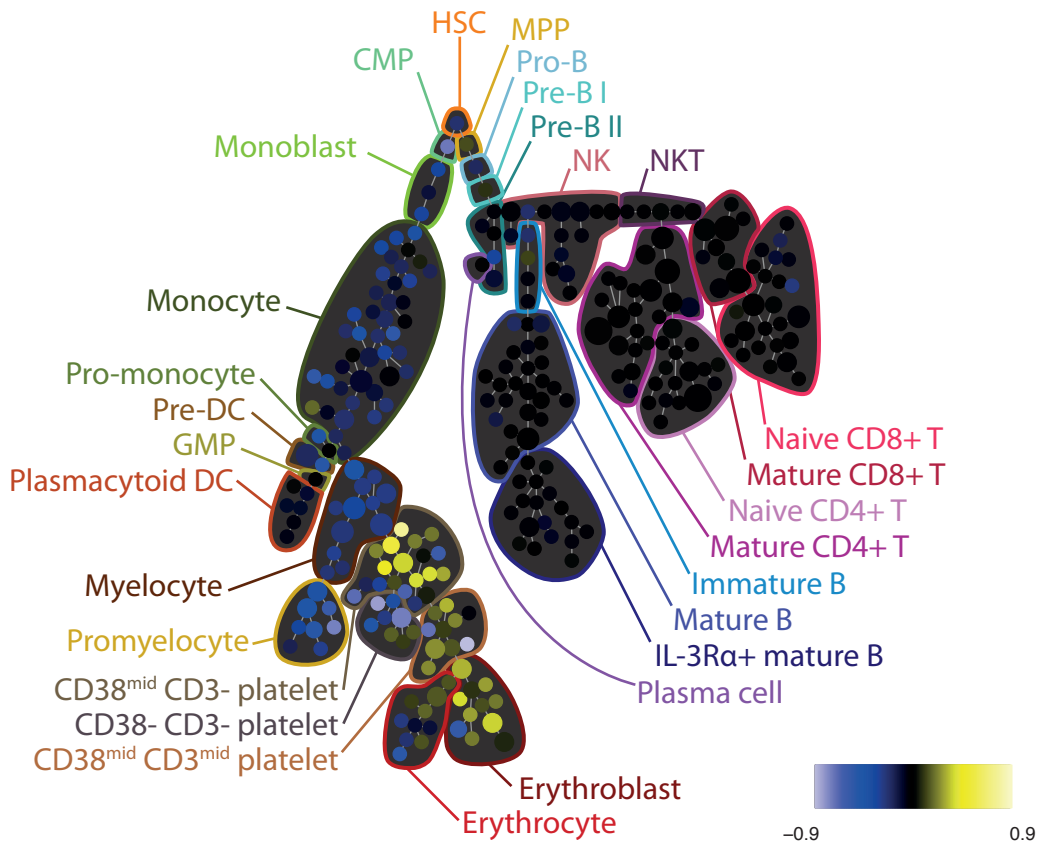


Figure S8A

152-Ki67 ---- GCSF vs Ref Ratio

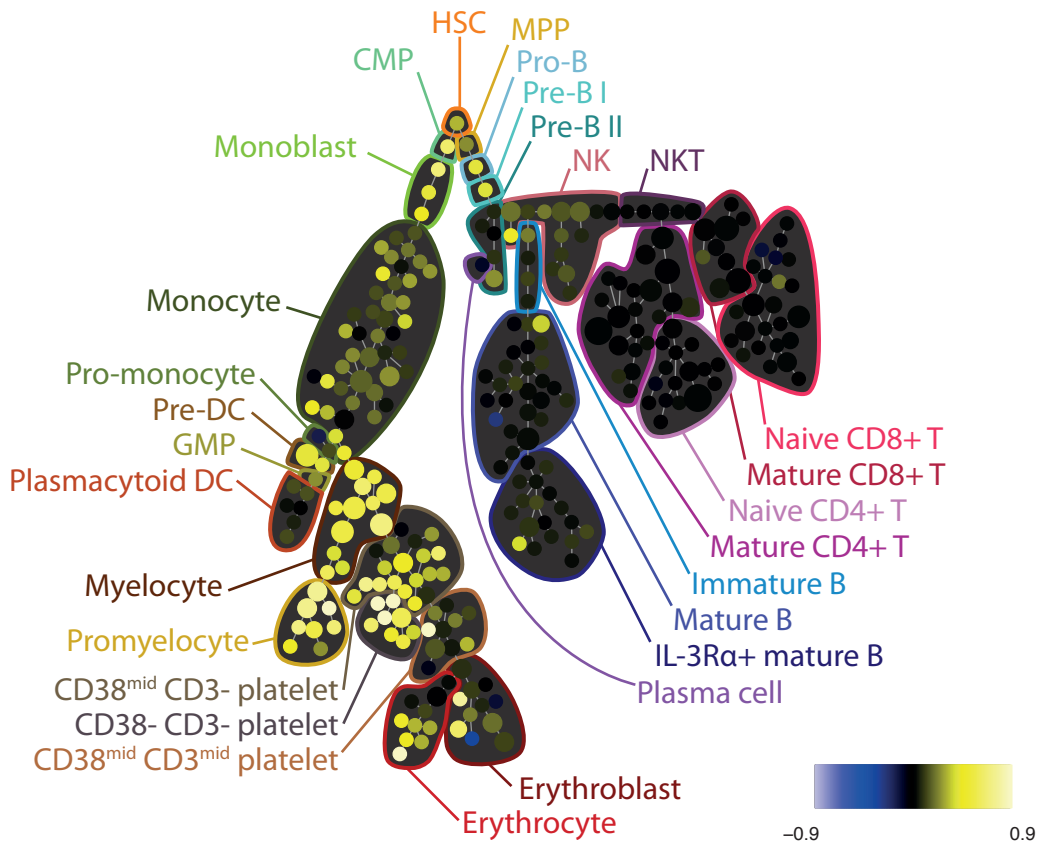


Figure S8A

152-Ki67 ---- GMCSF vs Ref Ratio

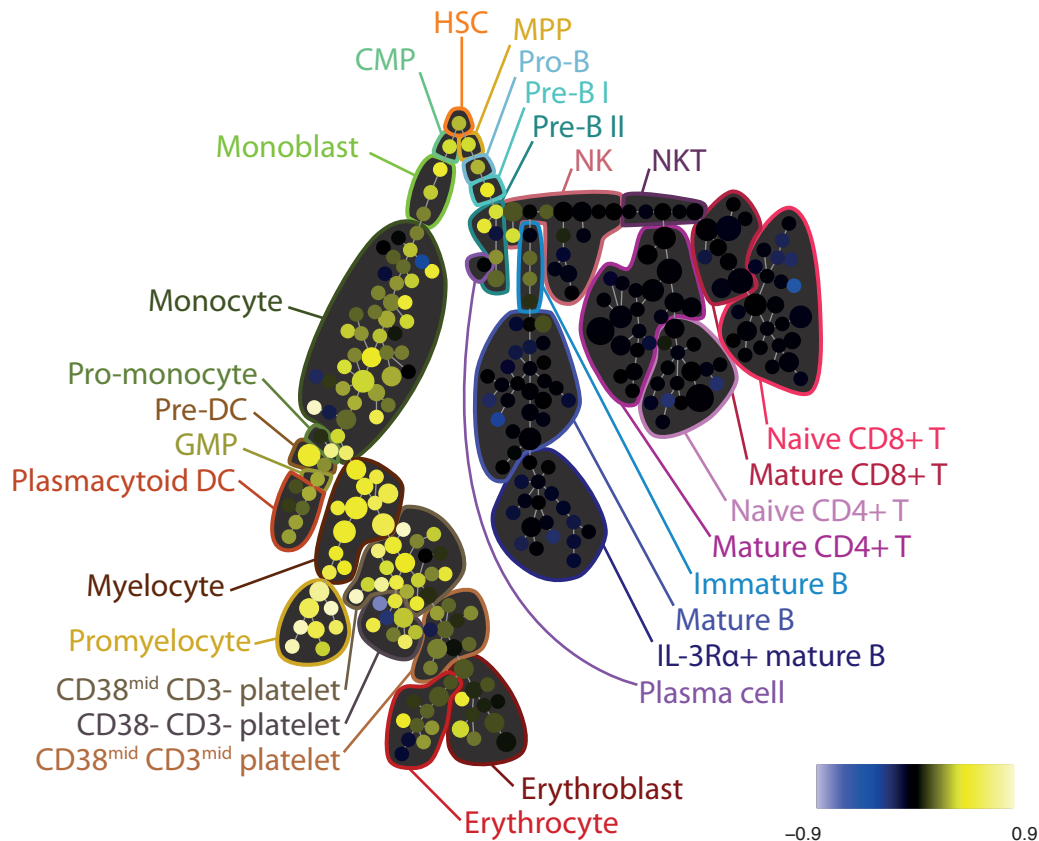


Figure S8A

152-Ki67 ---- IFNad vs Ref Ratio

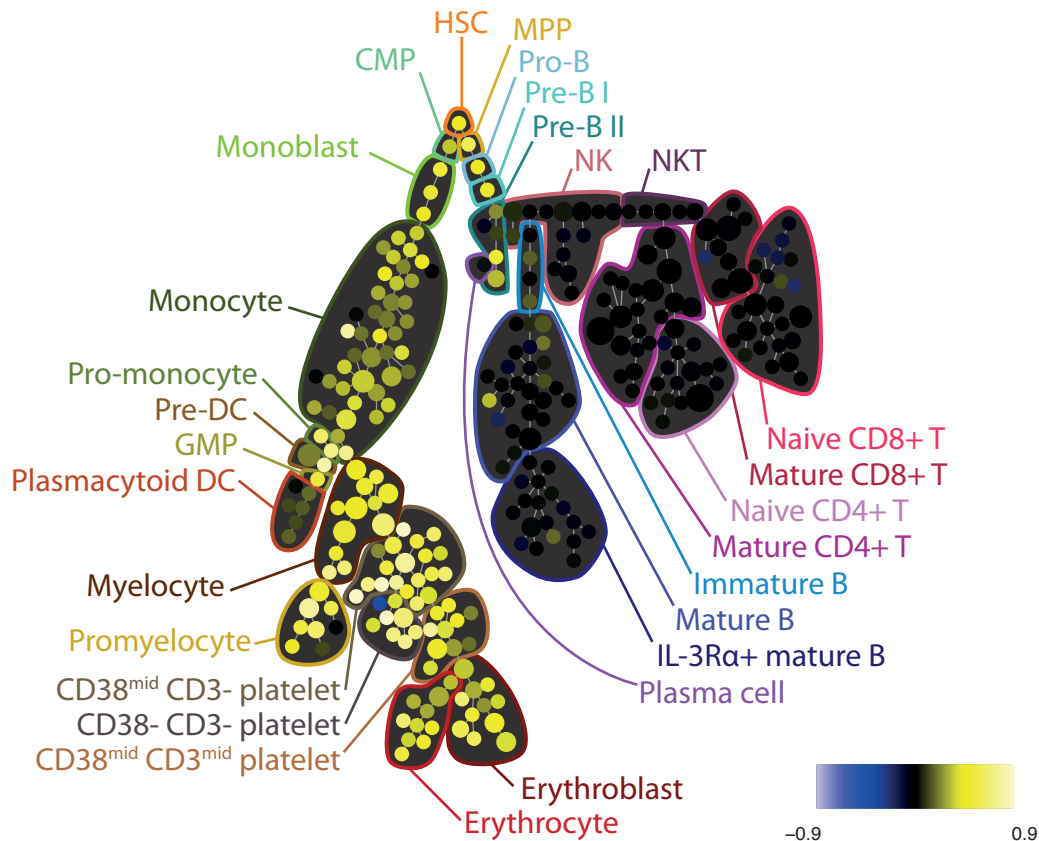


Figure S8A

152-Ki67 ---- IL3 vs Ref Ratio

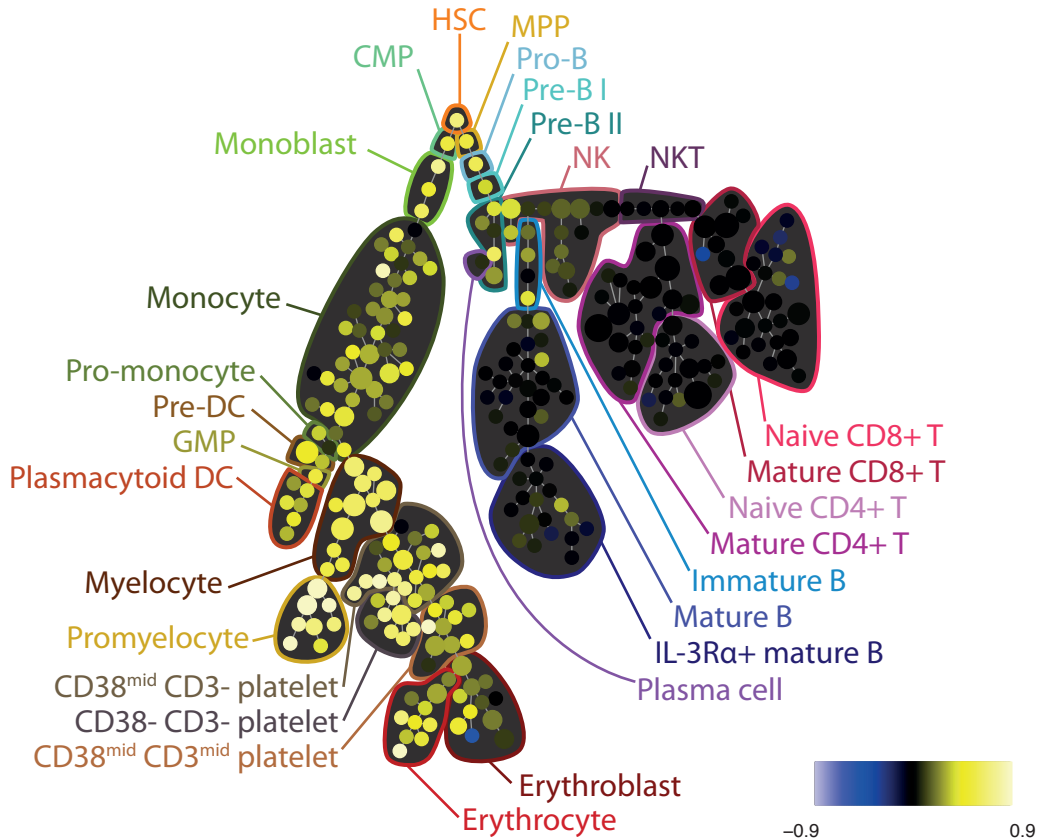


Figure S8A

152-Ki67 ---- IL7 vs Ref Ratio

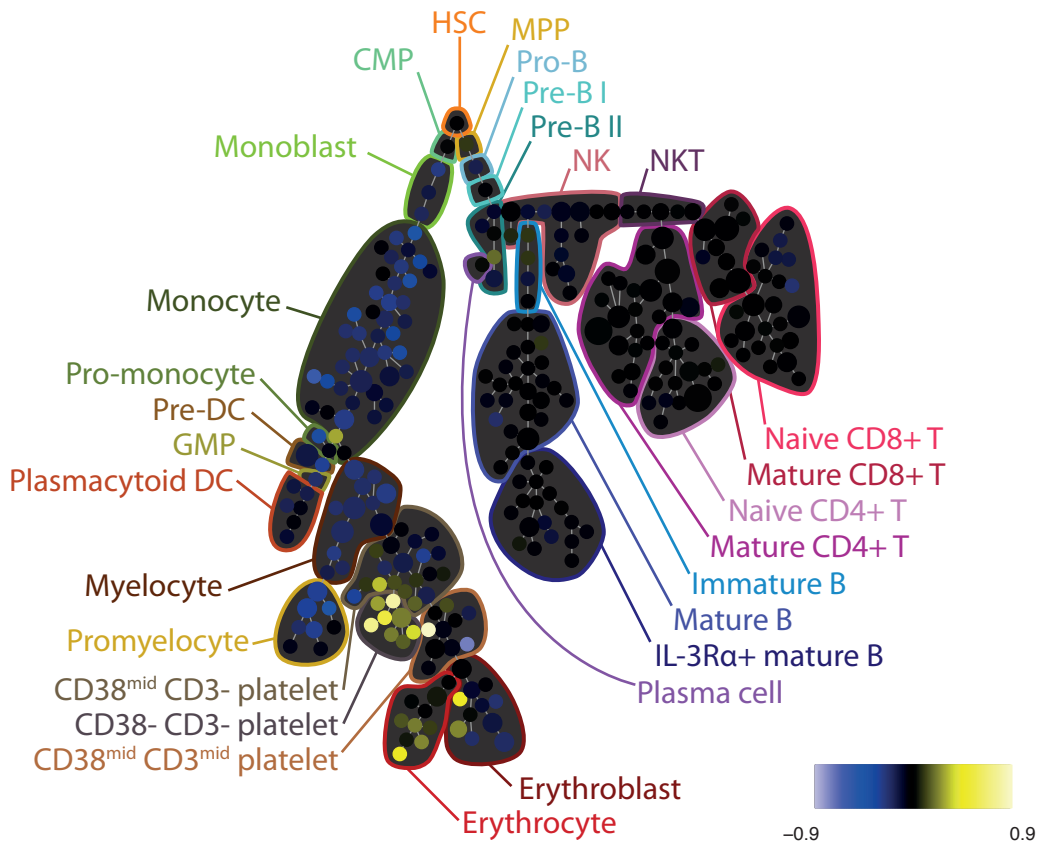


Figure S8A

152-Ki67 ---- LPS vs Ref Ratio

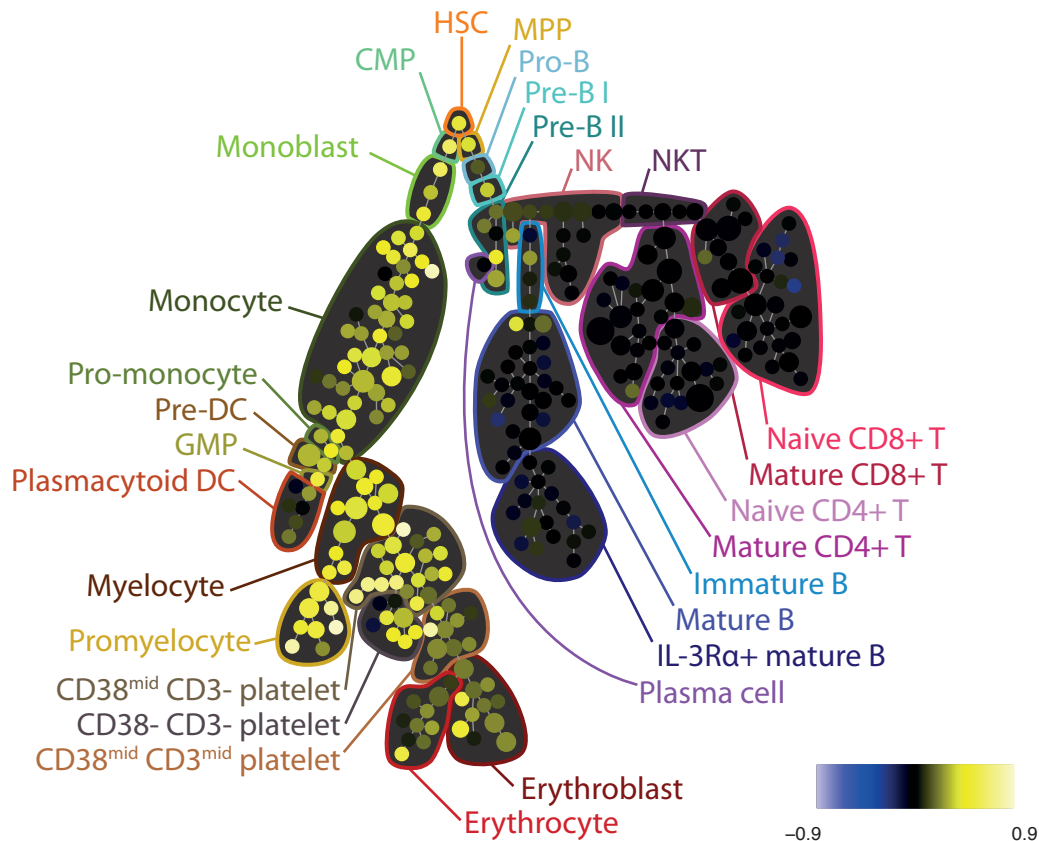


Figure S8A

152-Ki67 ---- PMAiono vs Ref Ratio

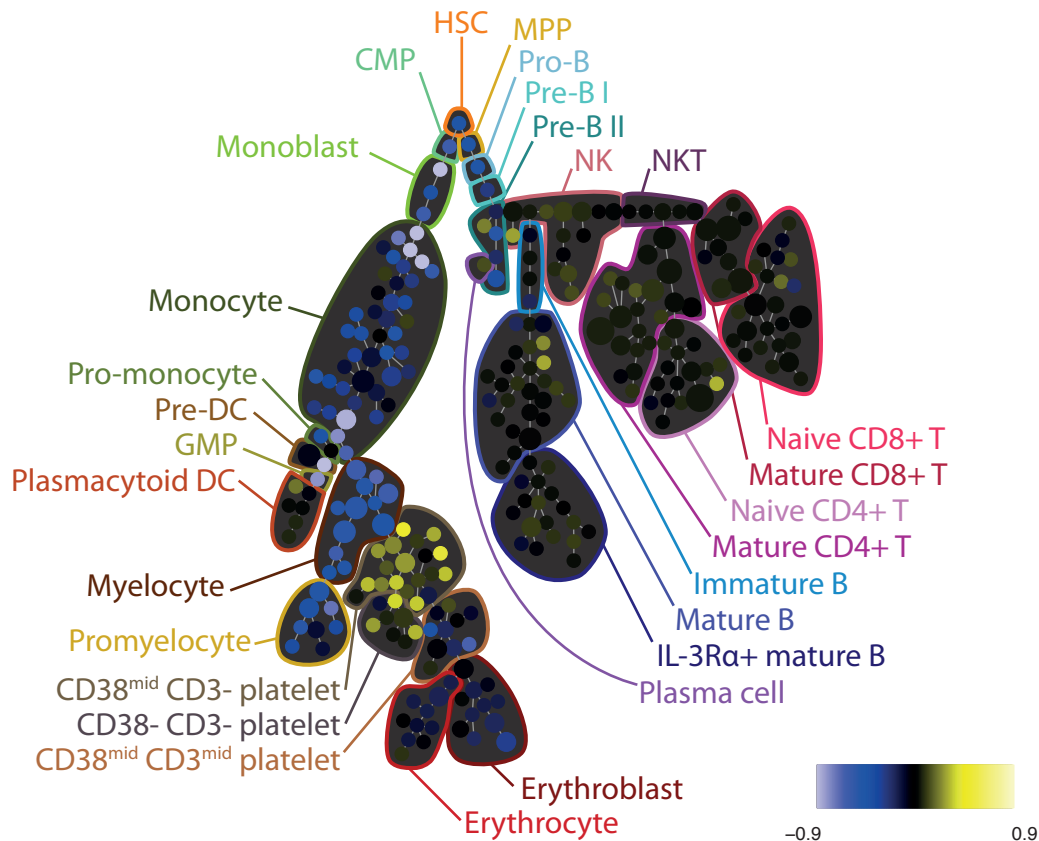


Figure S8A

152-Ki67 ---- PVO4 vs Ref Ratio

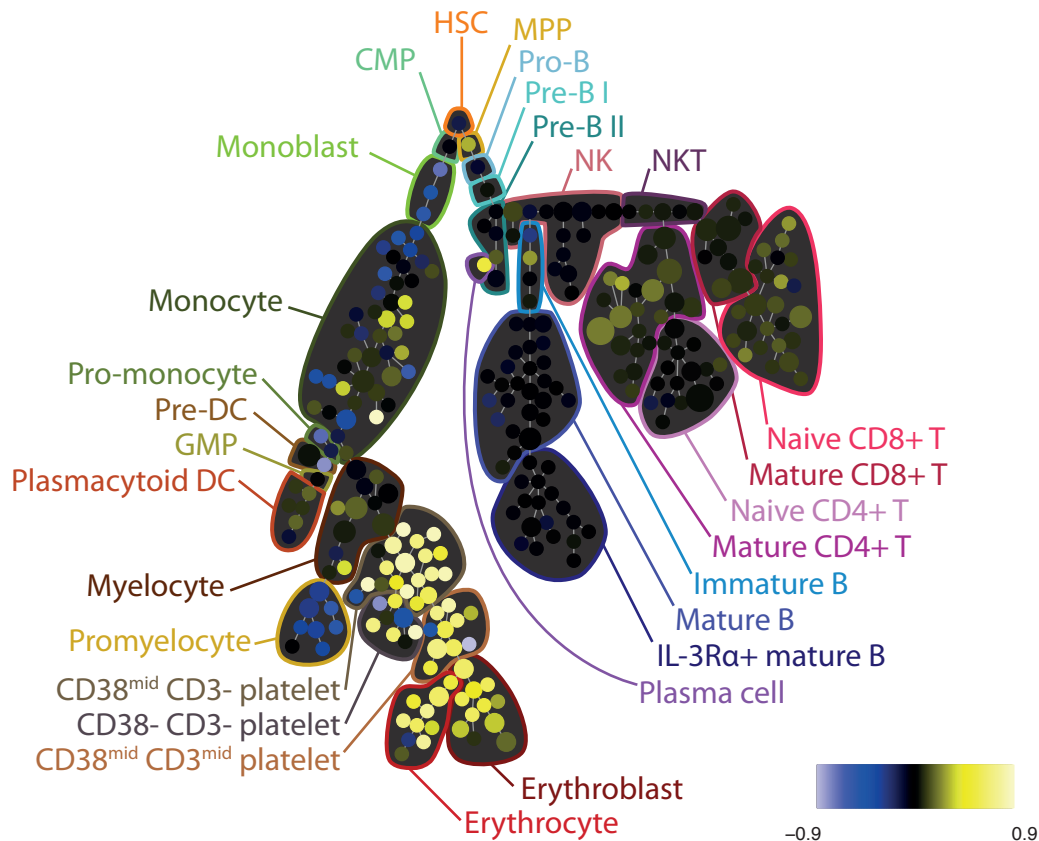


Figure S8A

152-Ki67 ---- SCF vs Ref Ratio

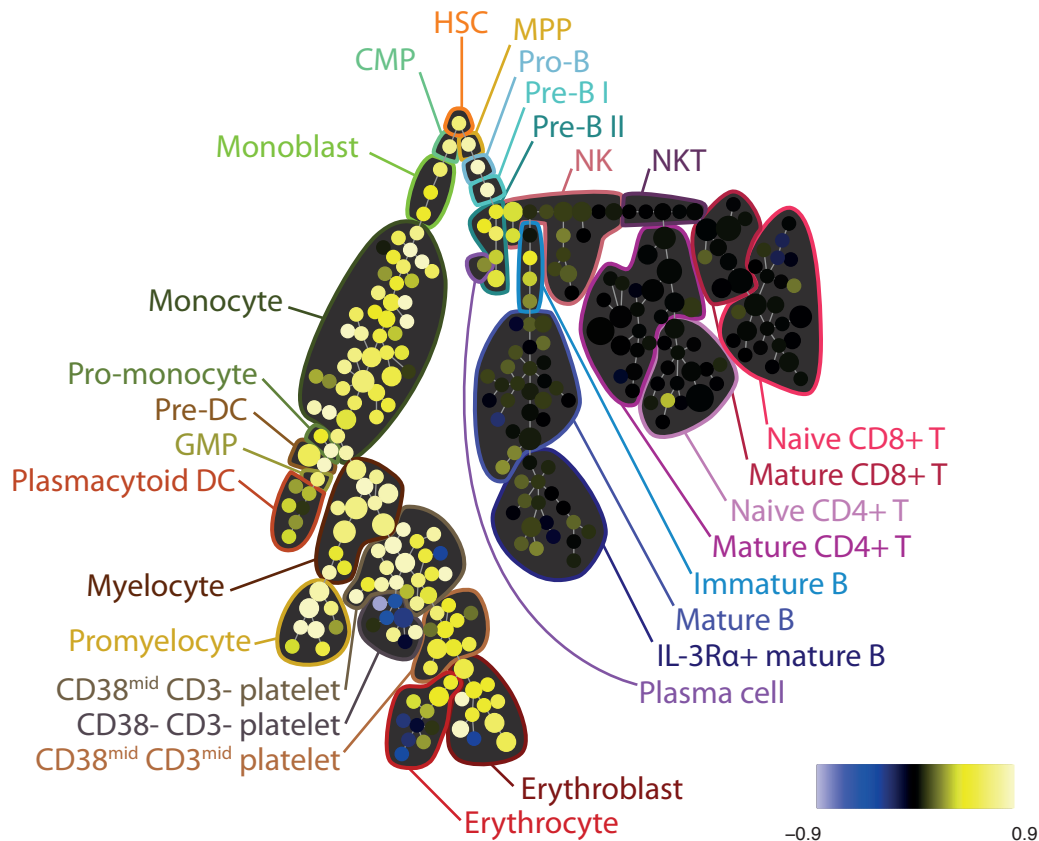


Figure S8A

152-Ki67 ---- TNFa vs Ref Ratio

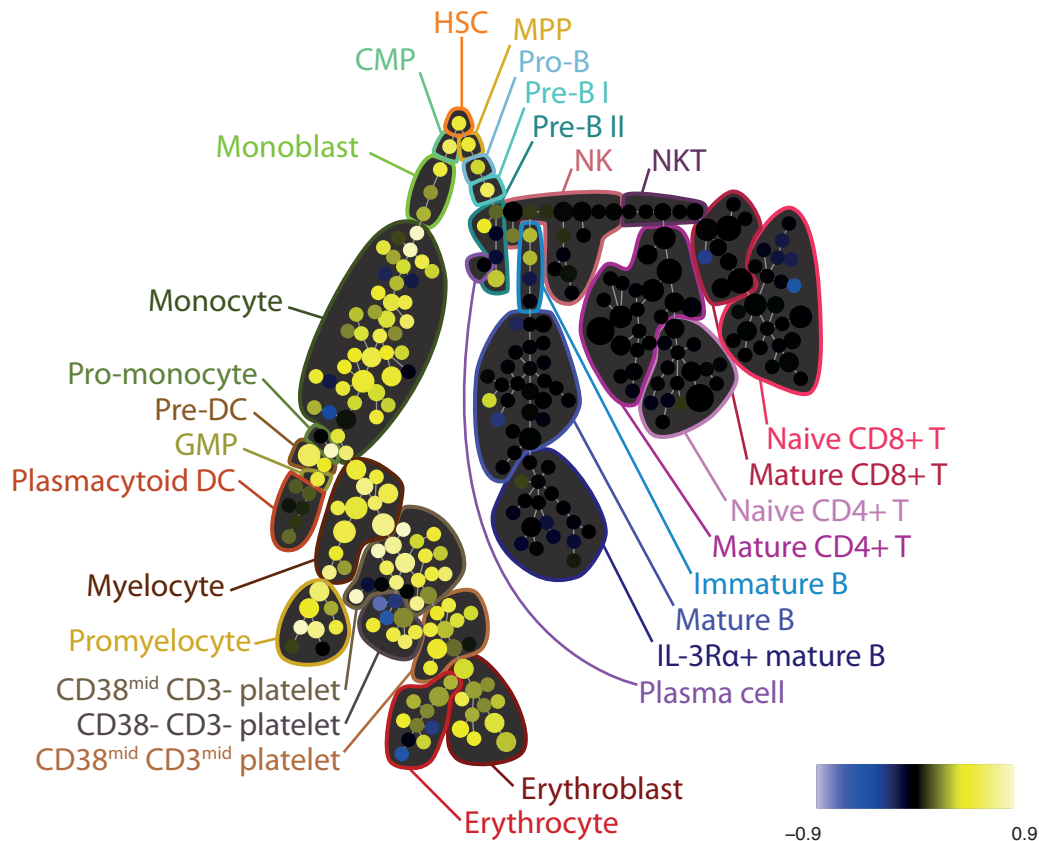


Figure S8A

152-Ki67 ---- TPO vs Ref Ratio

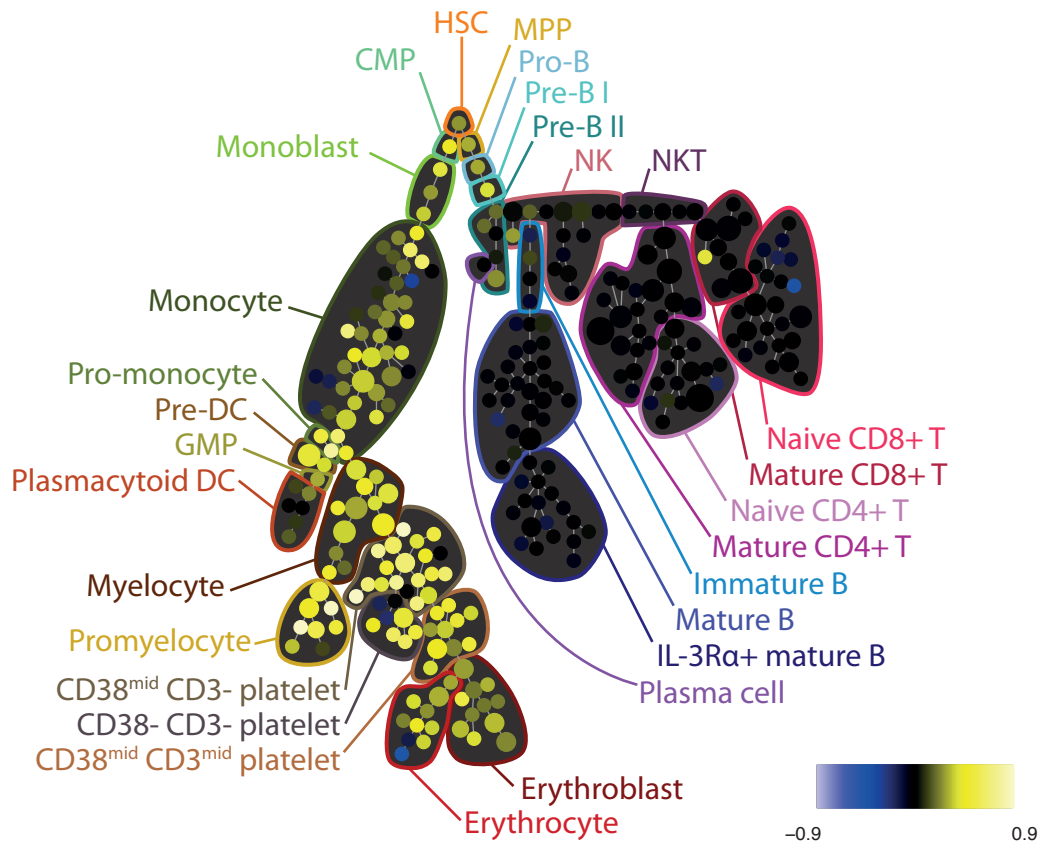


Figure S8A

153-pMAPKAPK2 ---- BCR vs Ref Ratio

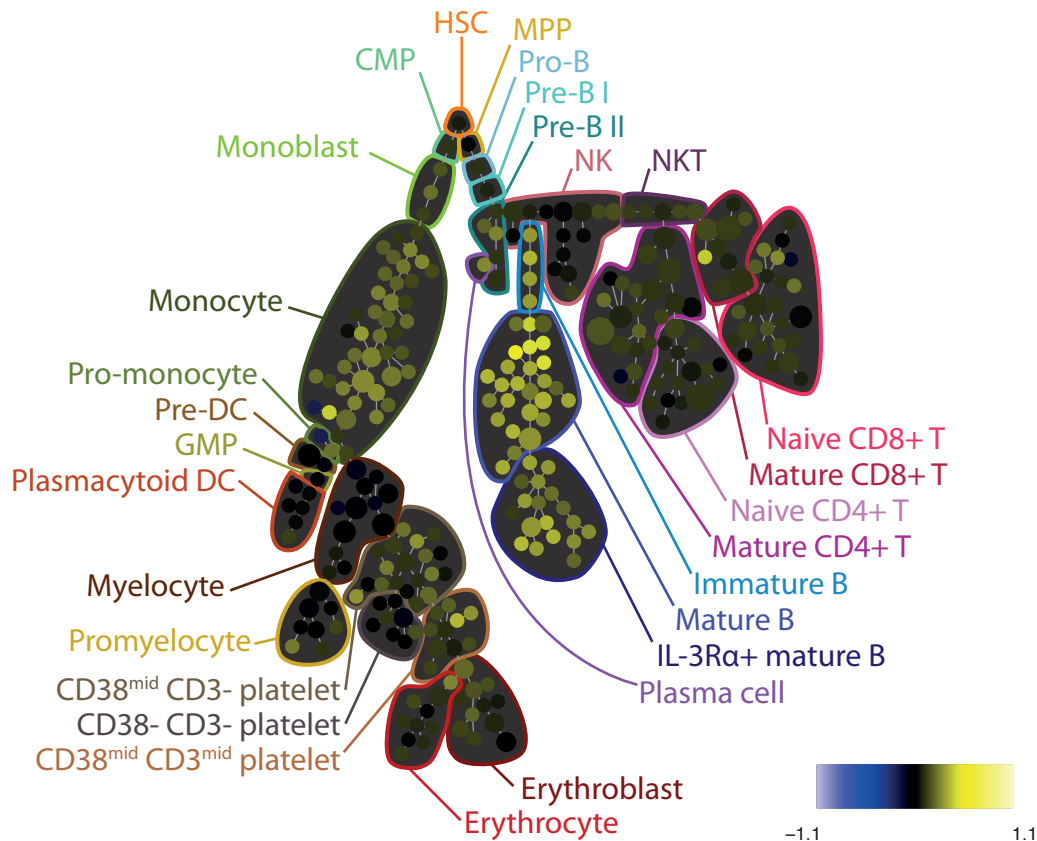


Figure S8A

153-pMAPKAPK2 ---- DMSO vs Ref Ratio

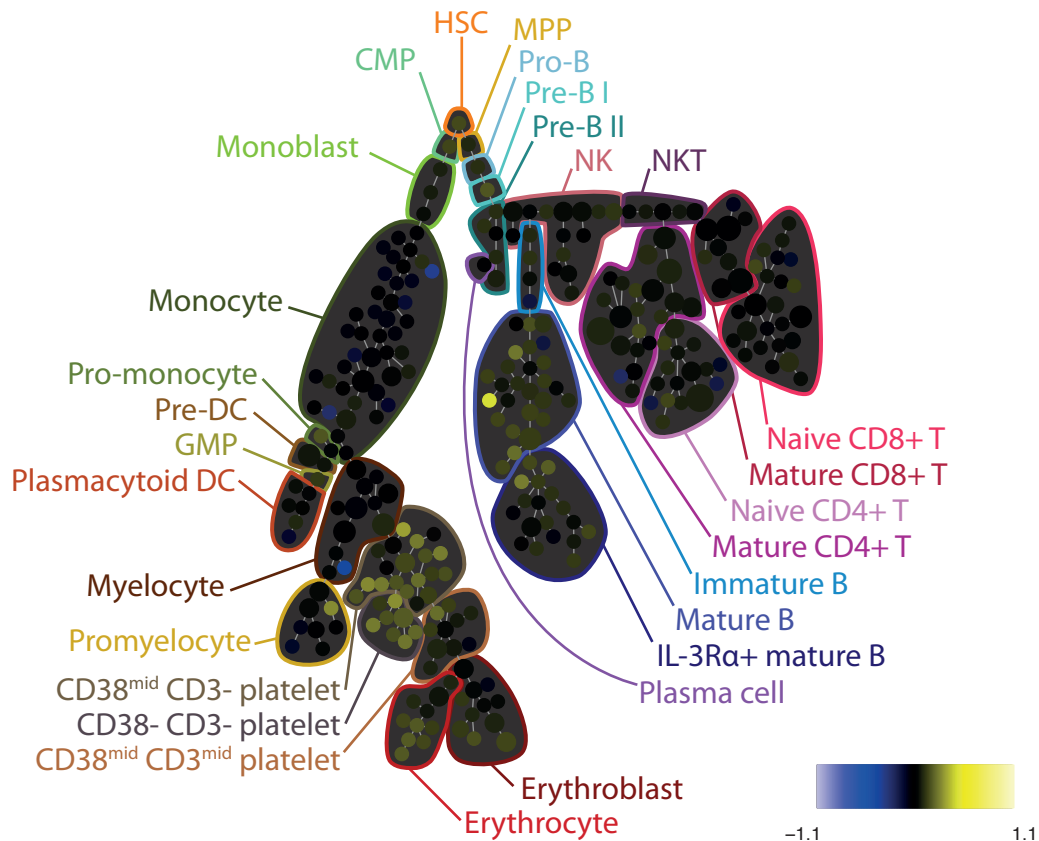


Figure S8A

153-pMAPKAPK2 ---- Flt3L vs Ref Ratio

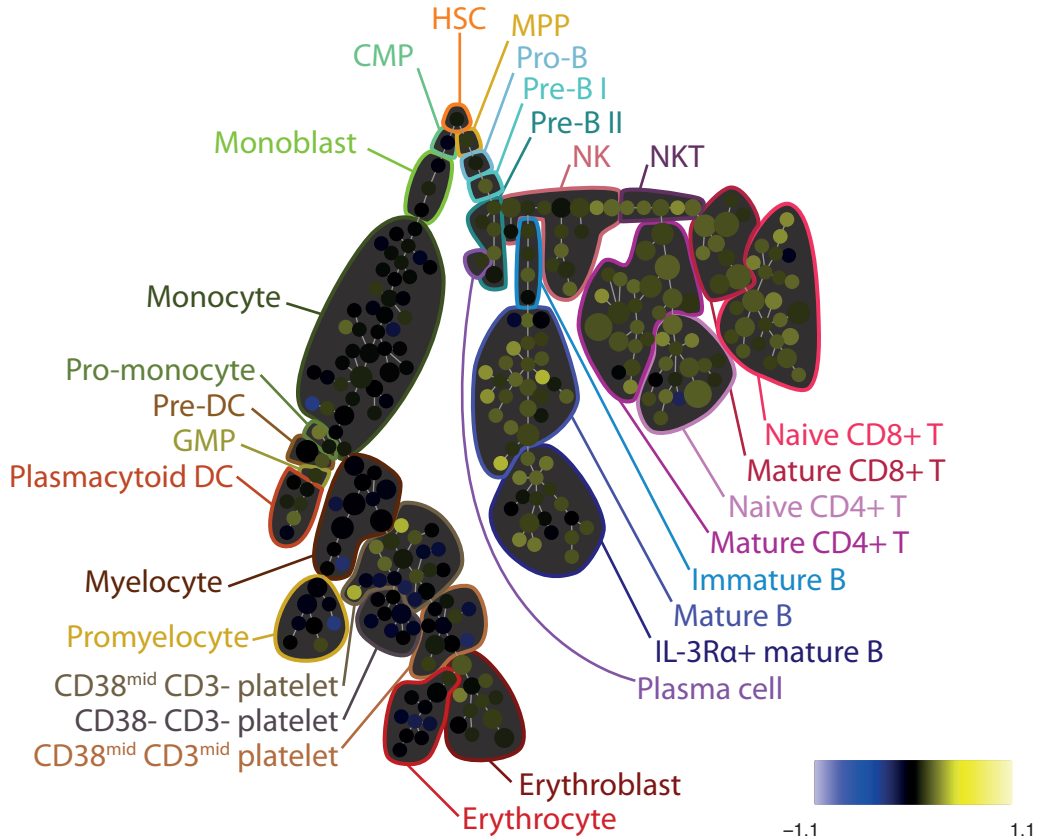


Figure S8A

153-pMAPKAPK2 — GCSF vs Ref Ratio

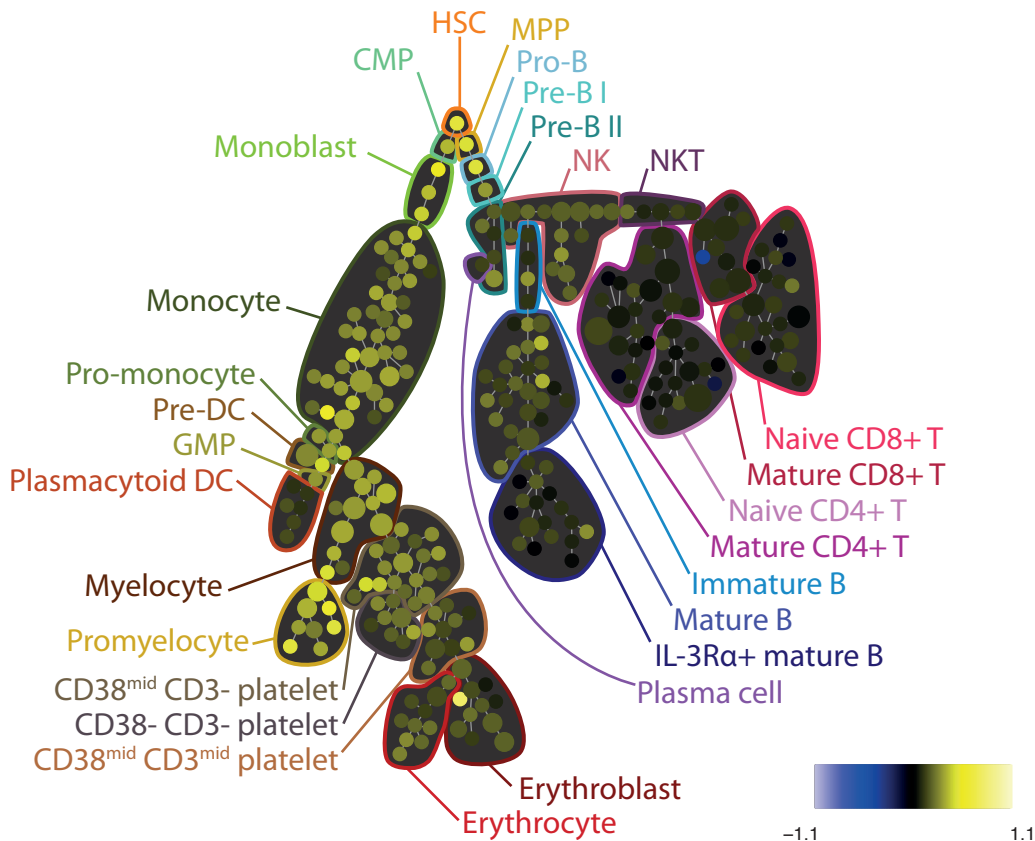


Figure S8A

153-pMAPKAPK2 --- GMCSF vs Ref Ratio

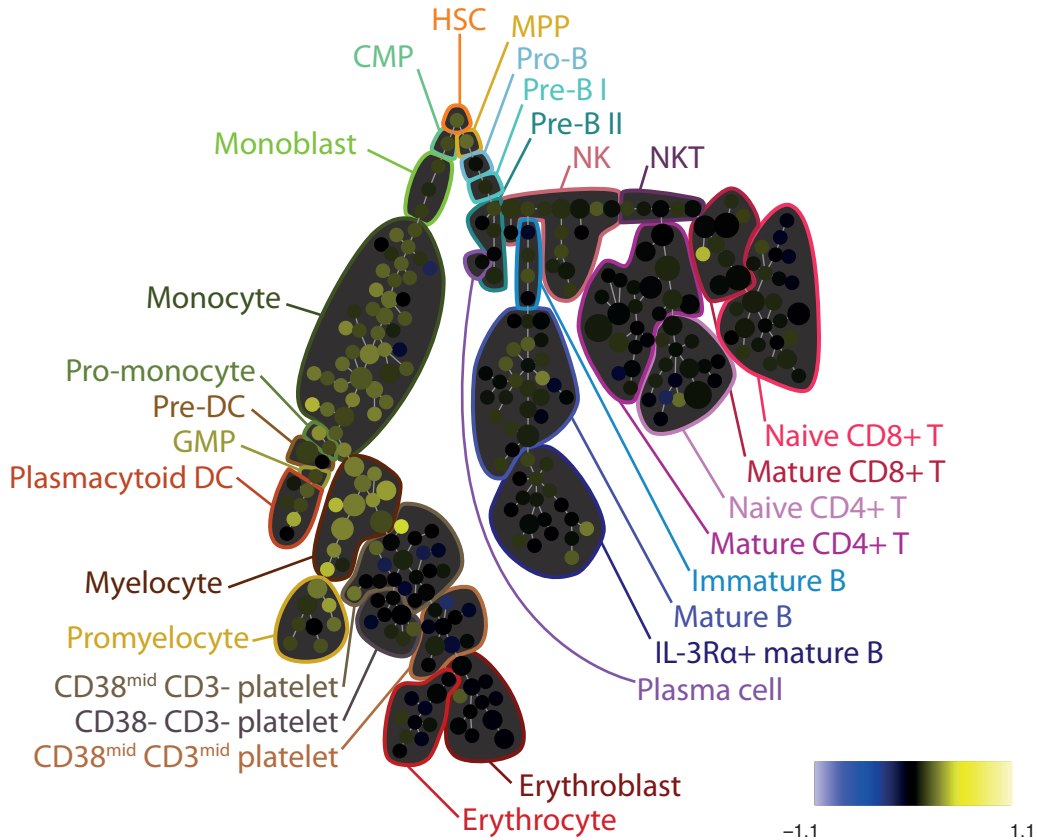


Figure S8A

153-pMAPKAPK2 ---- IFNad vs Ref Ratio

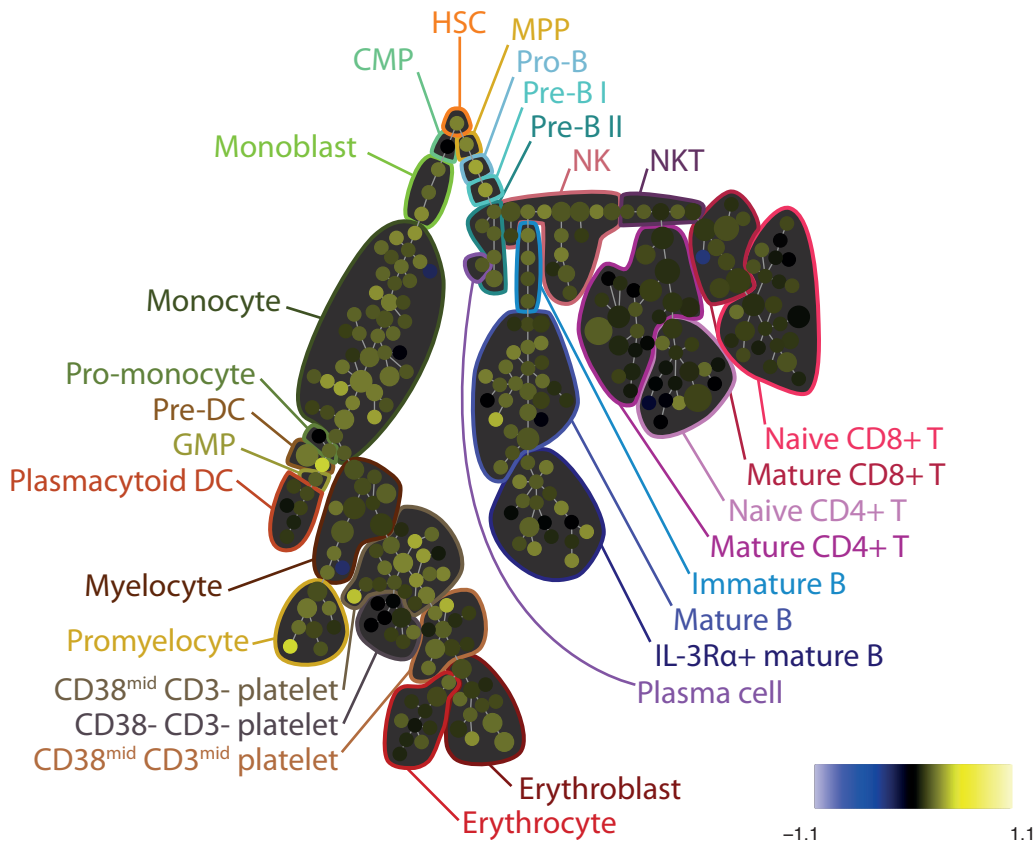


Figure S8A

153-pMAPKAPK2 ---- IL3 vs Ref Ratio

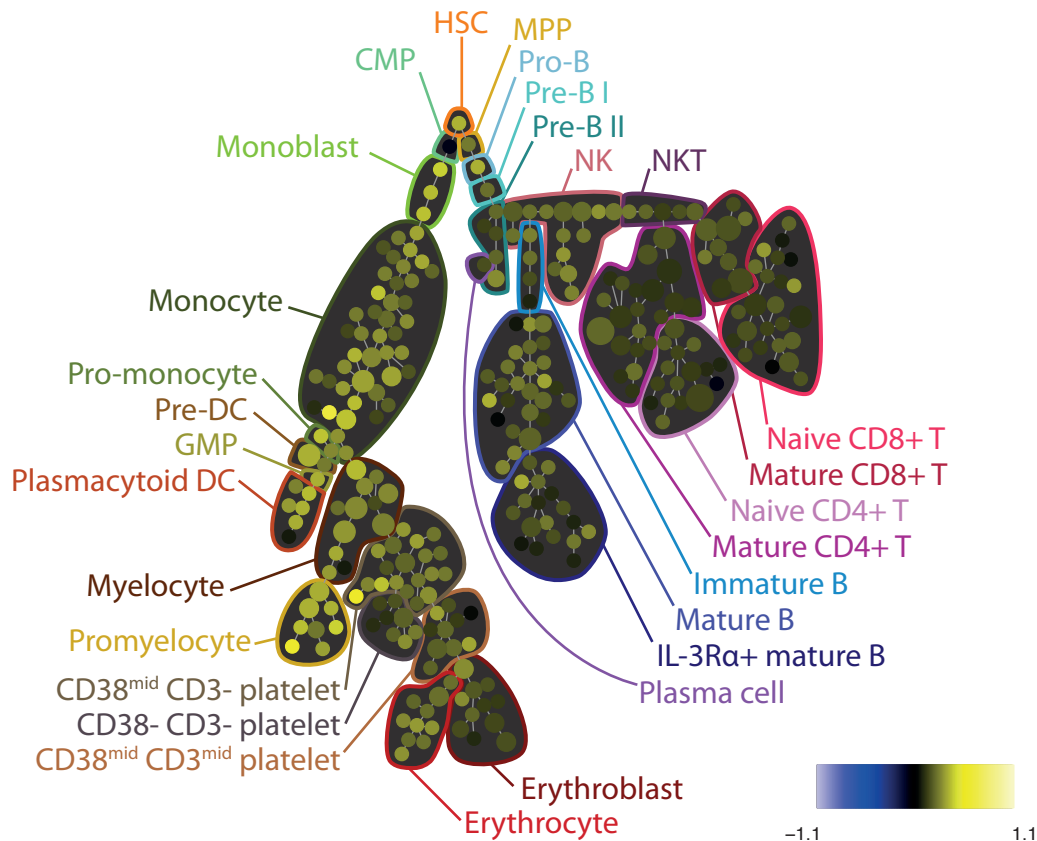


Figure S8A

153-pMAPKAPK2 ---- IL7 vs Ref Ratio

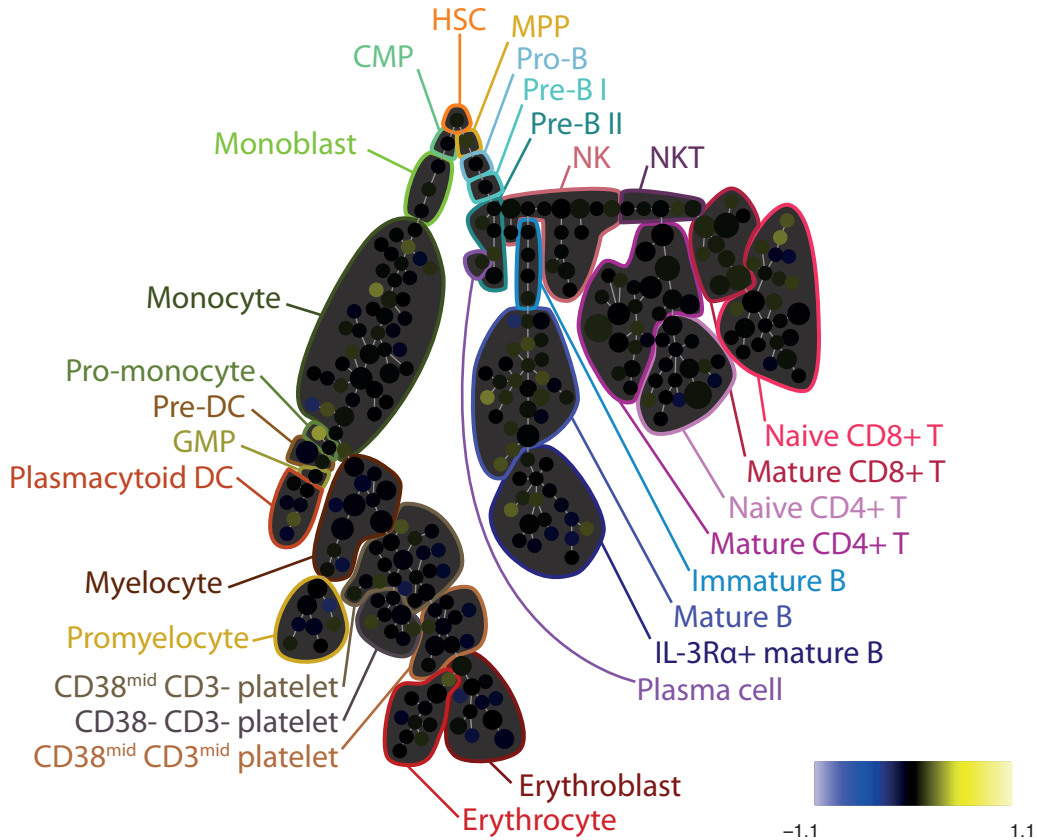


Figure S8A

153-pMAPKAPK2 ---- LPS vs Ref Ratio

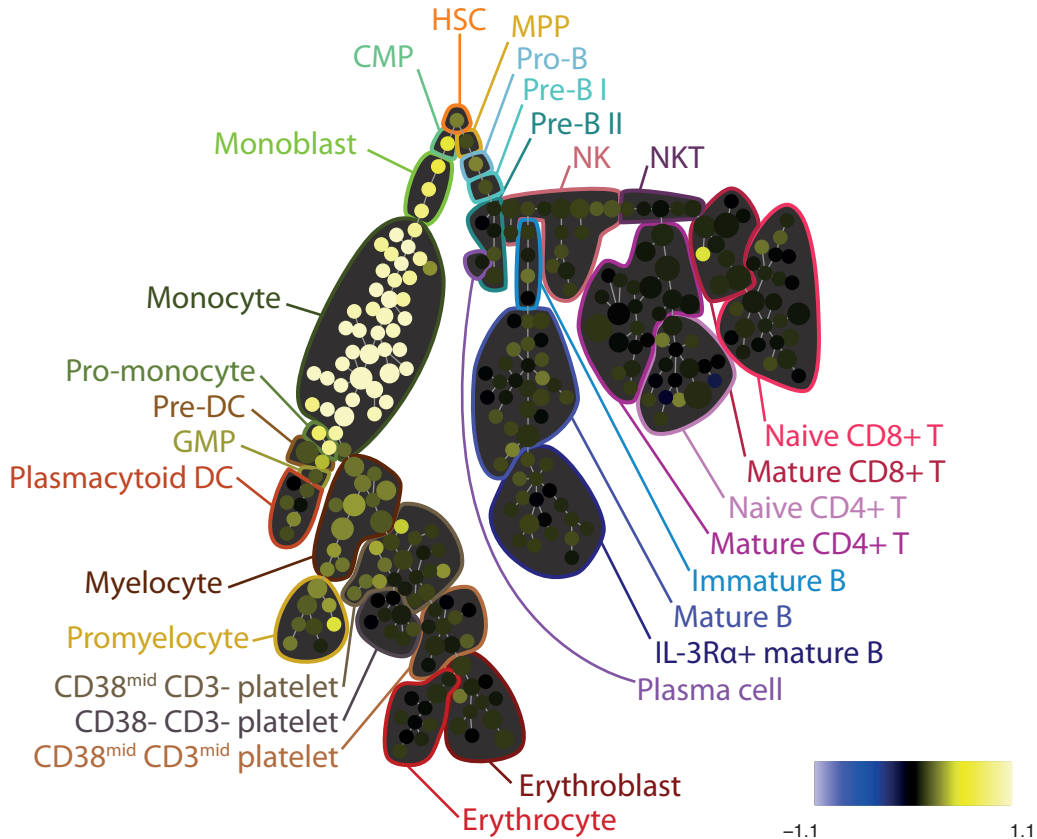


Figure S8A

153-pMAPKAPK2 ---- PMAiono vs Ref Ratio

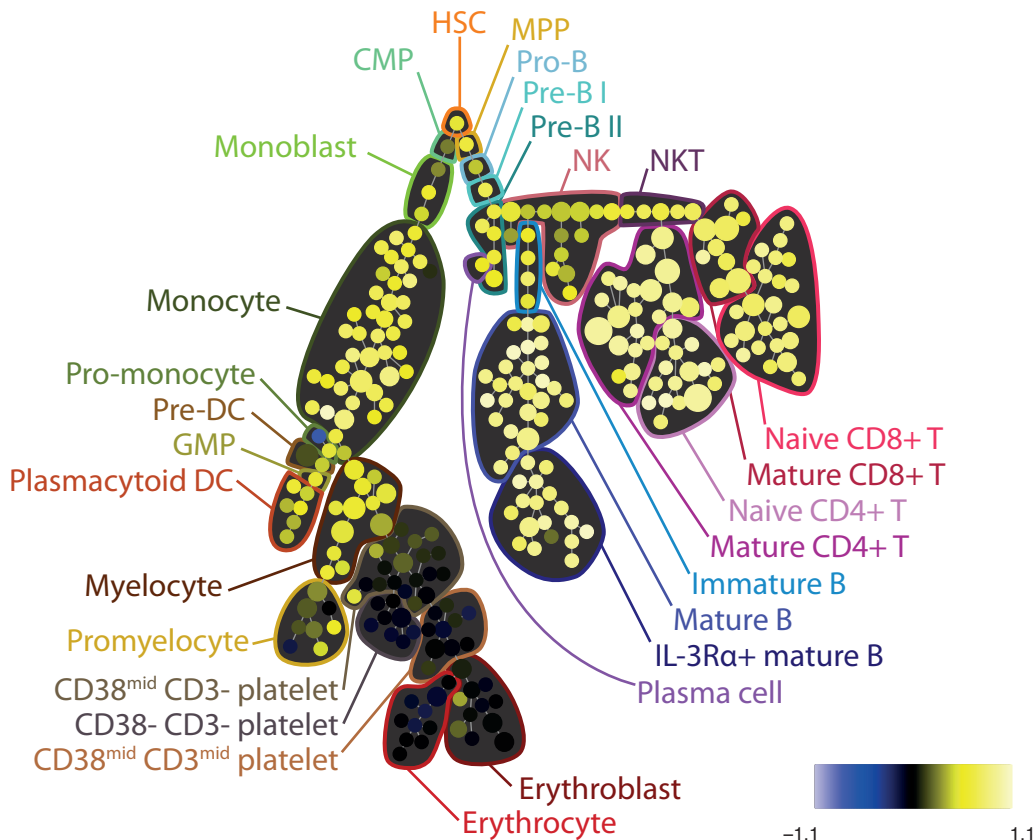


Figure S8A

153-pMAPKAPK2 ---- PVO4 vs Ref Ratio

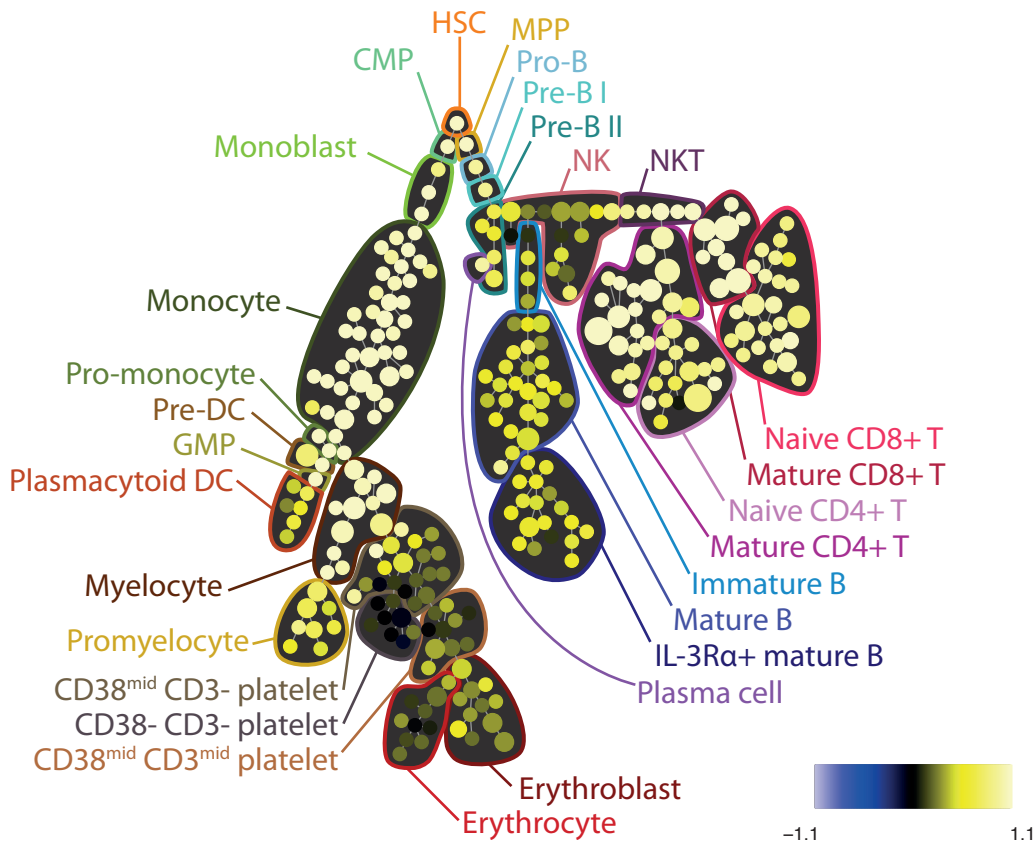


Figure S8A

153-pMAPKAPK2 ---- SCF vs Ref Ratio

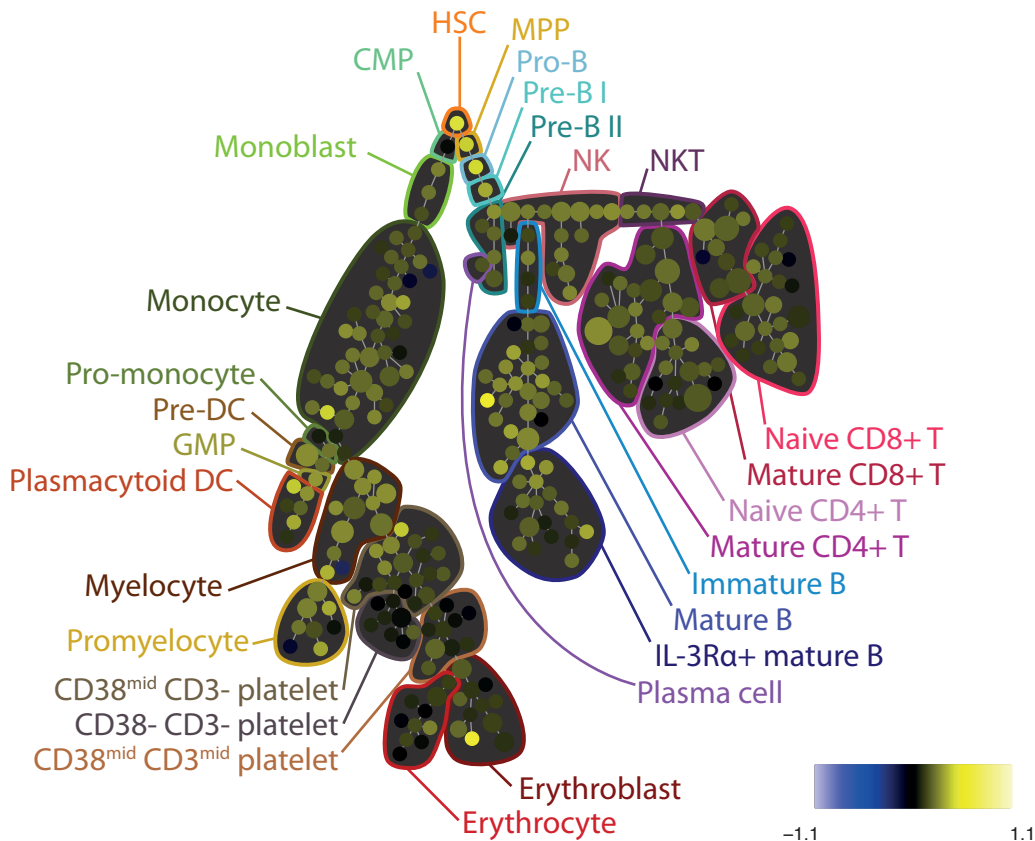


Figure S8A

153-pMAPKAPK2 ---- TNFa vs Ref Ratio

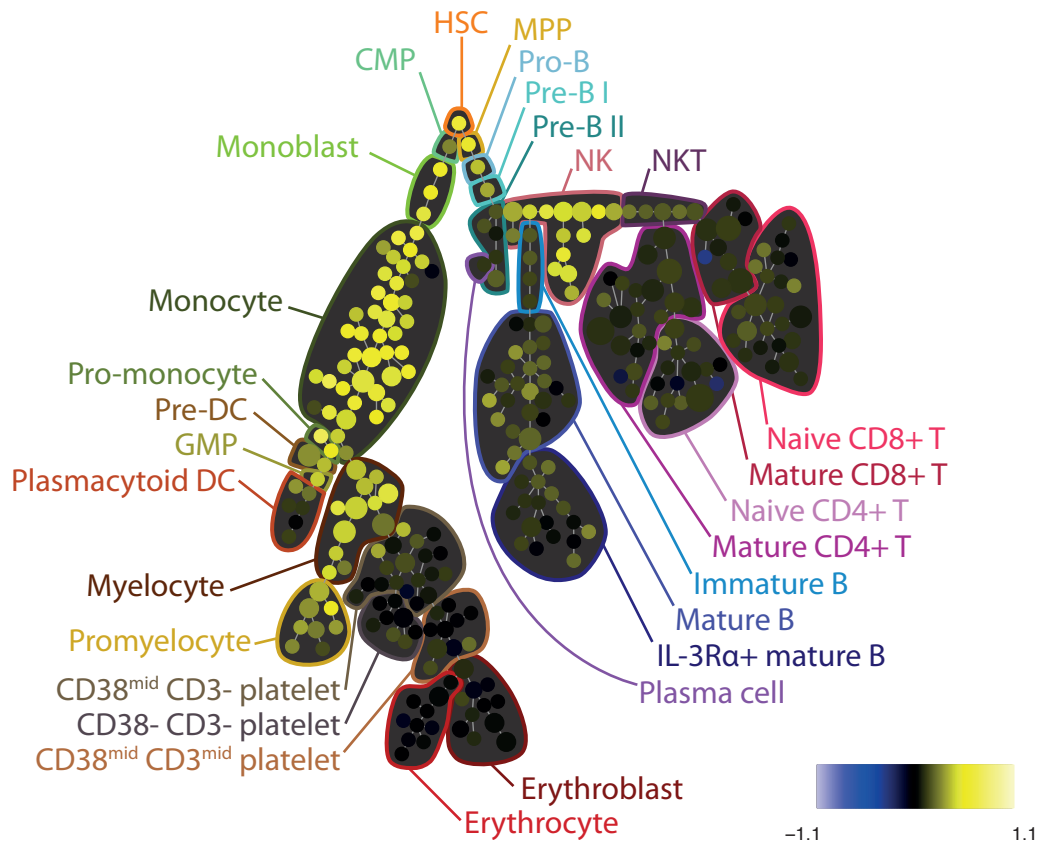


Figure S8A

153-pMAPKAPK2 ---- TPO vs Ref Ratio

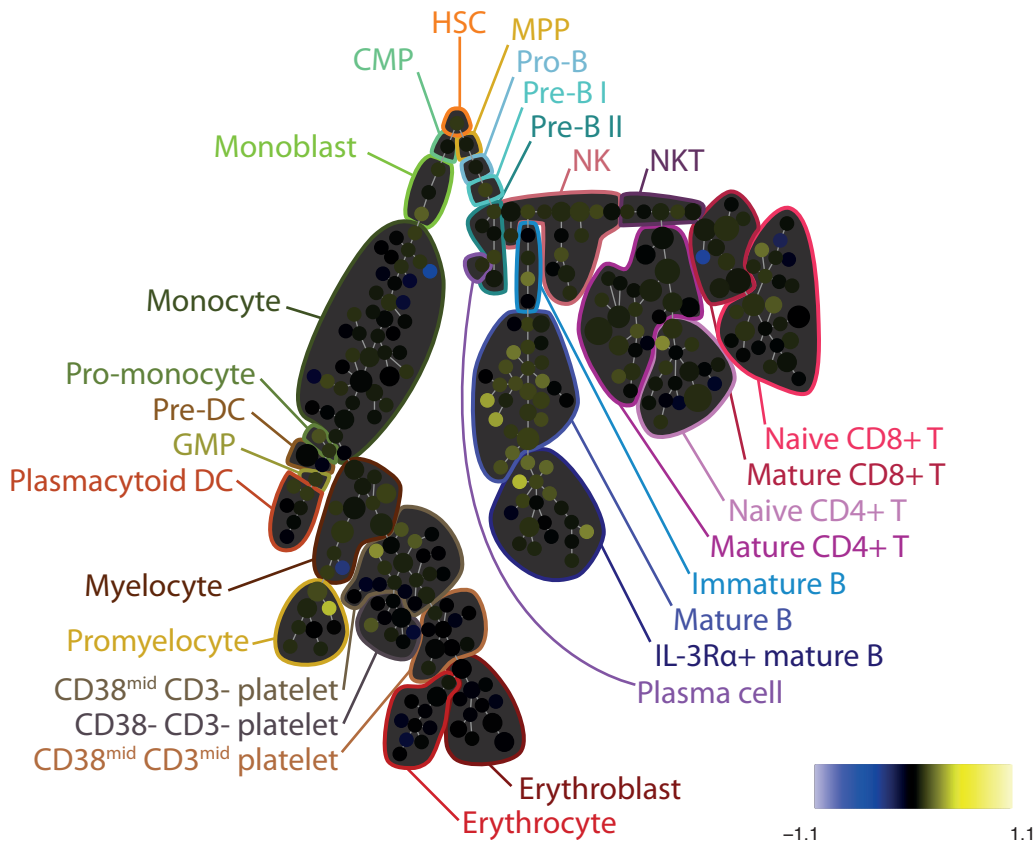


Figure S8A

154-pSHP2 ---- BCR vs Ref Ratio

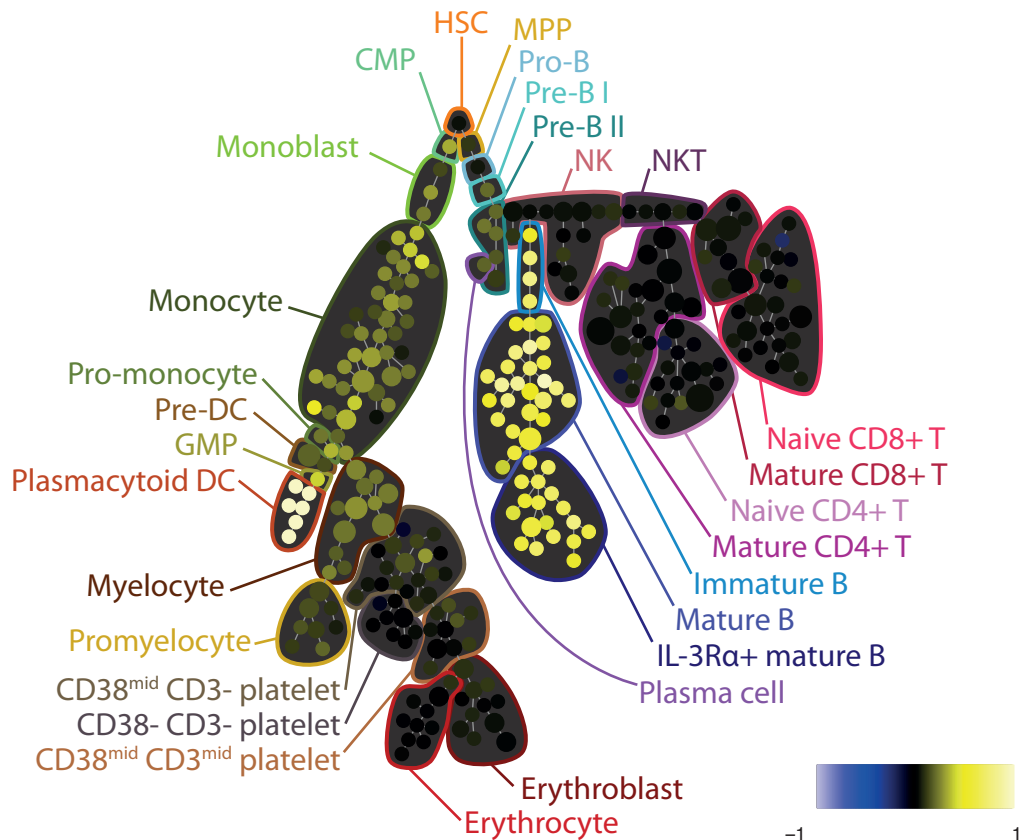


Figure S8A

154-pSHP2 ---- DMSO vs Ref Ratio

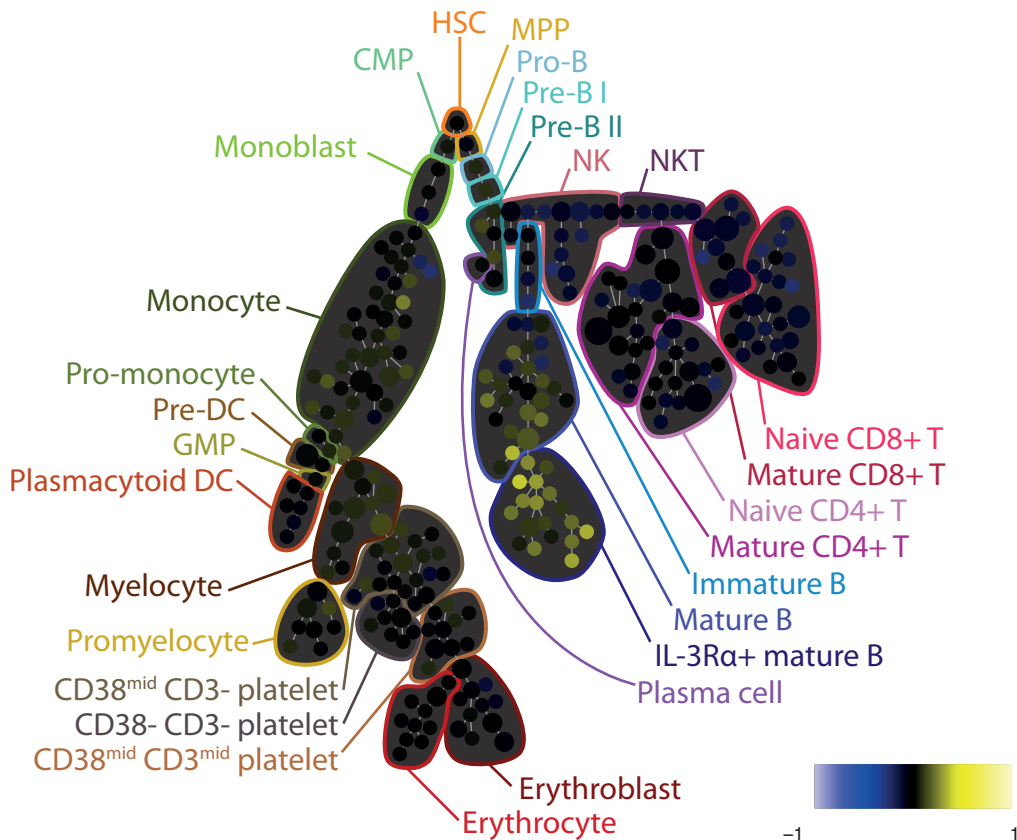


Figure S8A

154-pSHP2 ---- Flt3L vs Ref Ratio

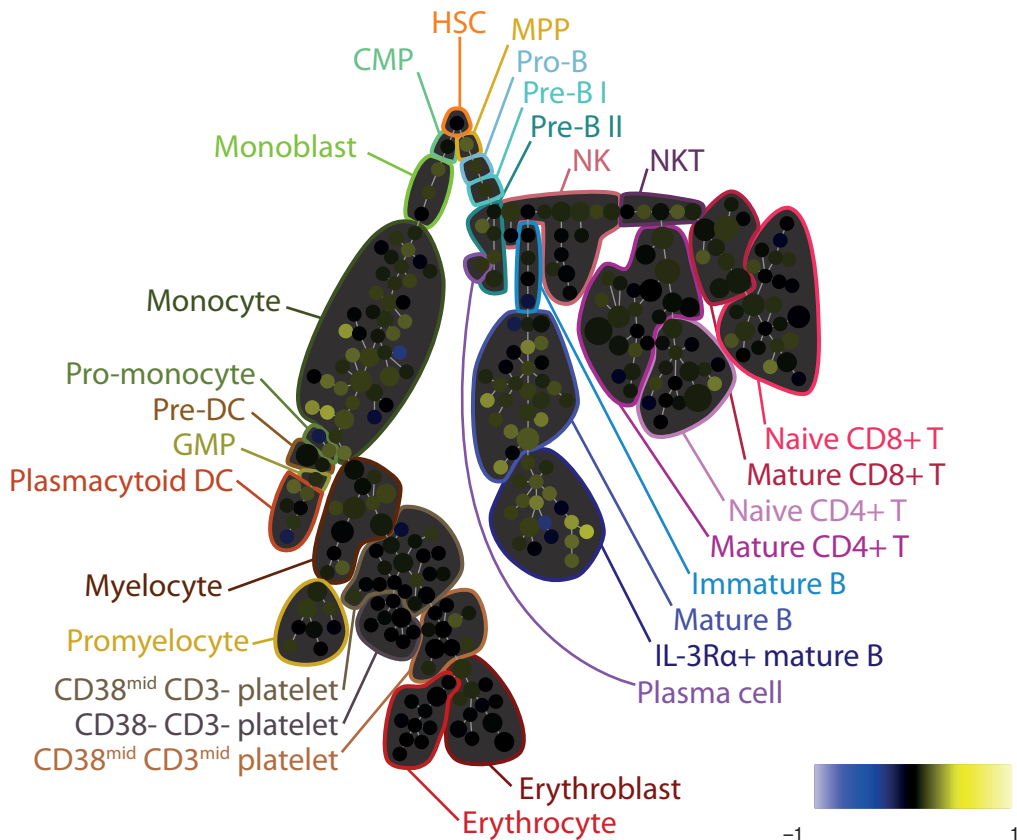


Figure S8A

154-pSHP2 ---- GCSF vs Ref Ratio

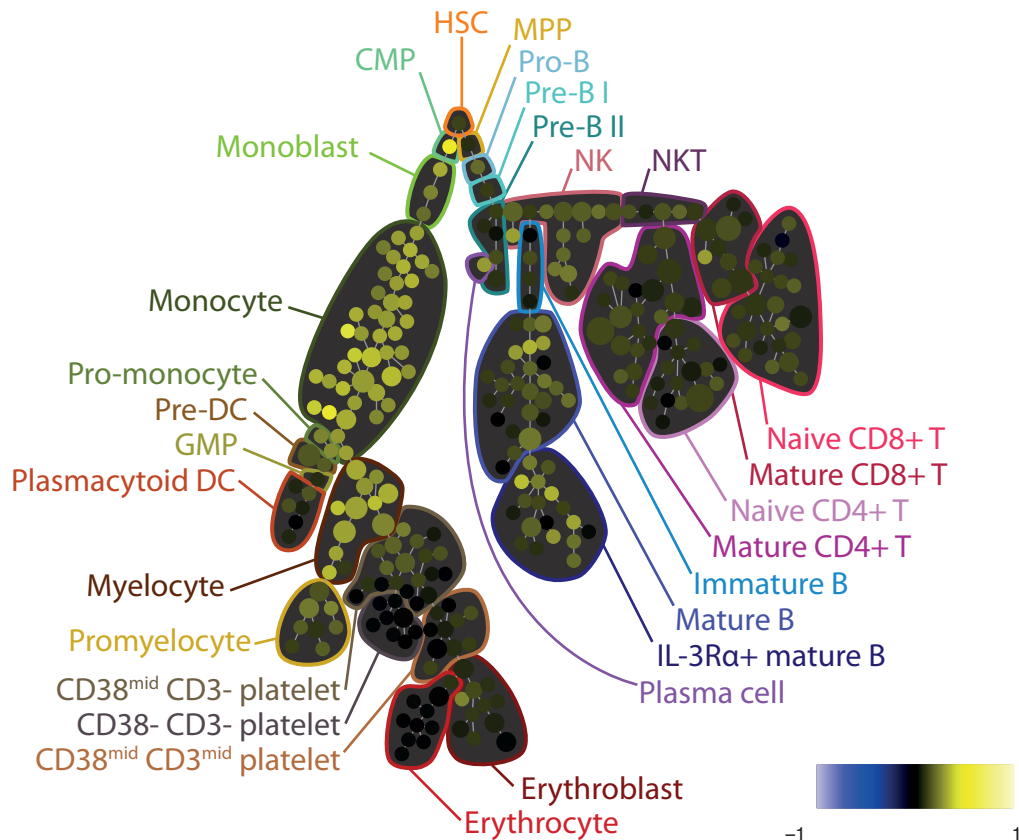


Figure S8A

154-pSHP2 ---- GMCSF vs Ref Ratio

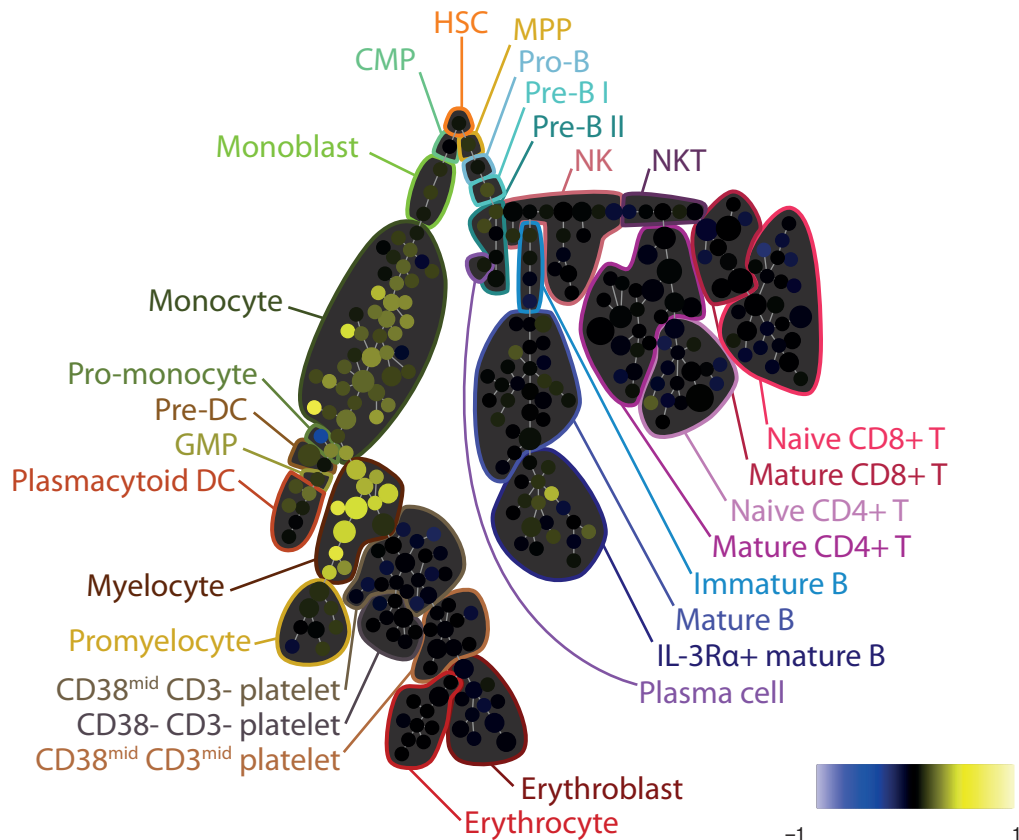


Figure S8A

154-pSHP2 ---- IFNad vs Ref Ratio

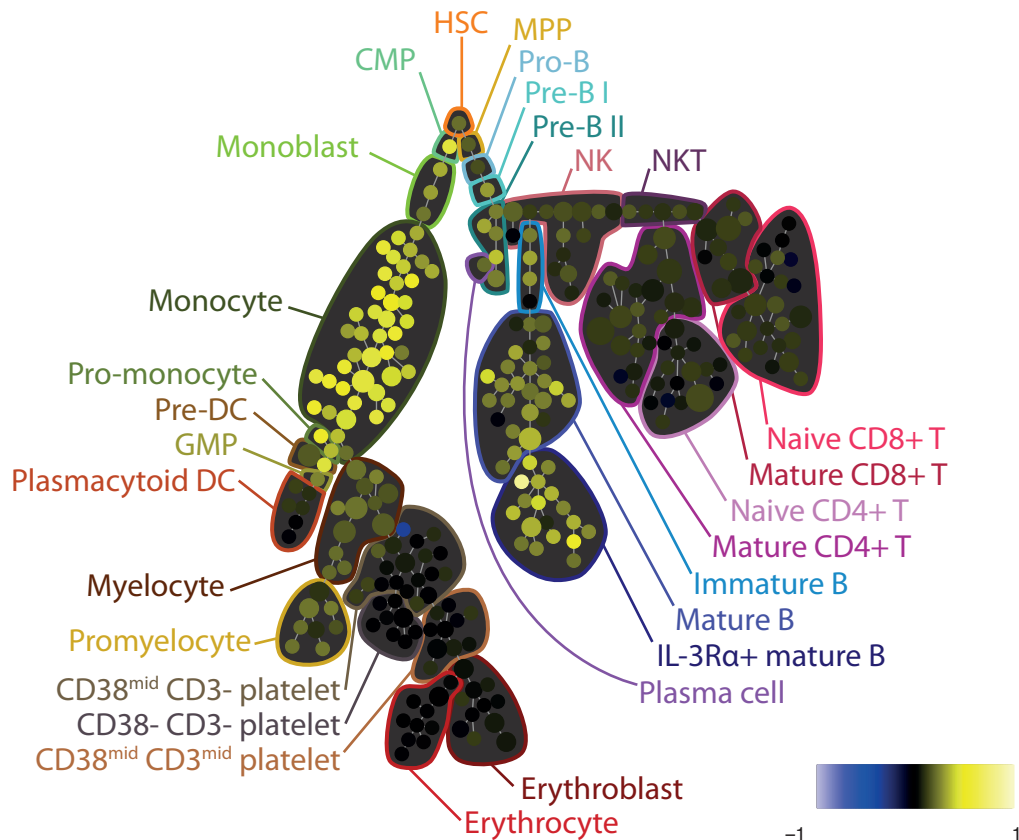


Figure S8A

154-pSHP2 ---- IL3 vs Ref Ratio

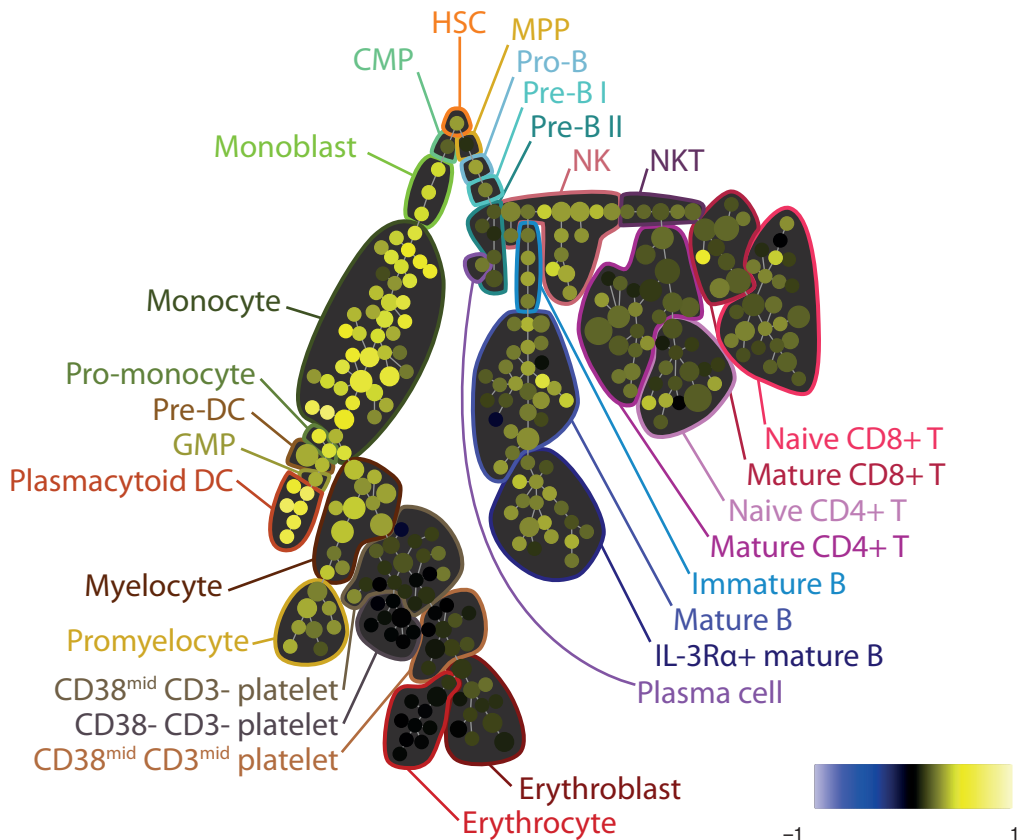


Figure S8A

154-pSHP2 ---- IL7 vs Ref Ratio

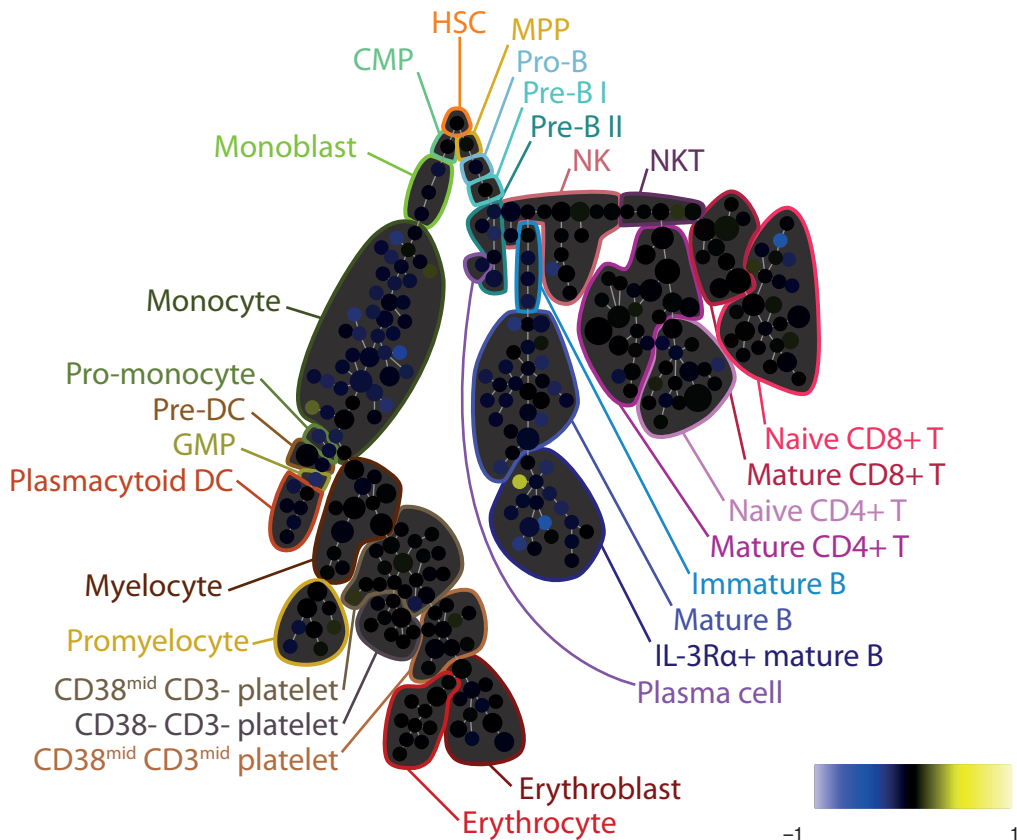


Figure S8A

154-pSHP2 ---- LPS vs Ref Ratio

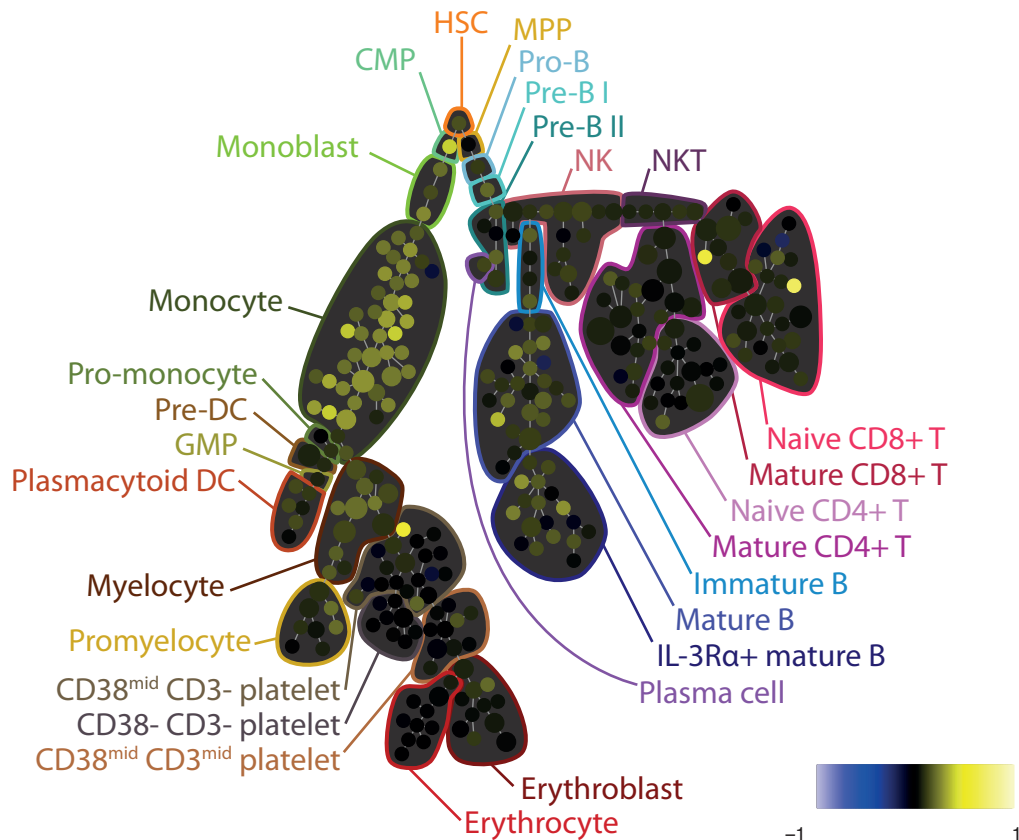


Figure S8A

154-pSHP2 ---- PMAiono vs Ref Ratio

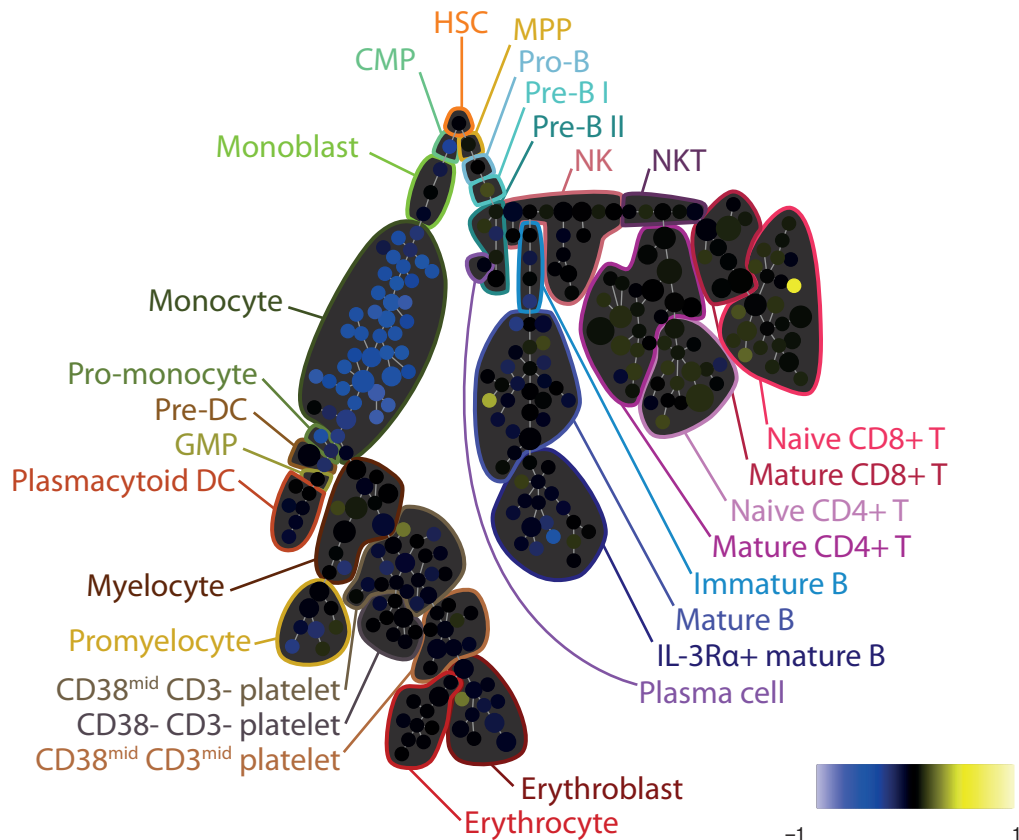


Figure S8A

154-pSHP2 ---- PVO4 vs Ref Ratio

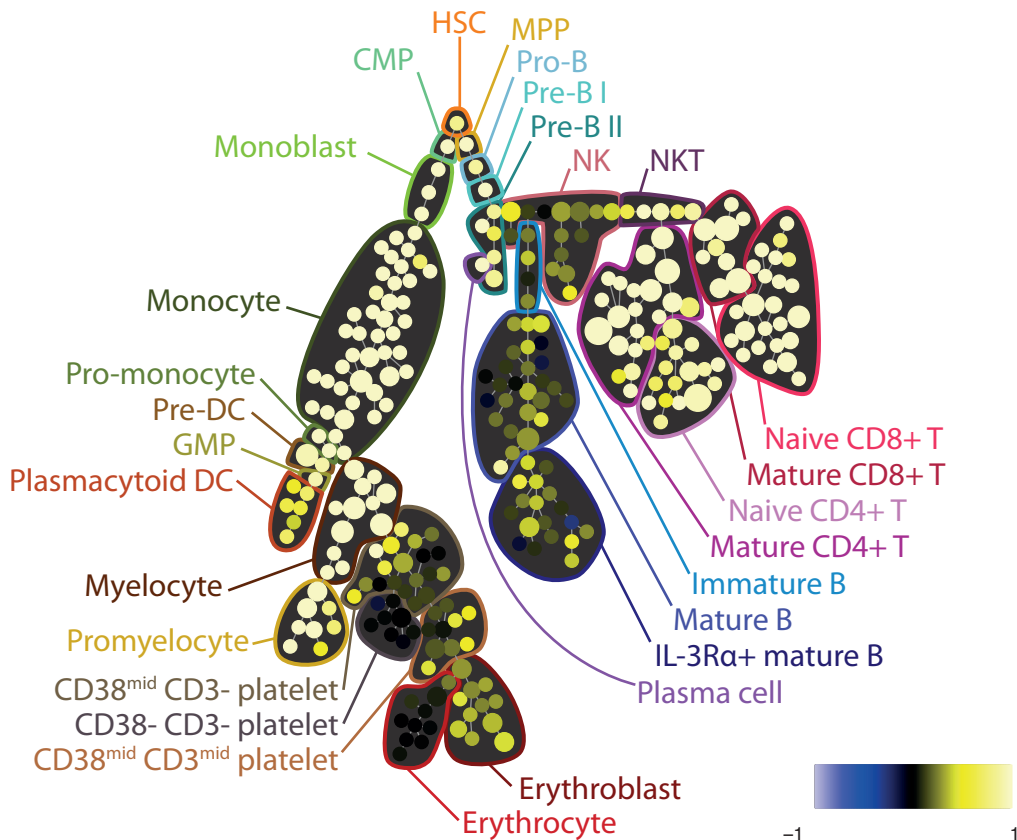


Figure S8A

154-pSHP2 ---- SCF vs Ref Ratio

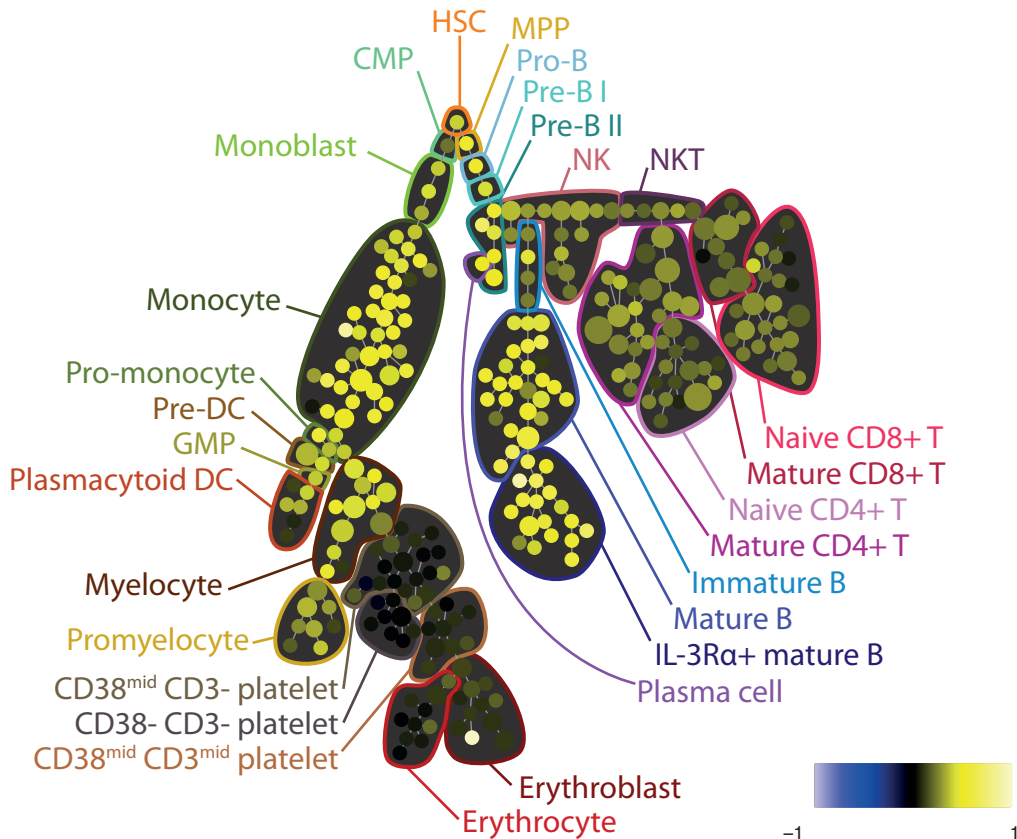


Figure S8A

154-pSHP2 ---- TNFa vs Ref Ratio

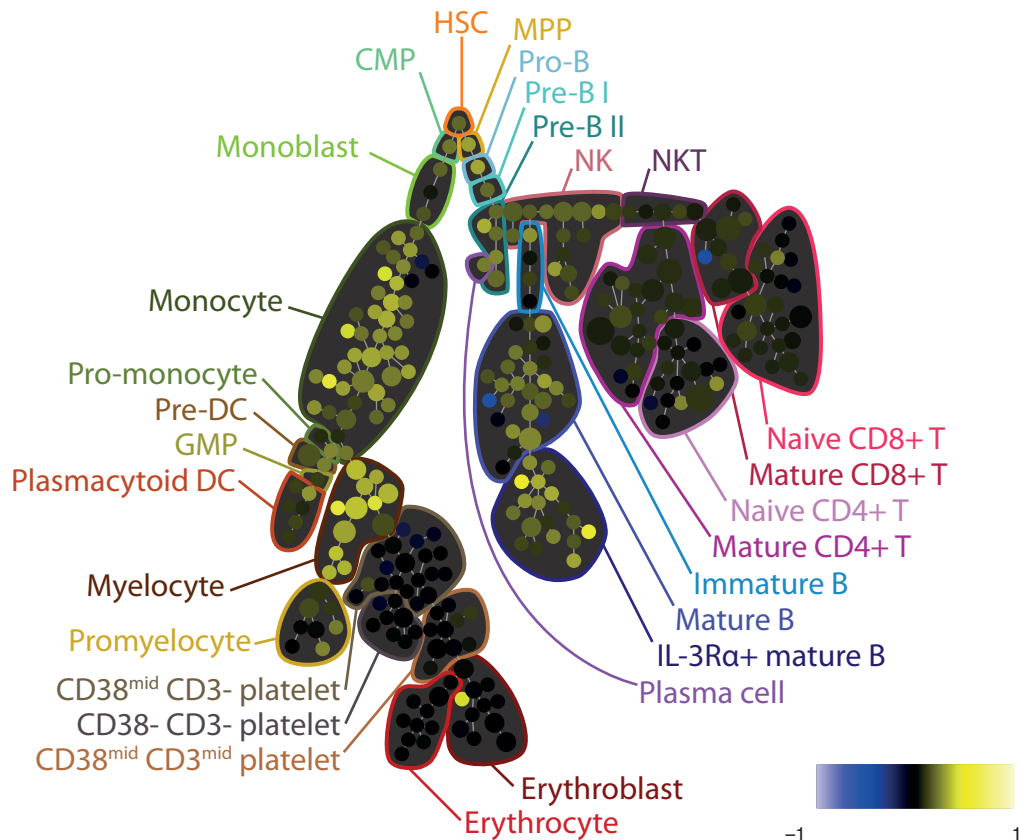


Figure S8A

154-pSHP2 ---- TPO vs Ref Ratio

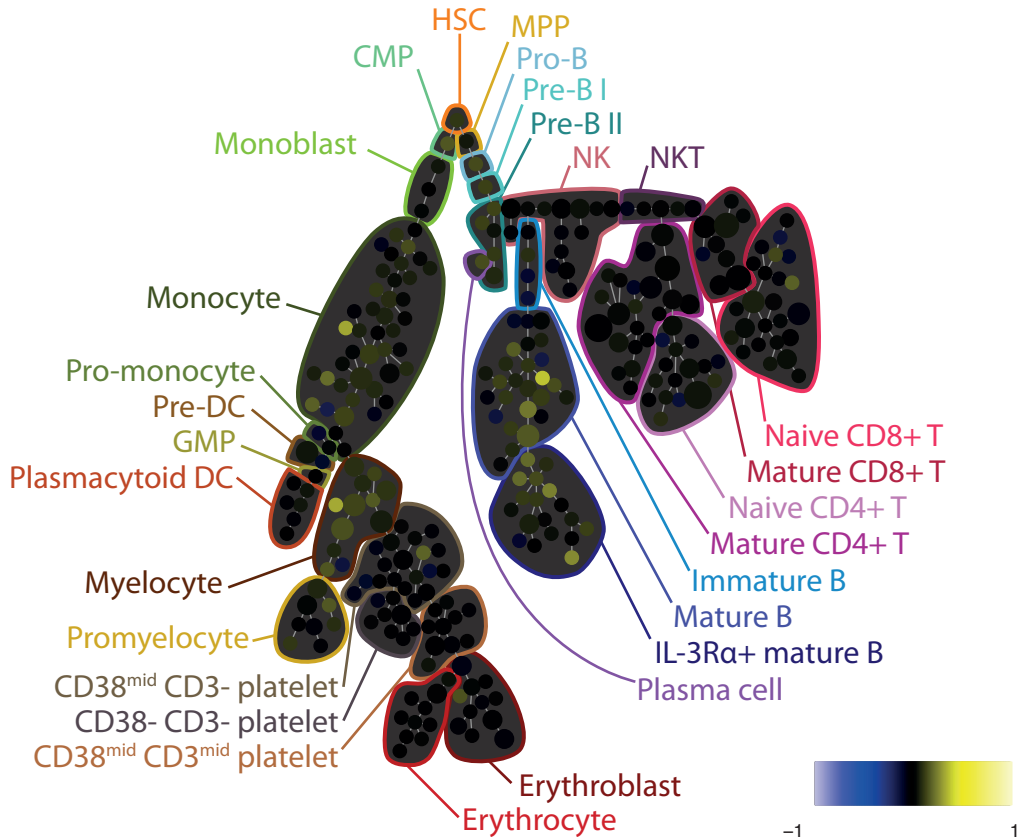


Figure S8A

156-pZAP70/Syk --- BCR vs Ref Ratio

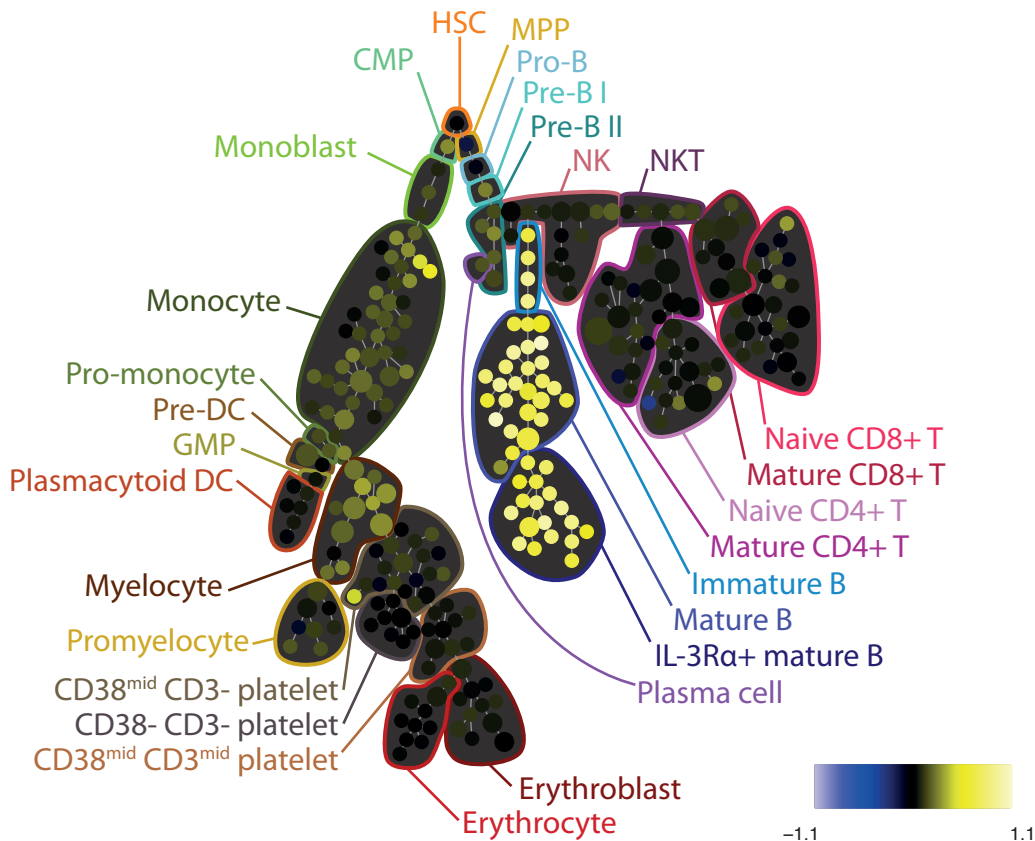


Figure S8A

156-pZAP70/Syk ---- DMSO vs Ref Ratio

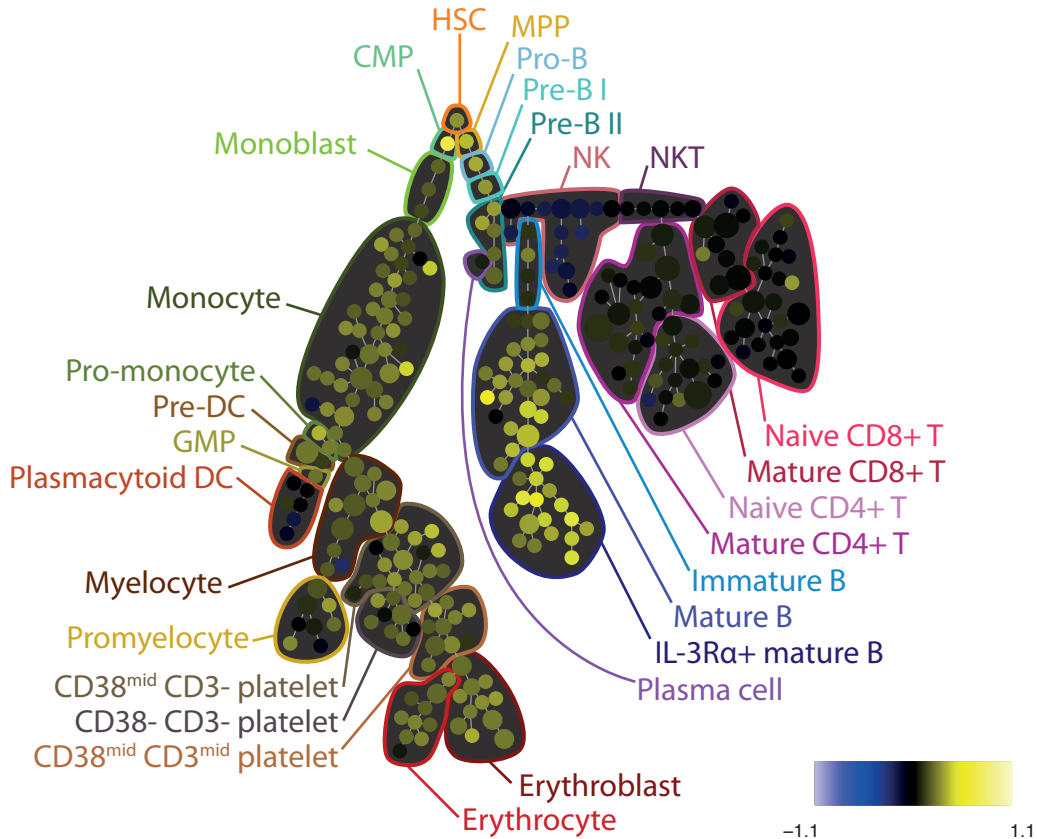


Figure S8A

156-pZAP70/Syk ---- Flt3L vs Ref Ratio

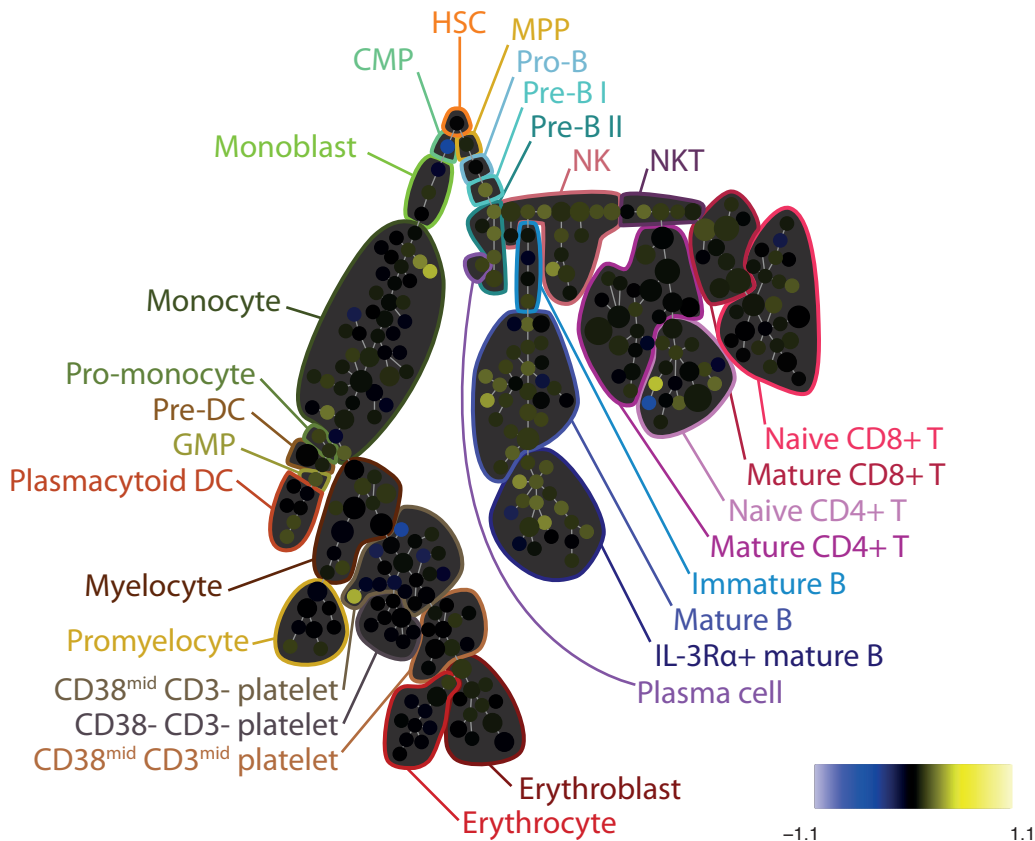


Figure S8A

156-pZAP70/Syk ---- GCSF vs Ref Ratio

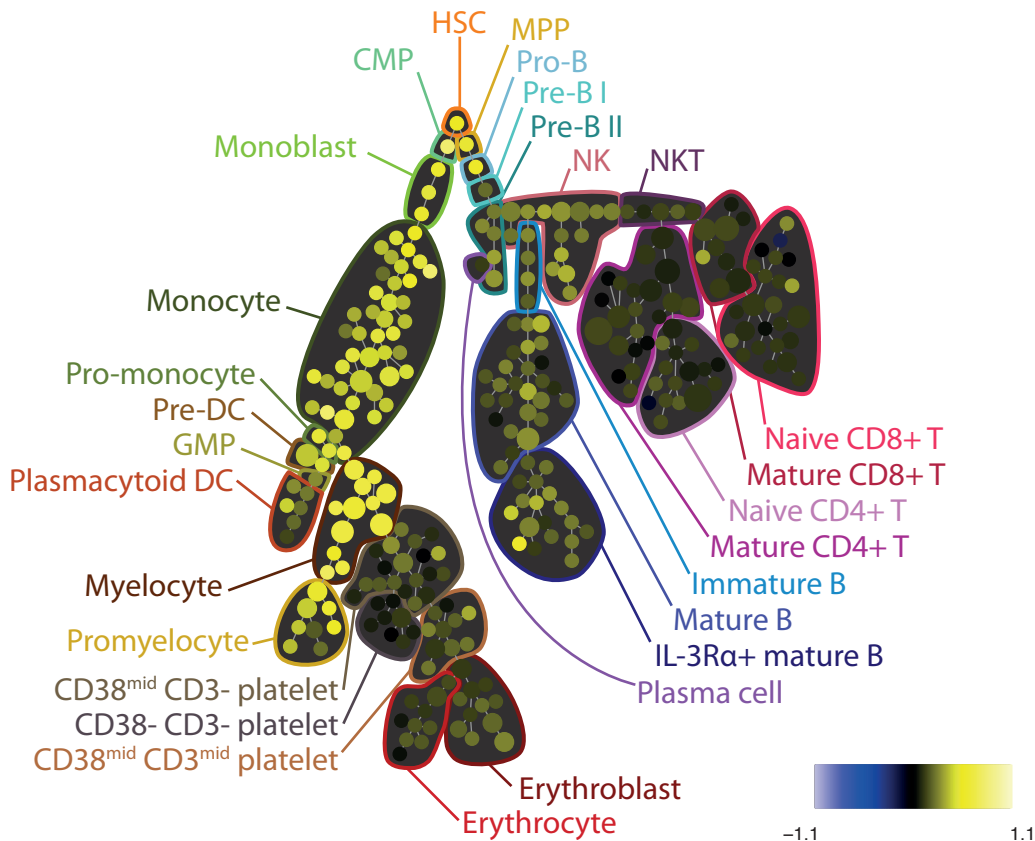


Figure S8A

156-pZAP70/Syk — GMCSF vs Ref Ratio

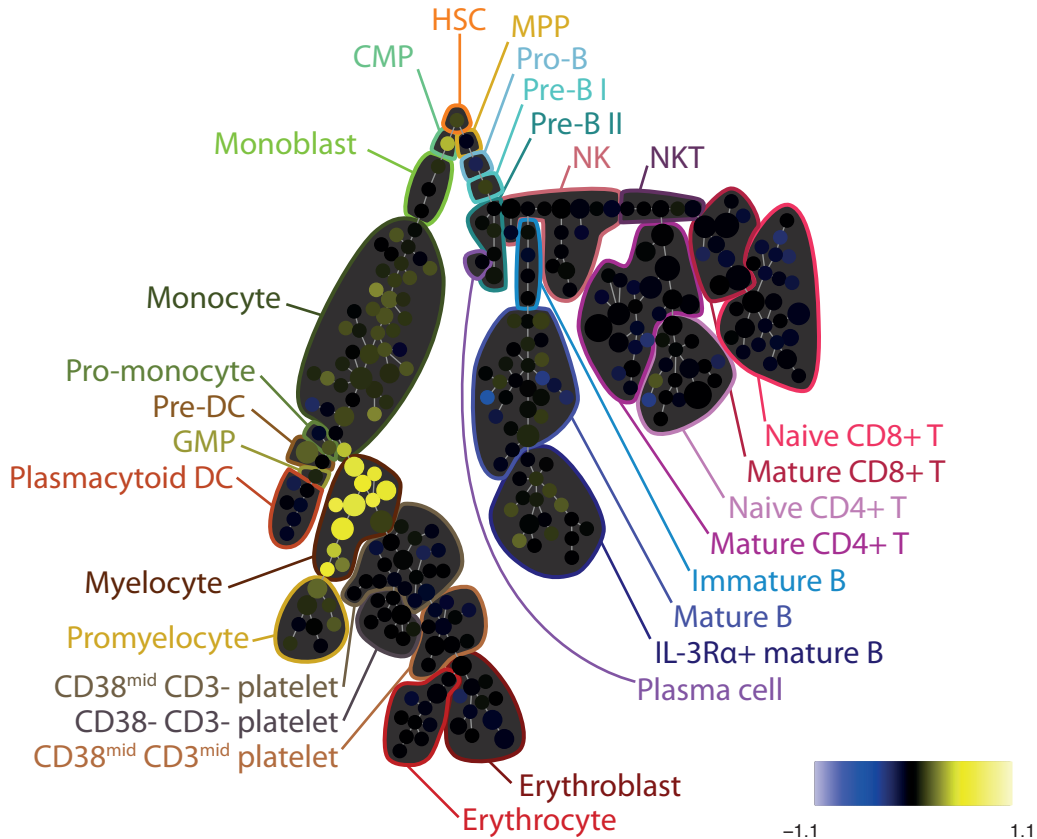


Figure S8A

156-pZAP70/Syk ---- IFN α d vs Ref Ratio

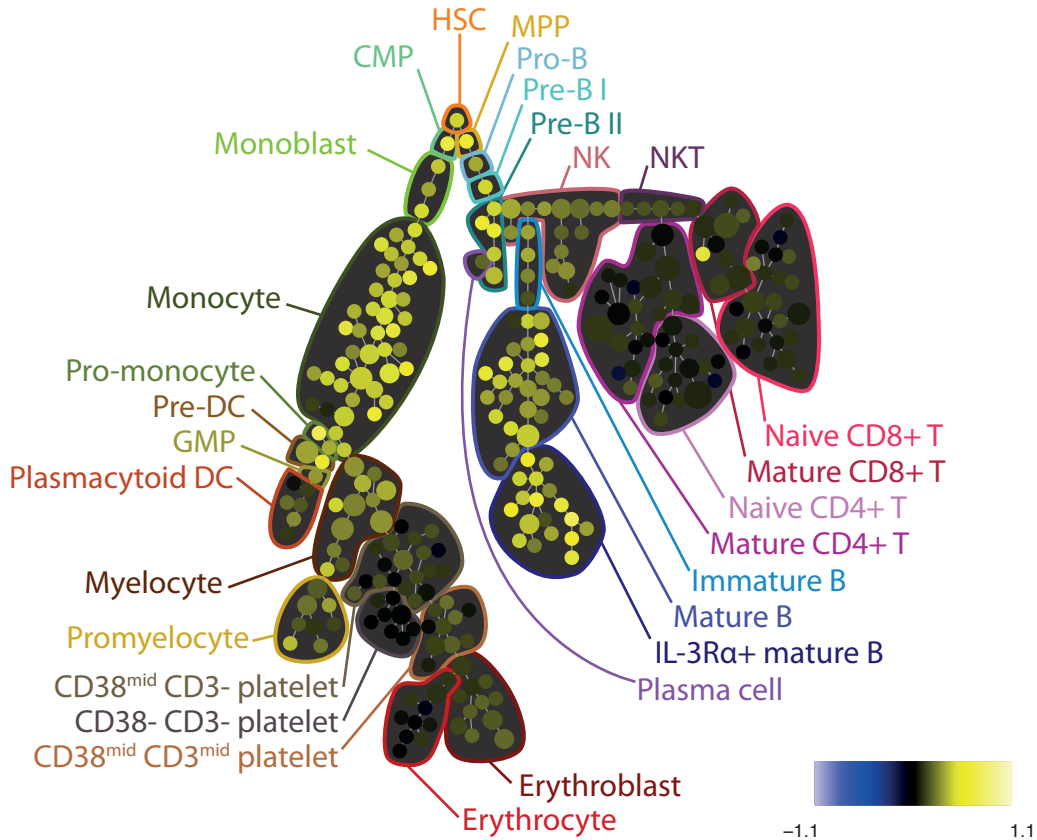


Figure S8A

156-pZAP70/Syk ---- IL3 vs Ref Ratio

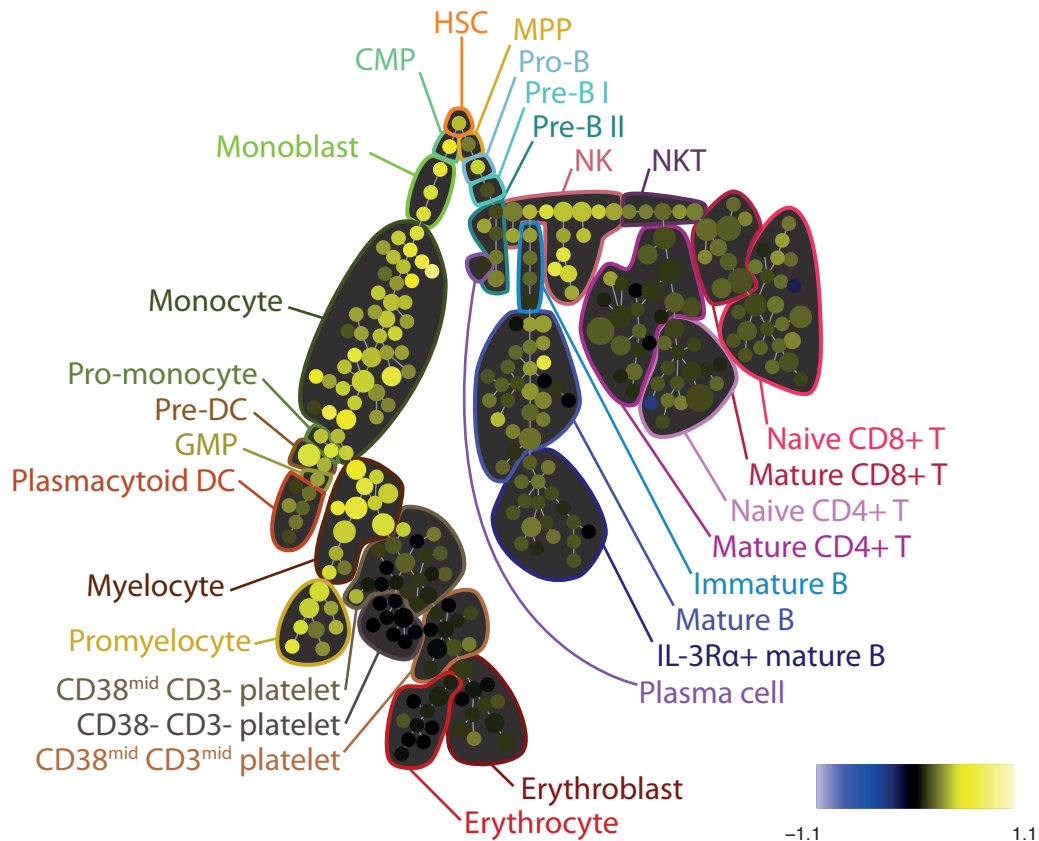


Figure S8A

156-pZAP70/Syk ---- IL7 vs Ref Ratio

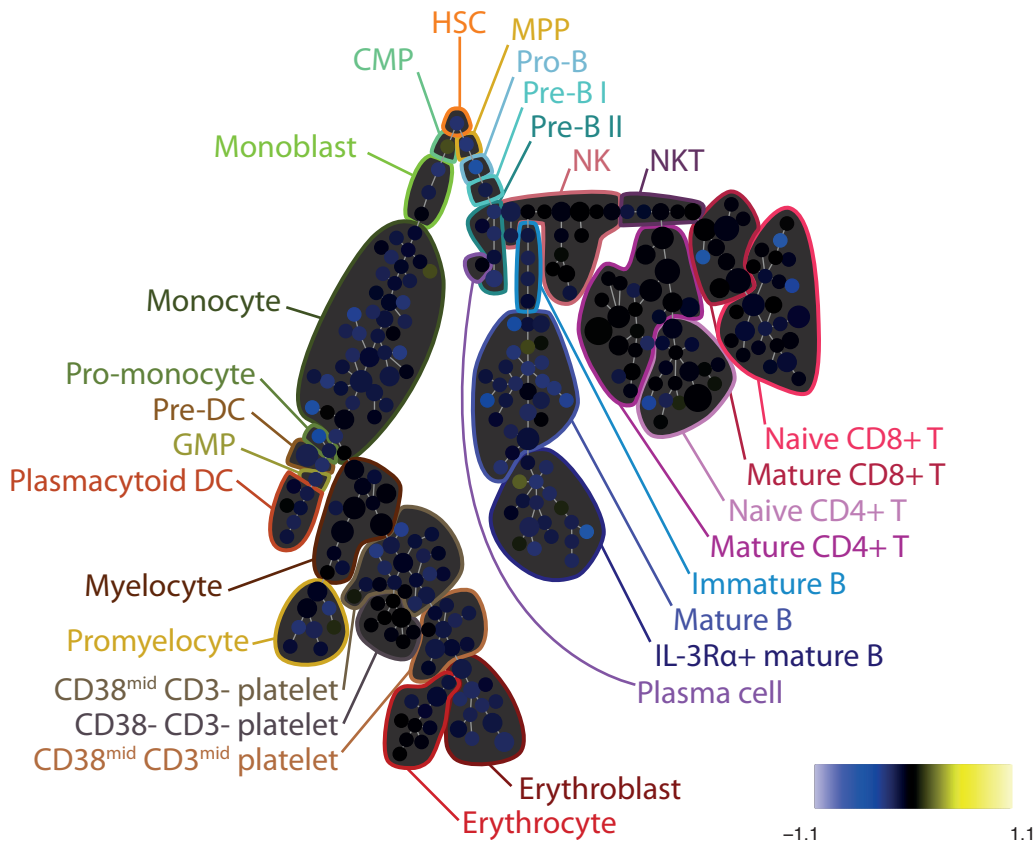


Figure S8A

156-pZAP70/Syk ---- LPS vs Ref Ratio

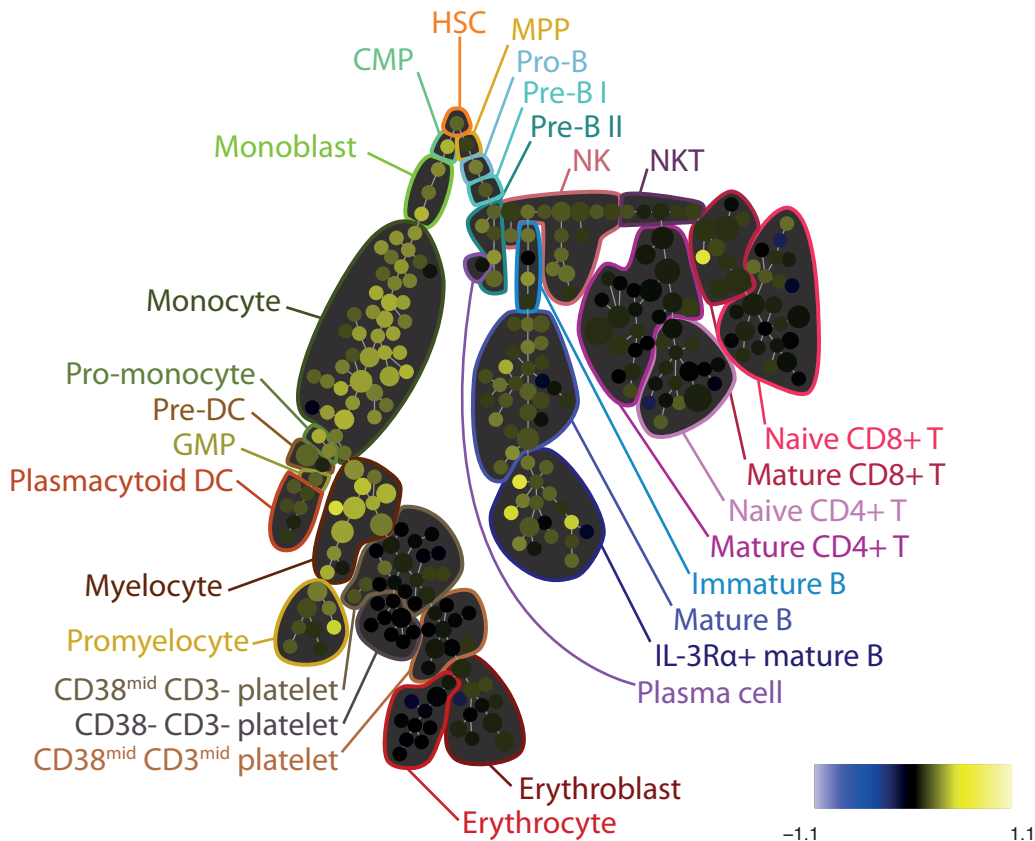


Figure S8A

156-pZAP70/Syk ---- PMAiono vs Ref Ratio

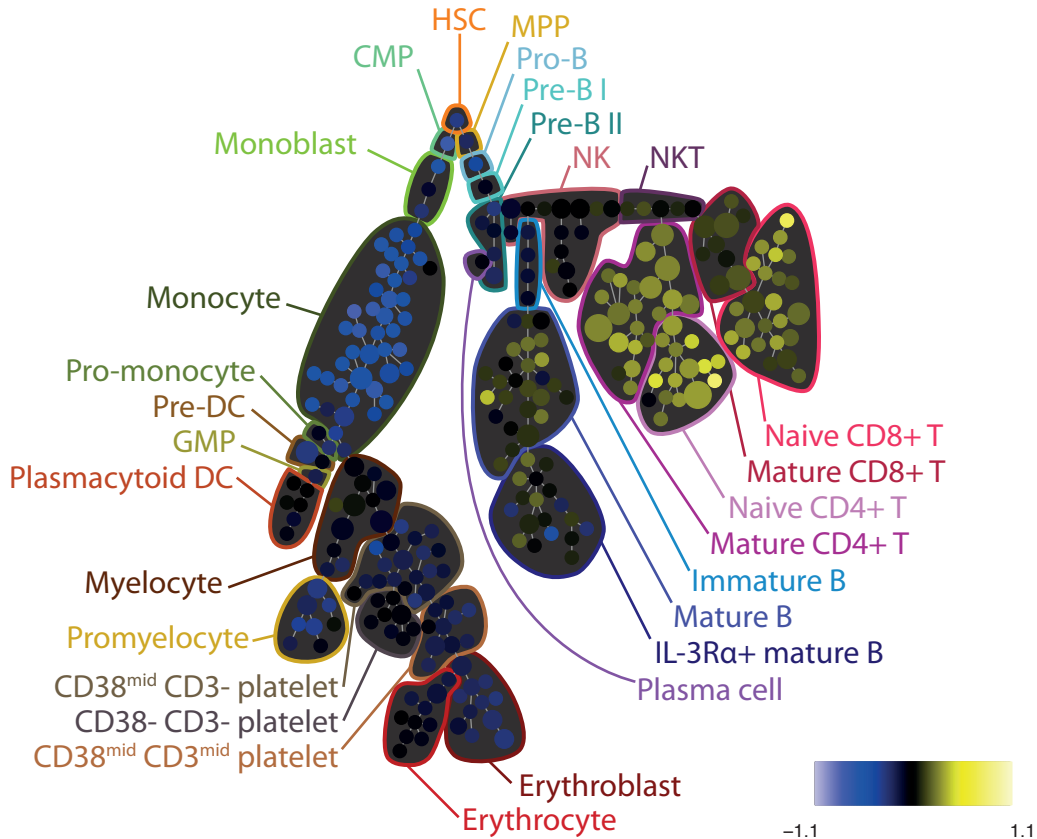


Figure S8A

156-pZAP70/Syk ---- PVO4 vs Ref Ratio

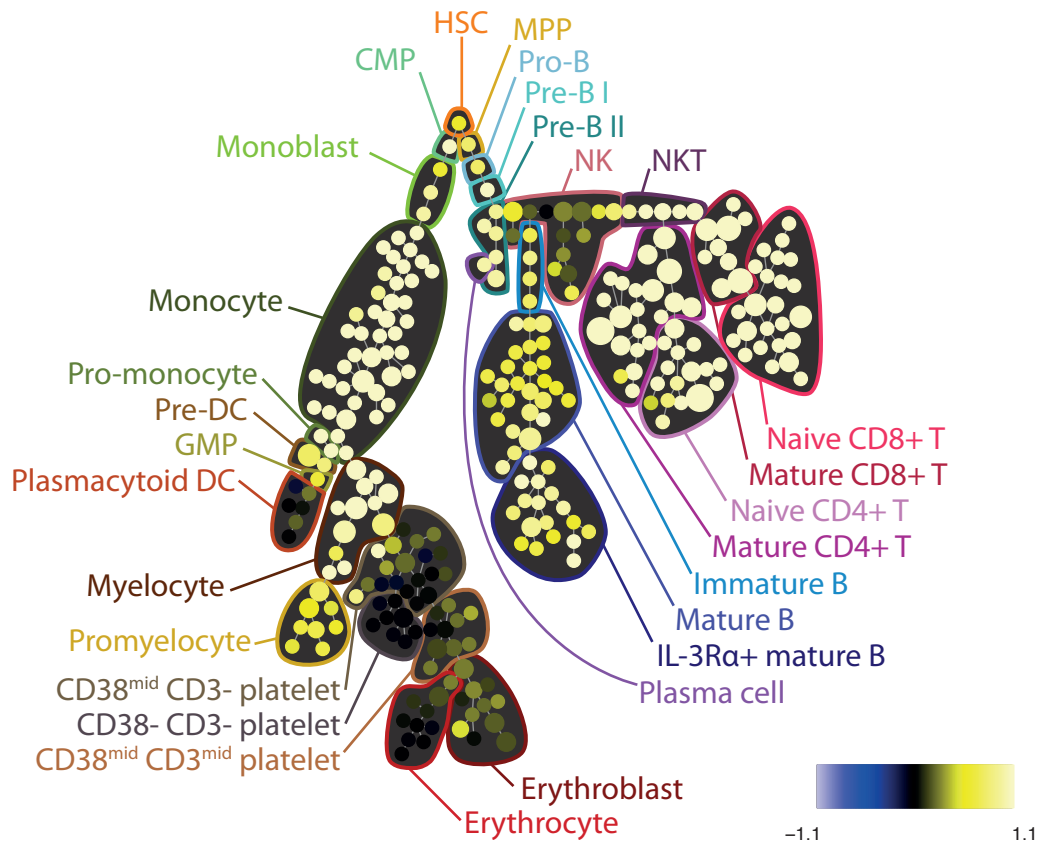


Figure S8A

156-pZAP70/Syk ---- SCF vs Ref Ratio

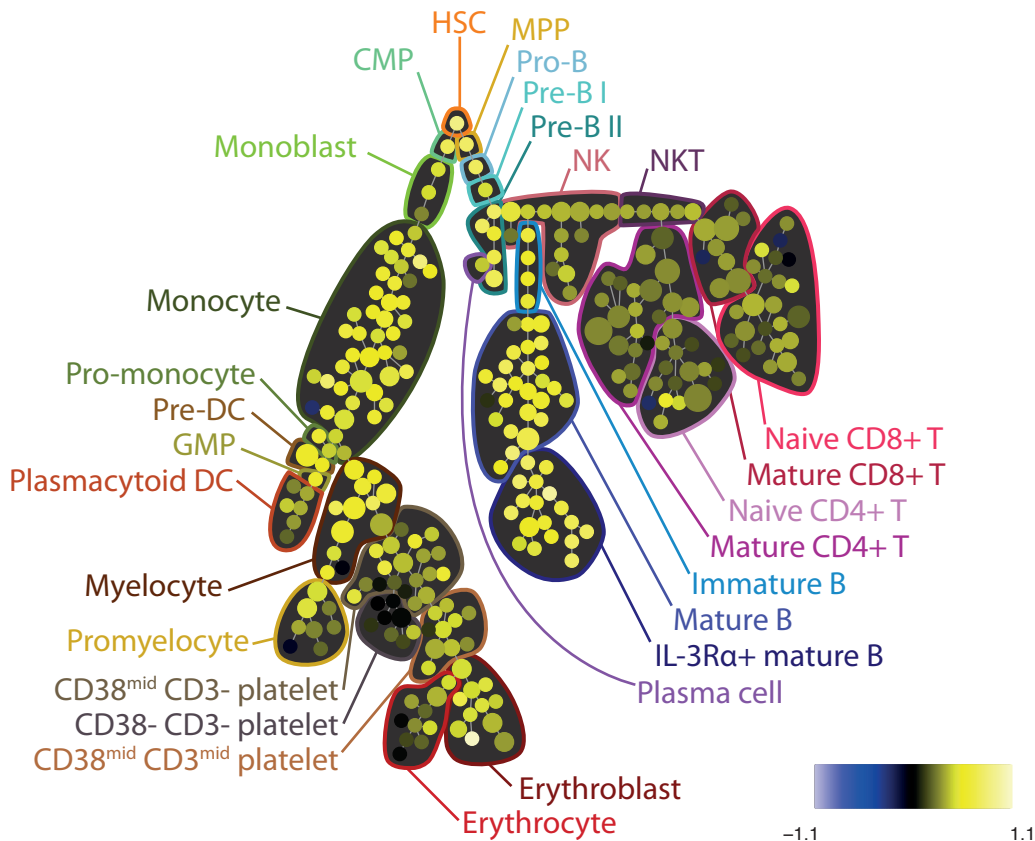


Figure S8A

156-pZAP70/Syk — TNFa vs Ref Ratio

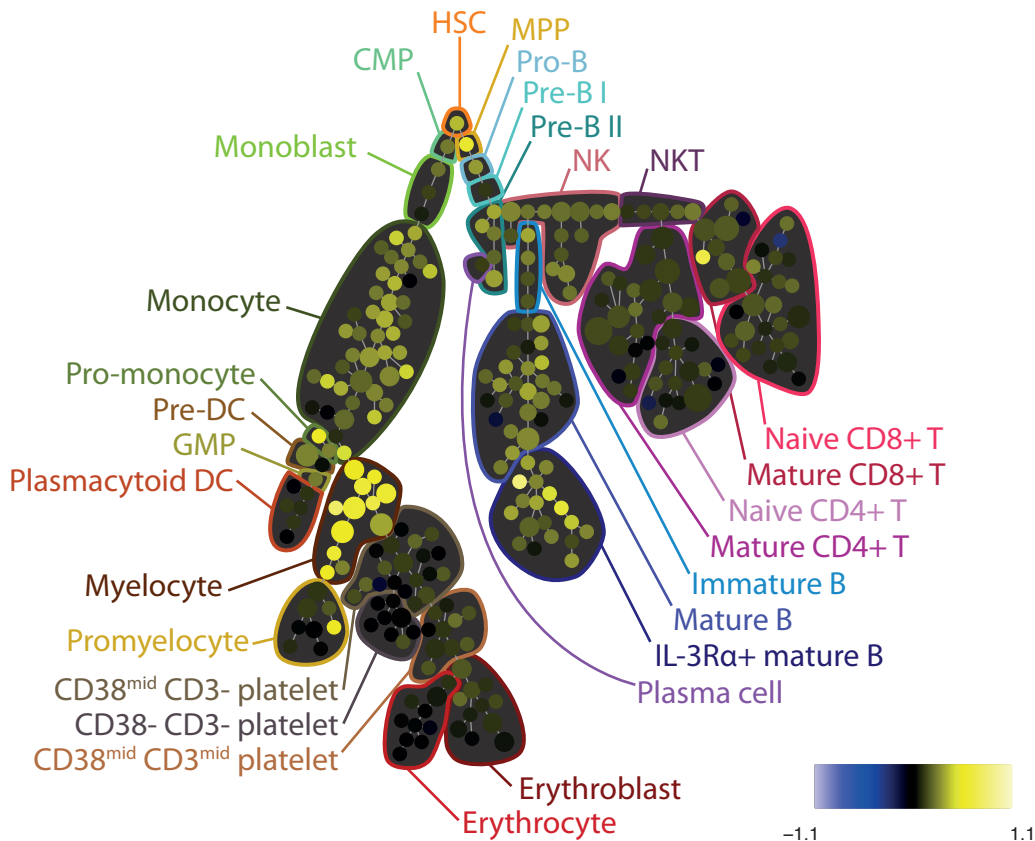


Figure S8A

156-pZAP70/Syk ---- TPO vs Ref Ratio

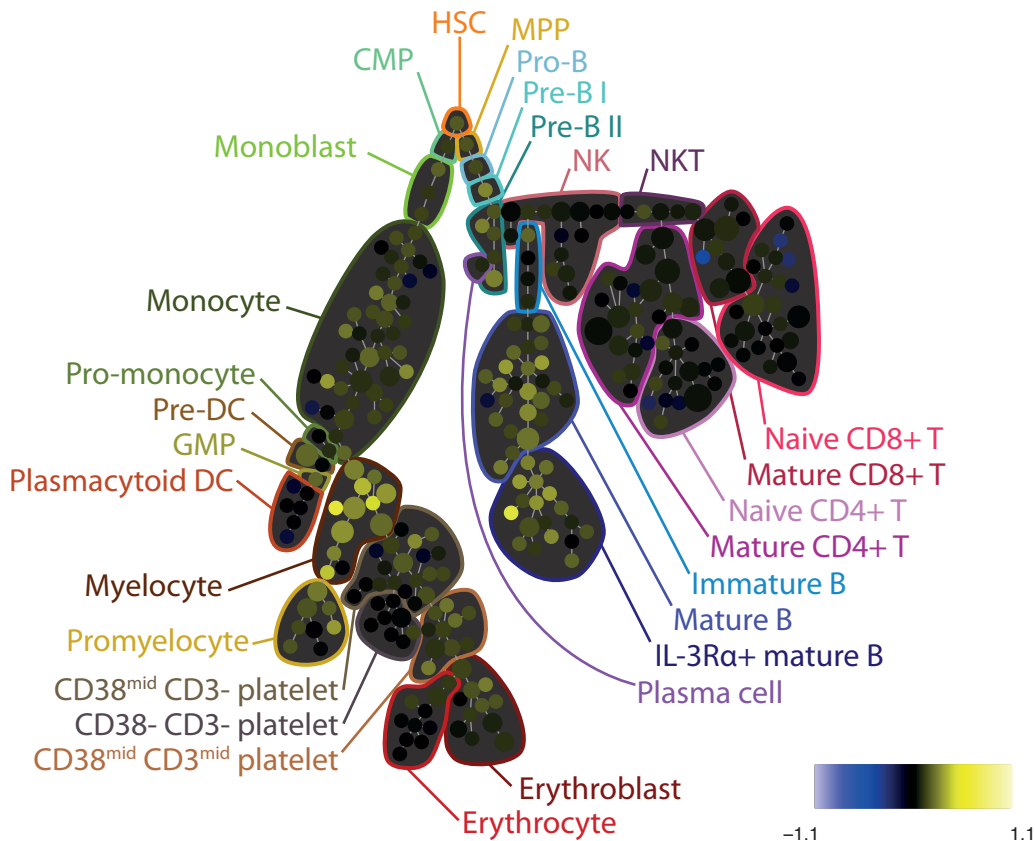


Figure S8A

159-pSTAT3 ---- BCR vs Ref Ratio

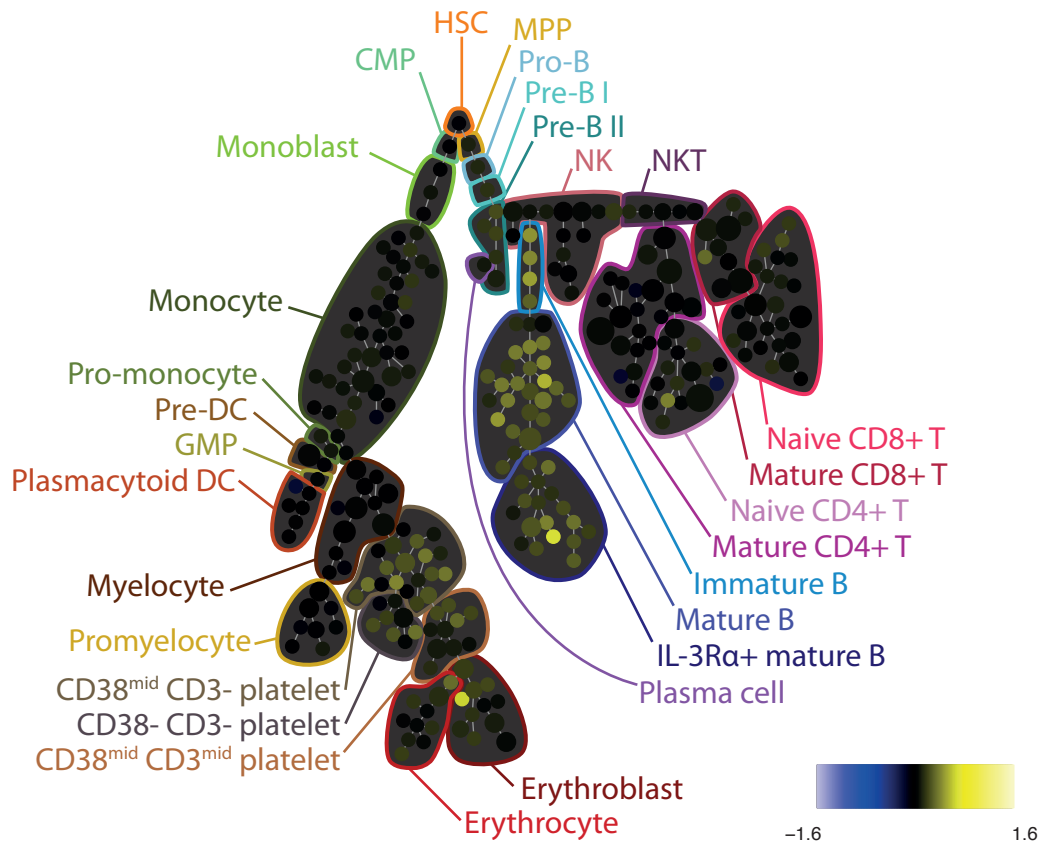


Figure S8A

159-pSTAT3 ---- DMSO vs Ref Ratio

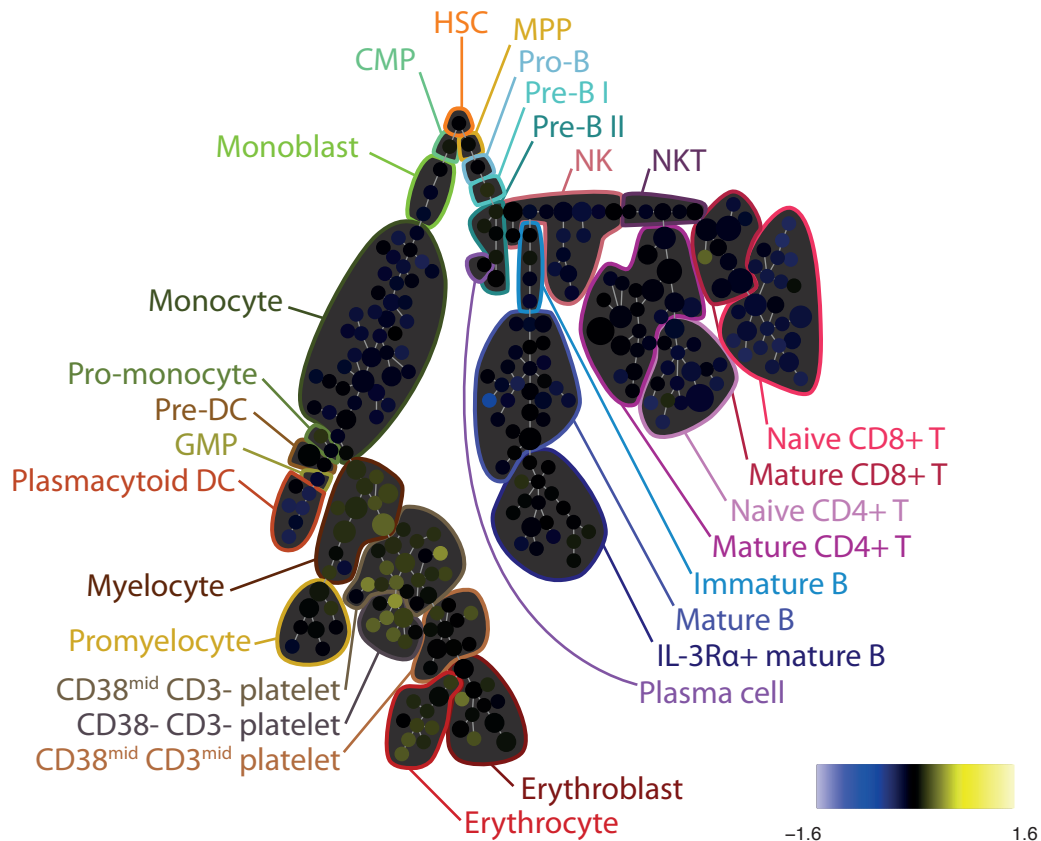


Figure S8A

159-pSTAT3 ---- Flt3L vs Ref Ratio

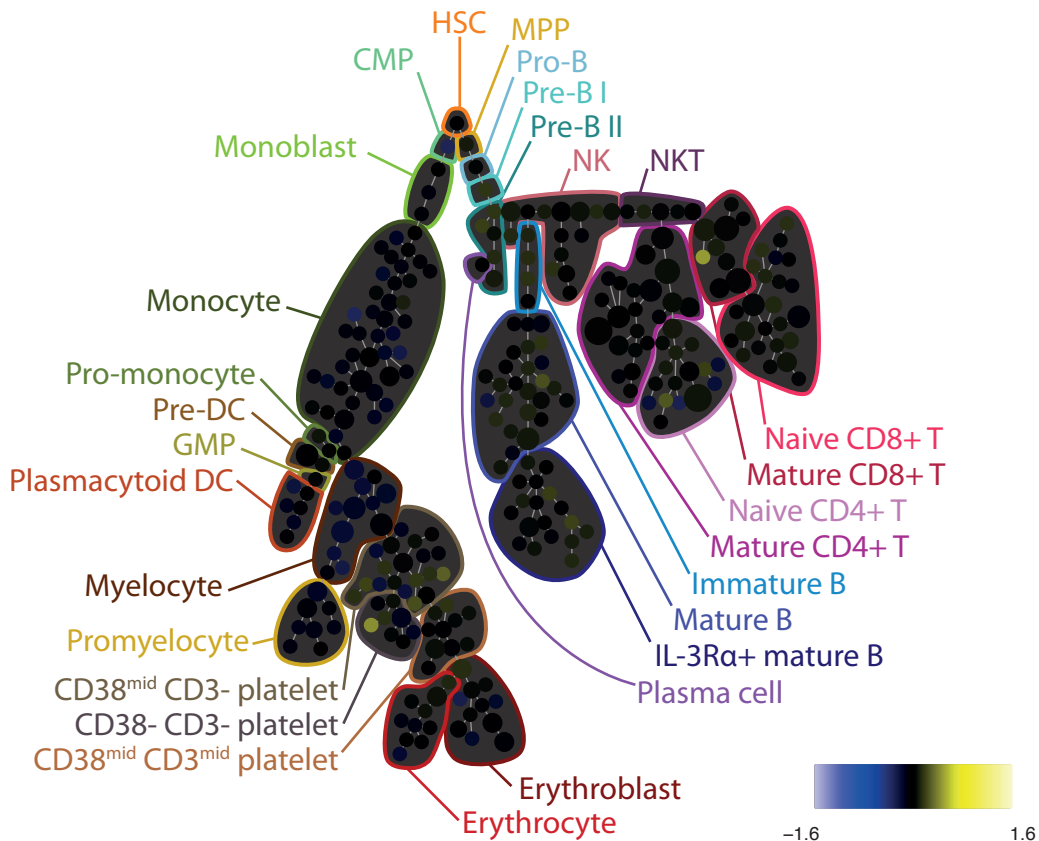


Figure S8A

159-pSTAT3 ---- GCSF vs Ref Ratio

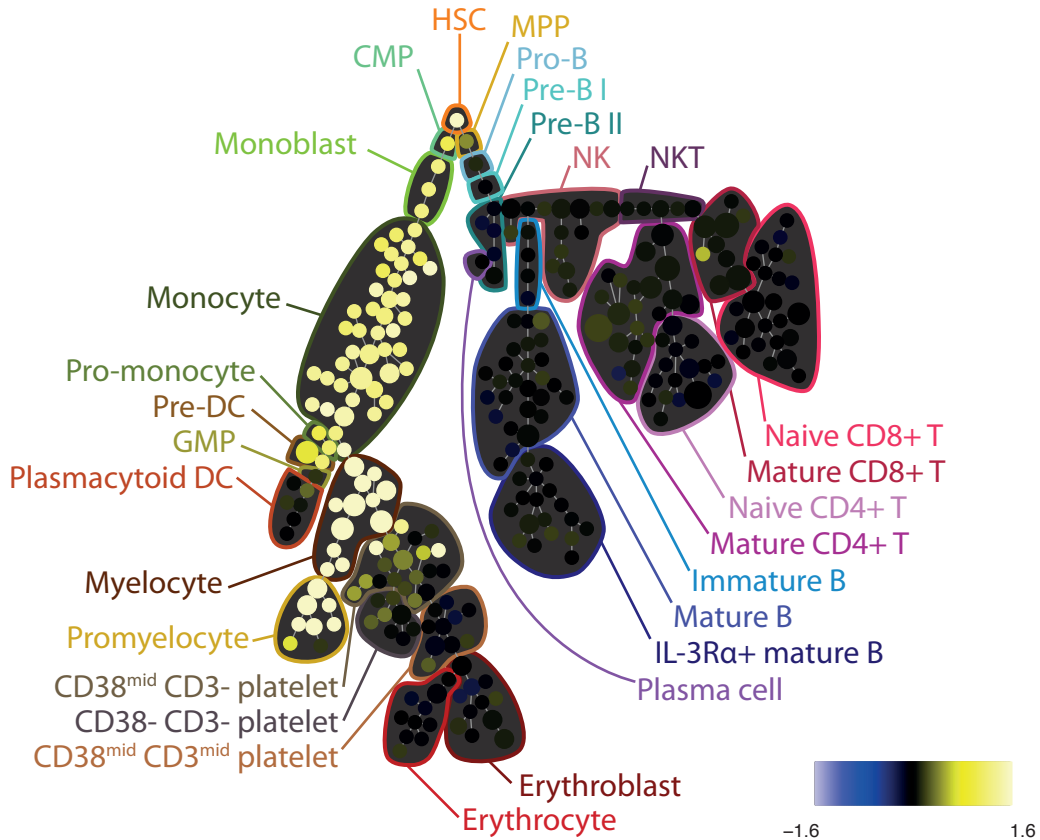


Figure S8A

159-pSTAT3 ---- GMCSF vs Ref Ratio

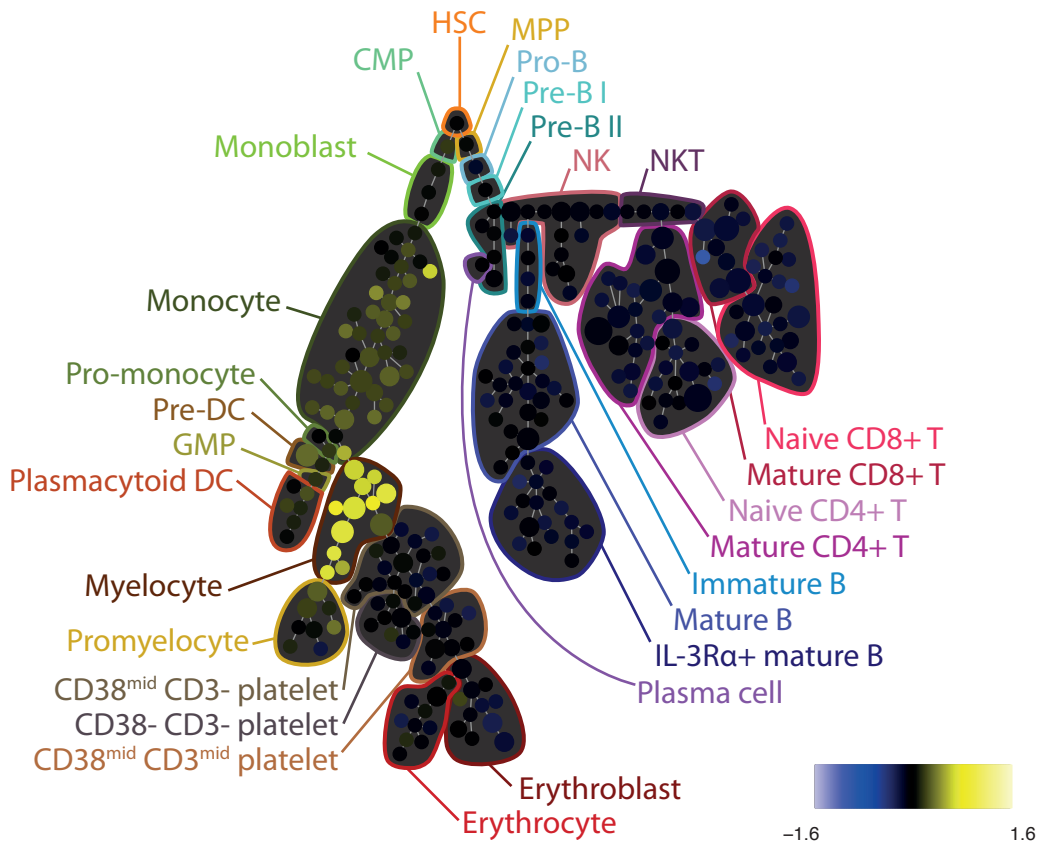


Figure S8A

159-pSTAT3 ---- IFNad vs Ref Ratio

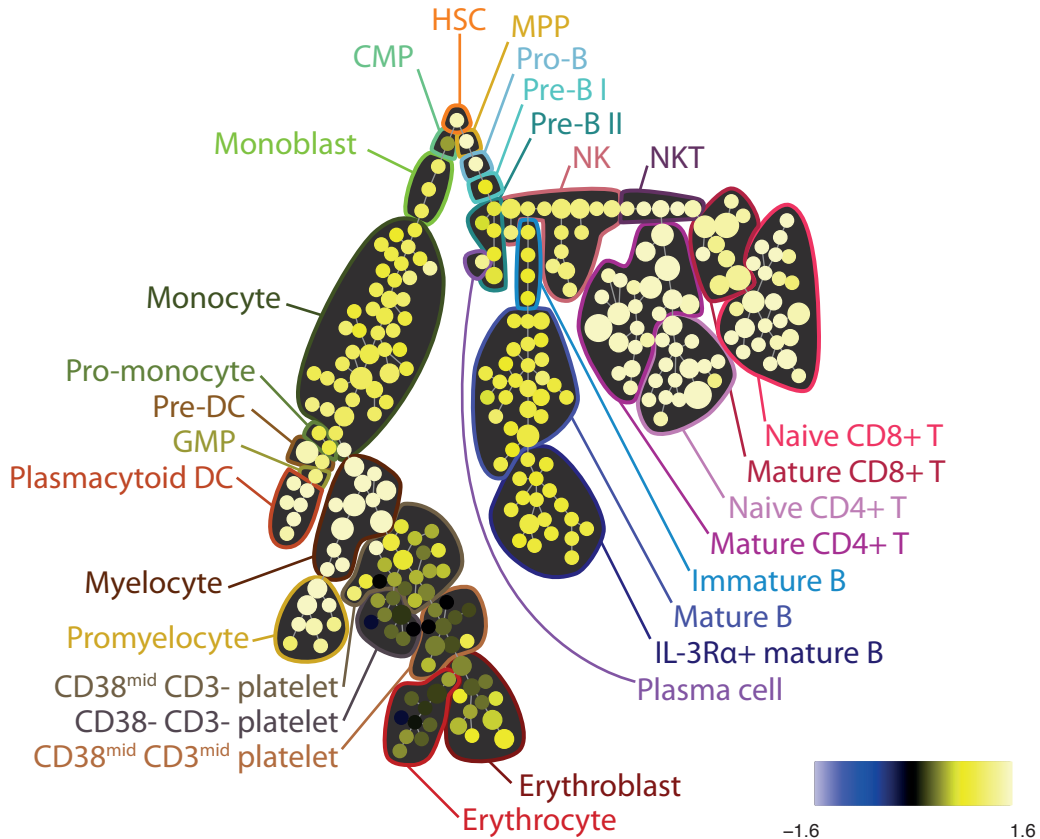


Figure S8A

159-pSTAT3 ---- IL3 vs Ref Ratio

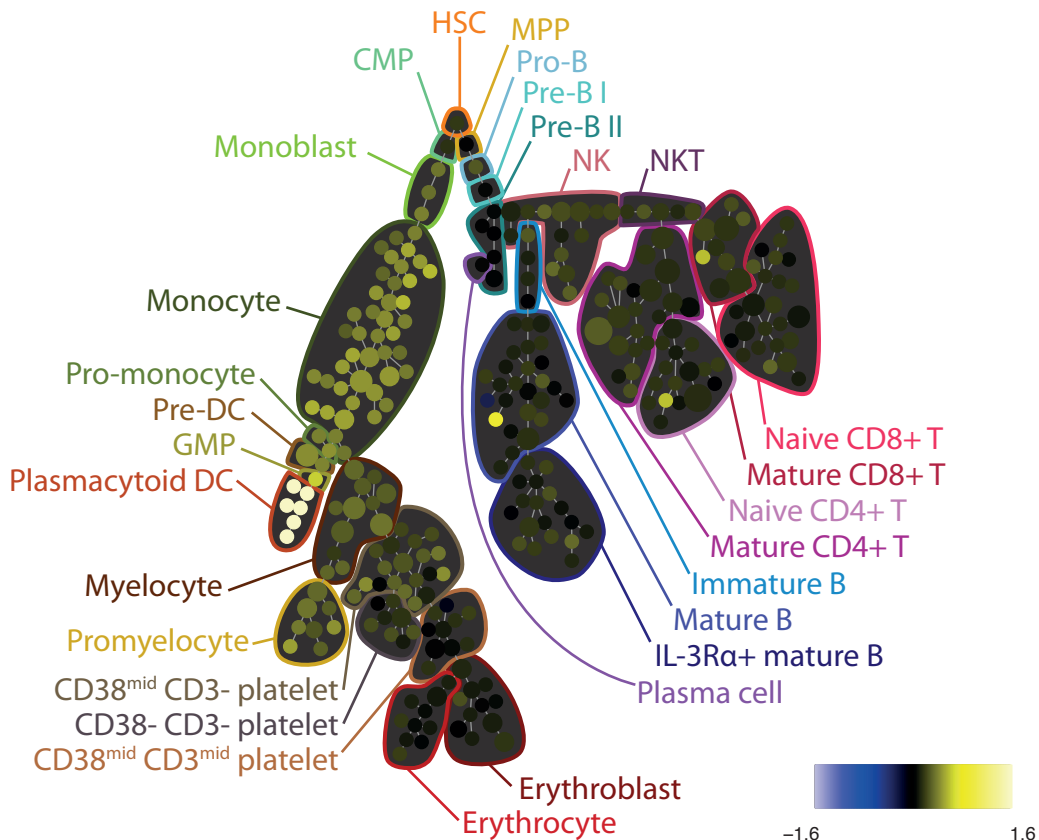


Figure S8A

159-pSTAT3 ---- IL7 vs Ref Ratio

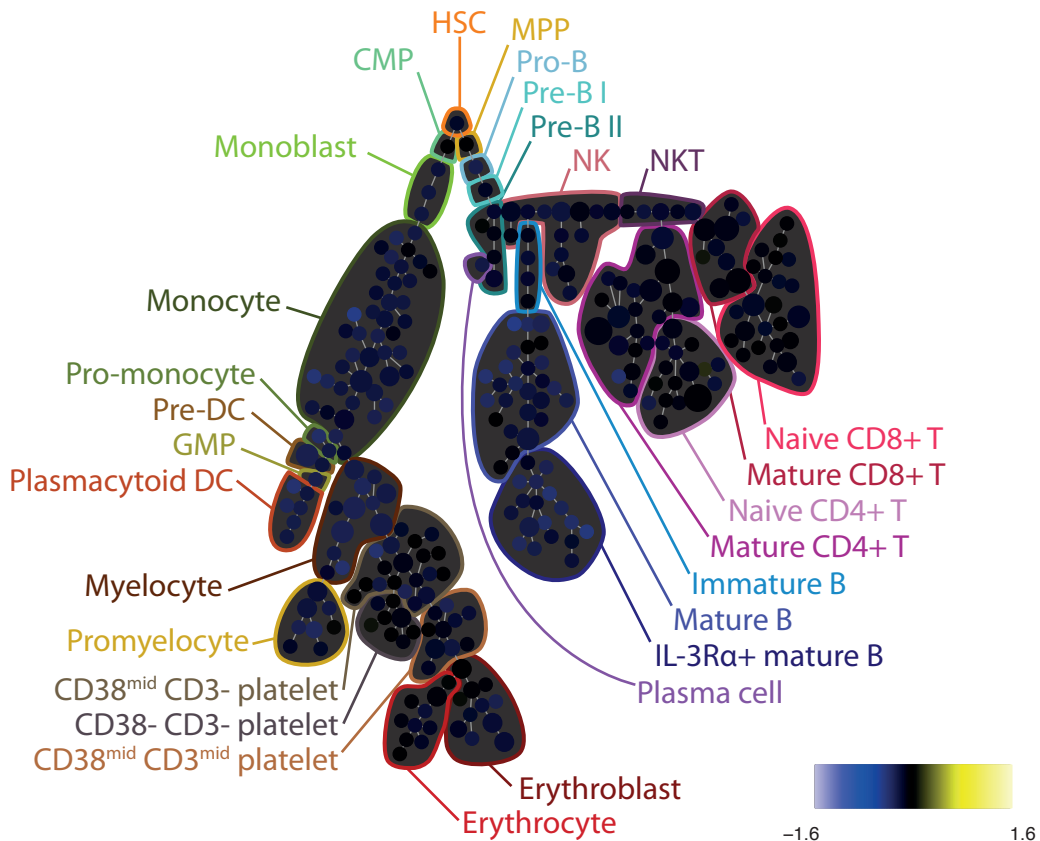


Figure S8A

159-pSTAT3 ---- LPS vs Ref Ratio

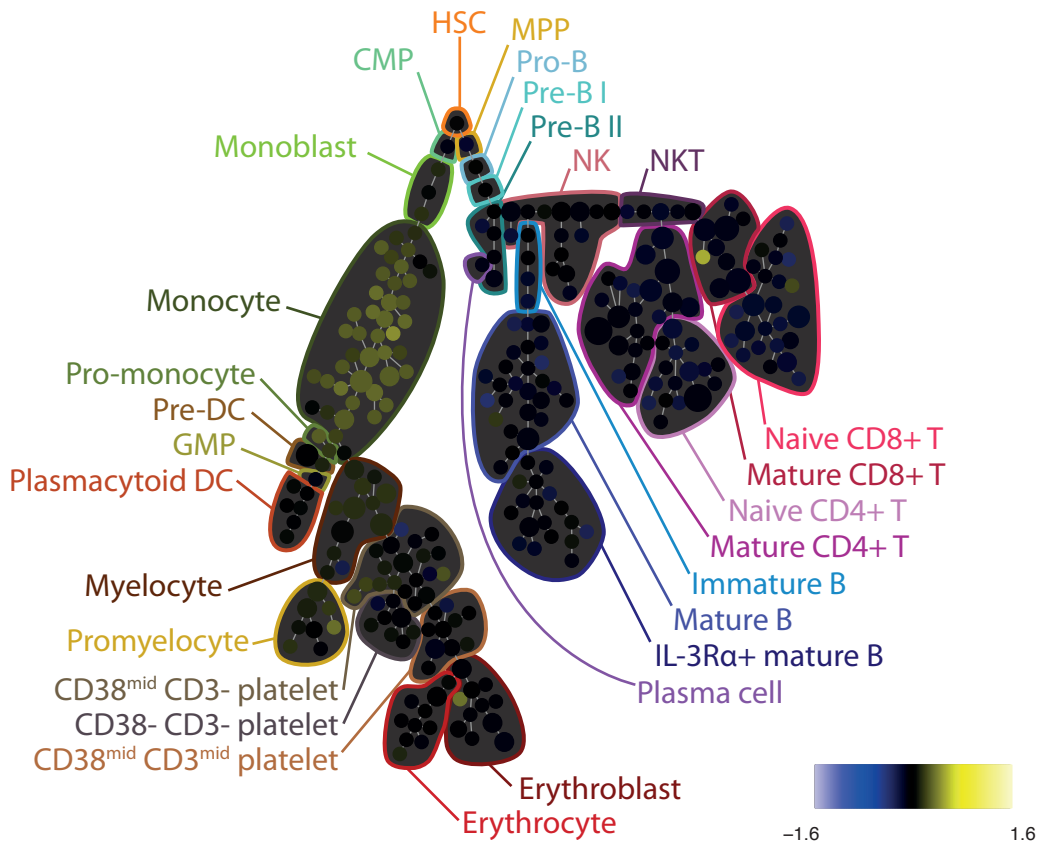


Figure S8A

159-pSTAT3 ---- PMAi on vs Ref Ratio

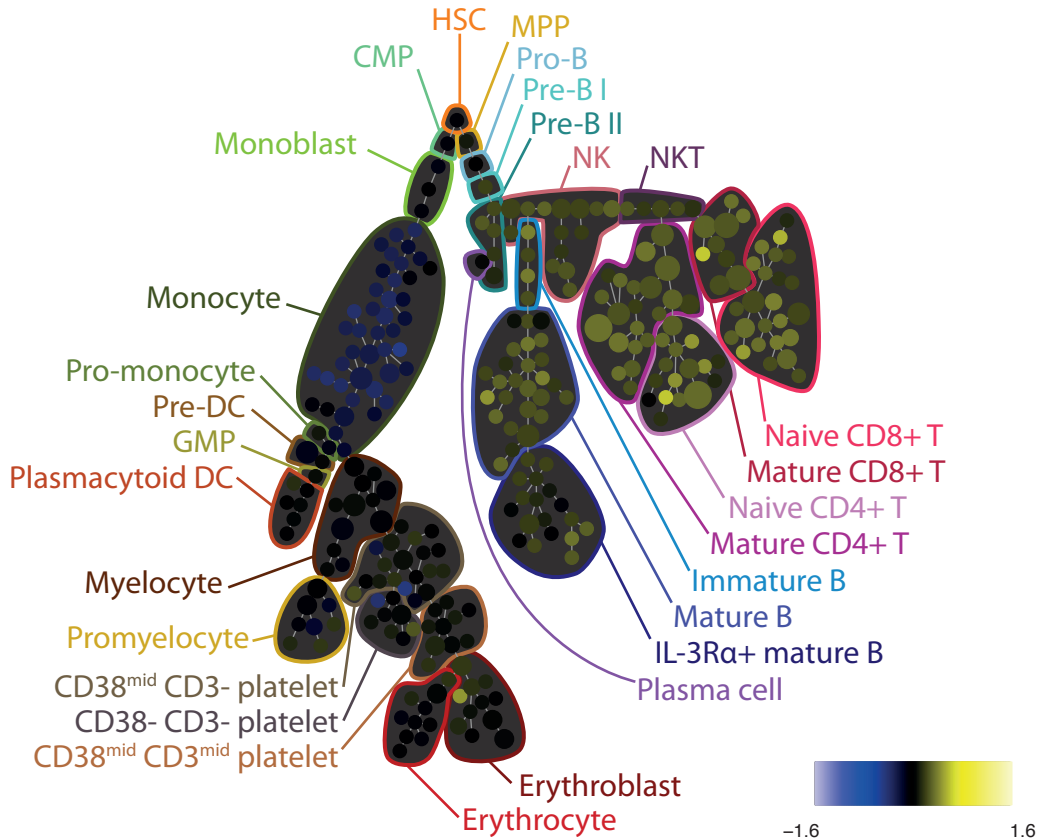


Figure S8A

159-pSTAT3 ---- PVO4 vs Ref Ratio

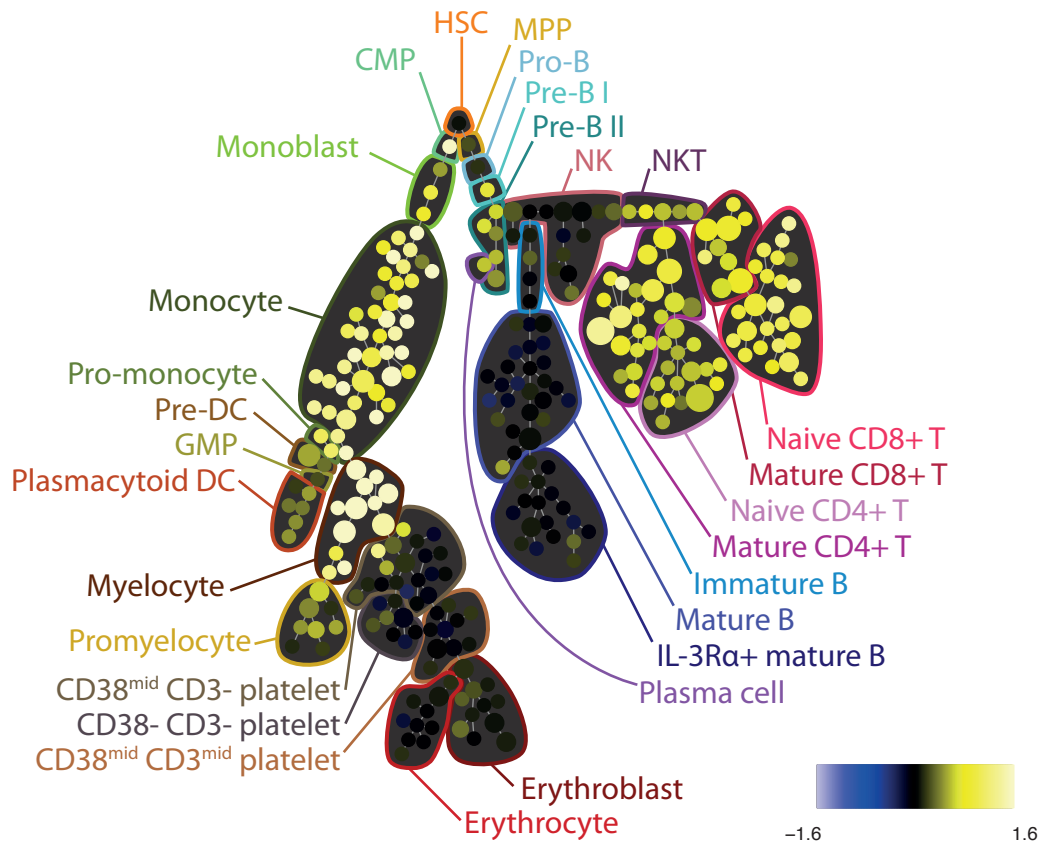


Figure S8A

159-pSTAT3 — SCF vs Ref Ratio

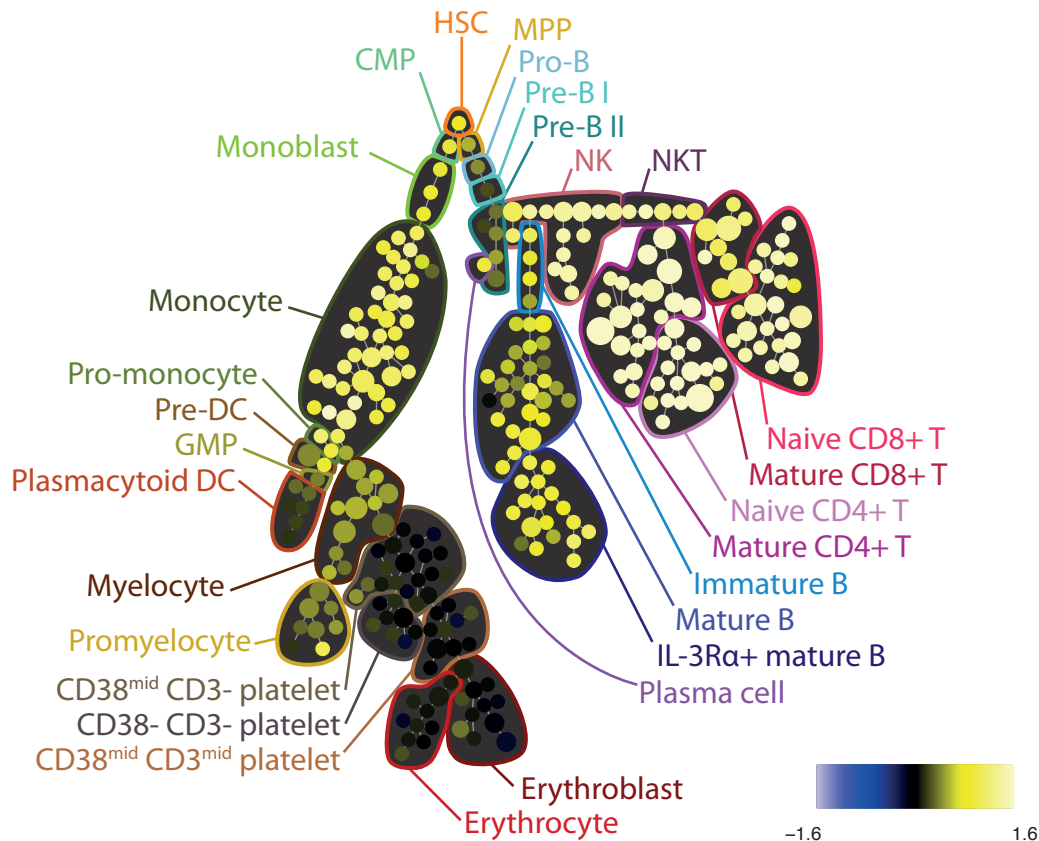


Figure S8A

159-pSTAT3 ---- TNFa vs Ref Ratio

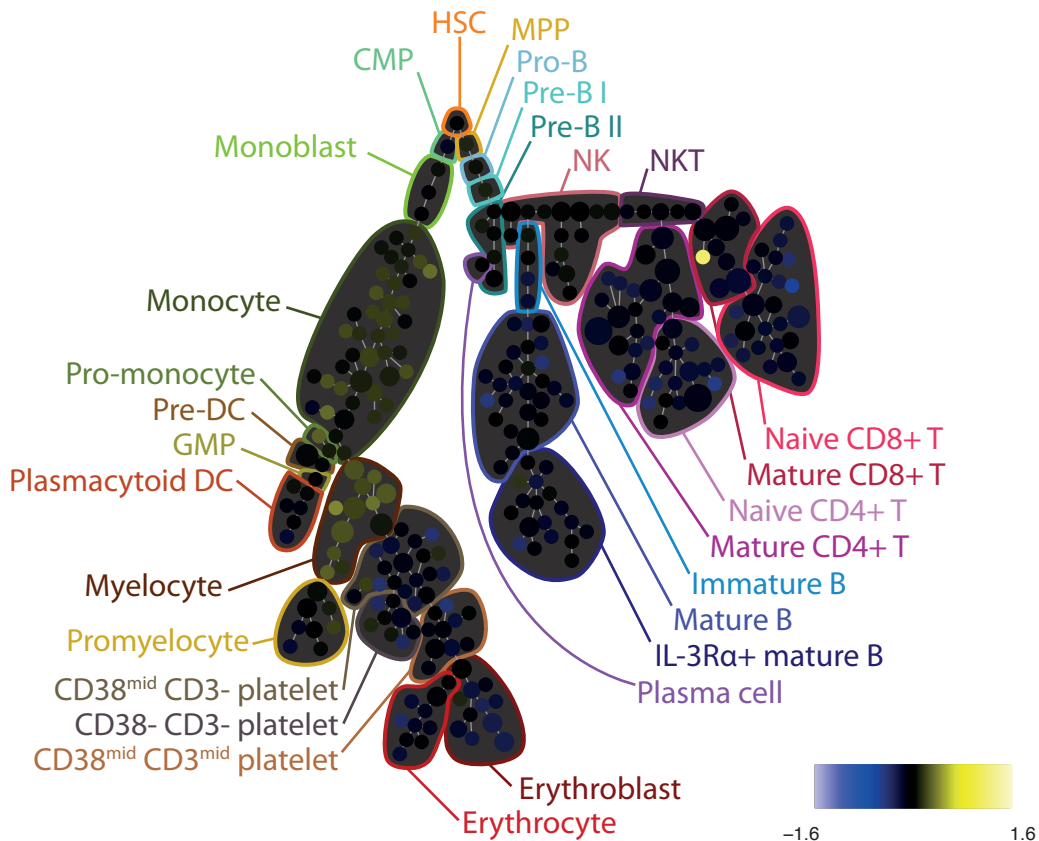


Figure S8A

159-pSTAT3 ---- TPO vs Ref Ratio

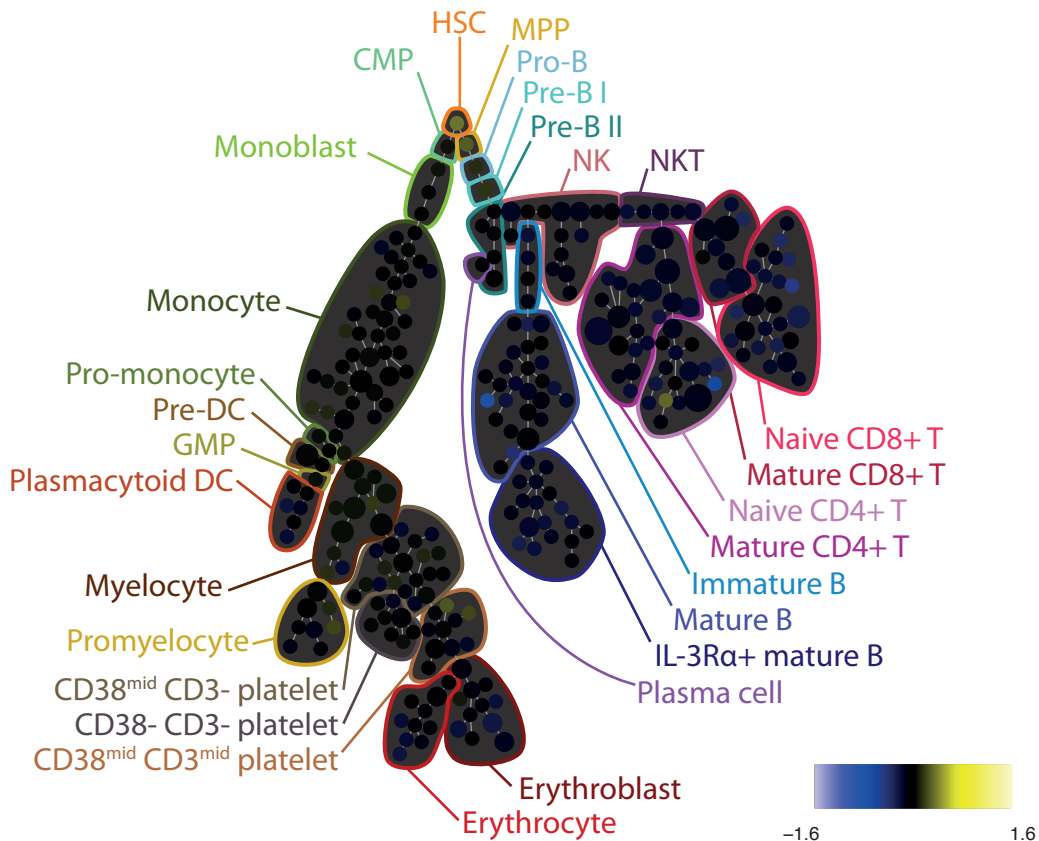


Figure S8A

164-pSLP-76 ---- BCR vs Ref Ratio

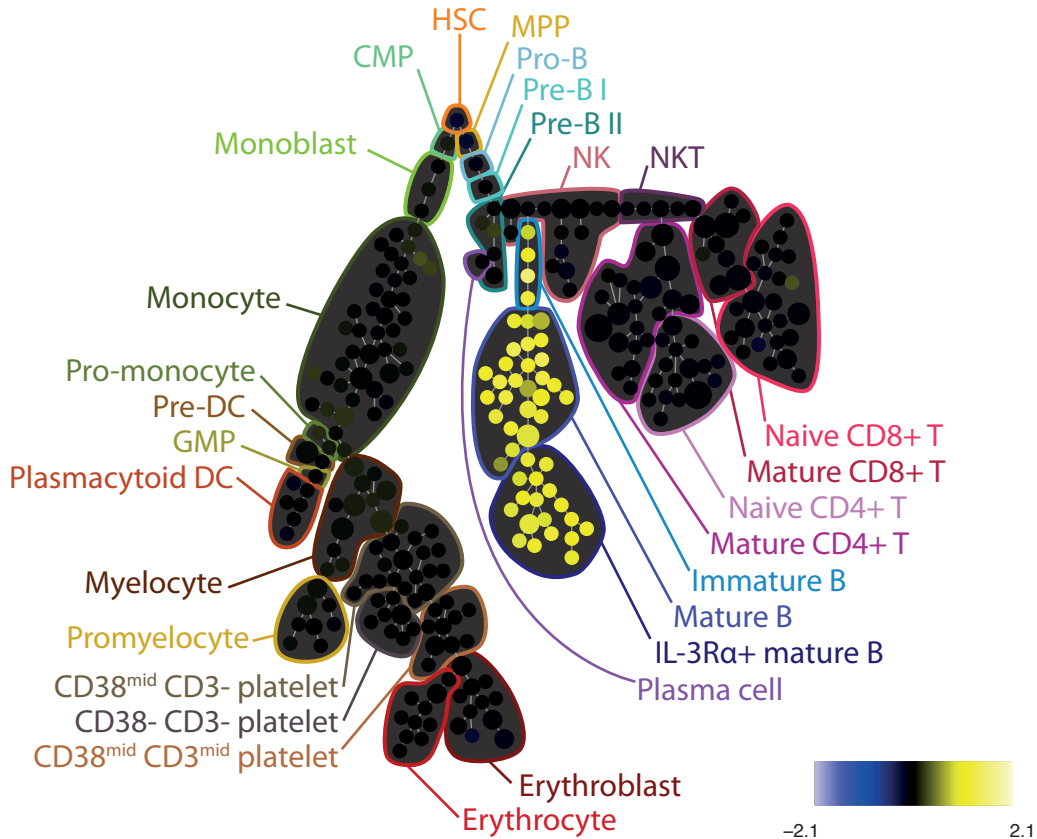


Figure S8A

164-pSLP-76 --- DMSO vs Ref Ratio

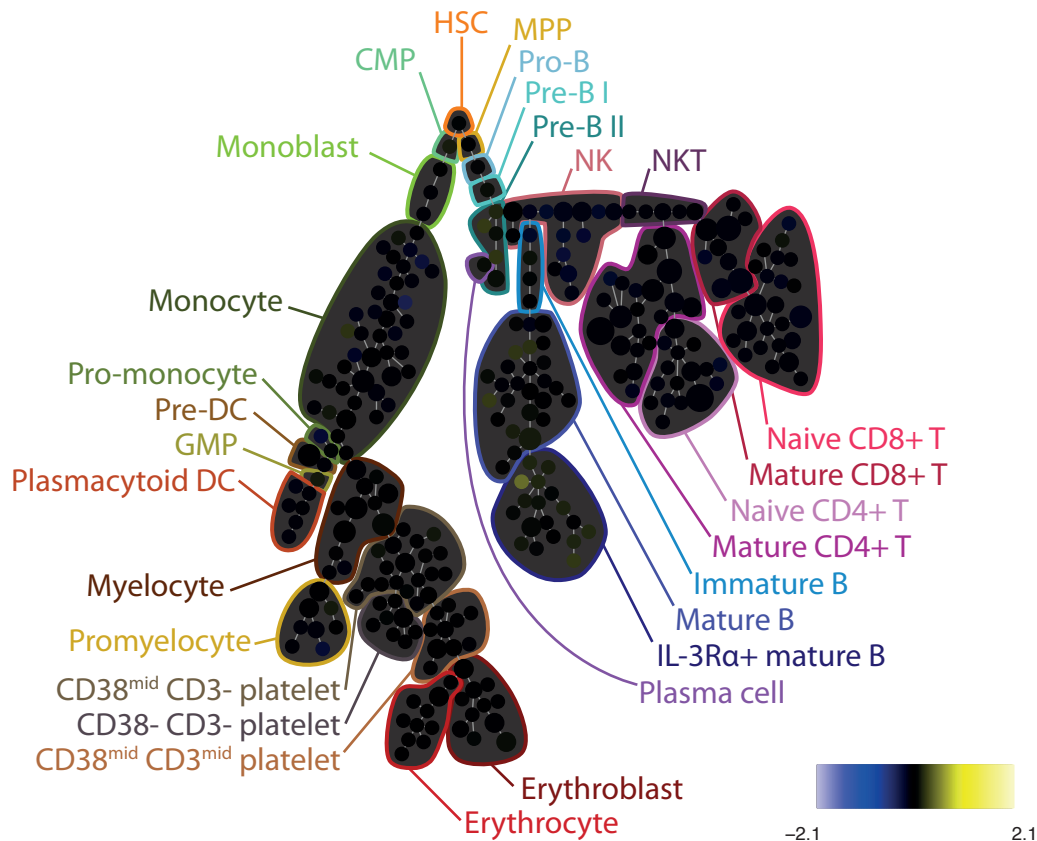


Figure S8A

164-pSLP-76 ---- Flt3L vs Ref Ratio

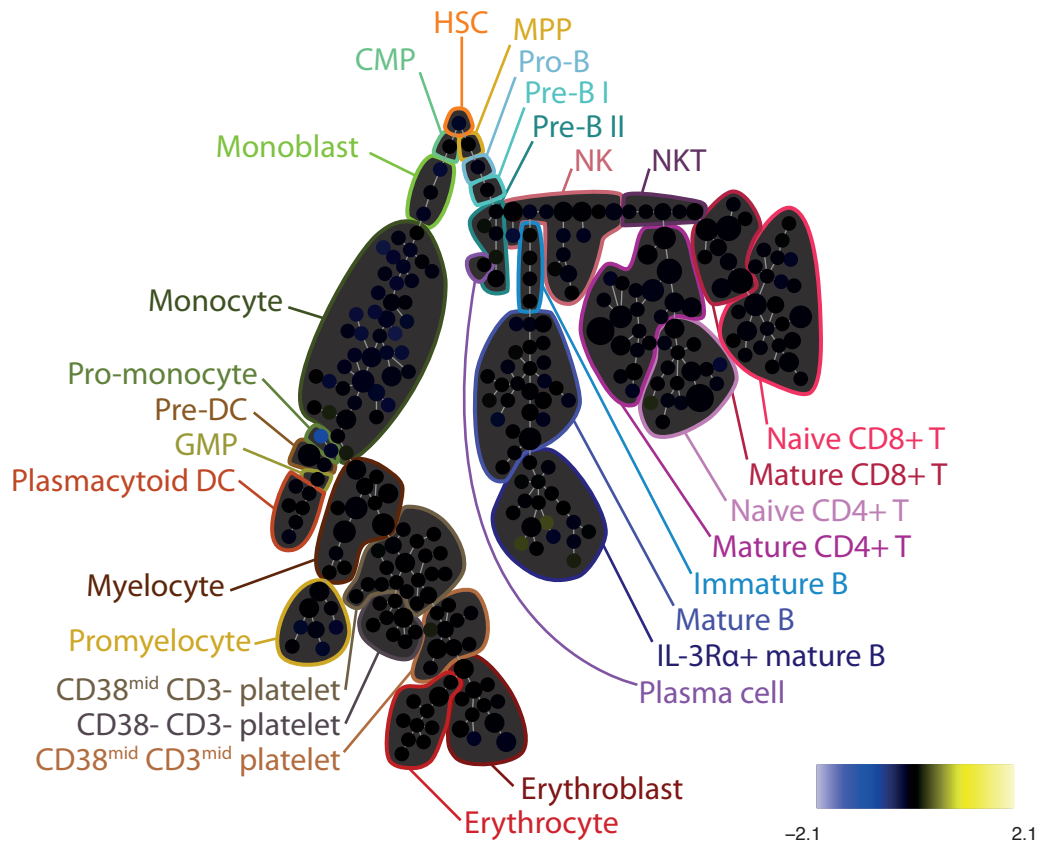


Figure S8A

164-pSLP-76 ---- GCSF vs Ref Ratio

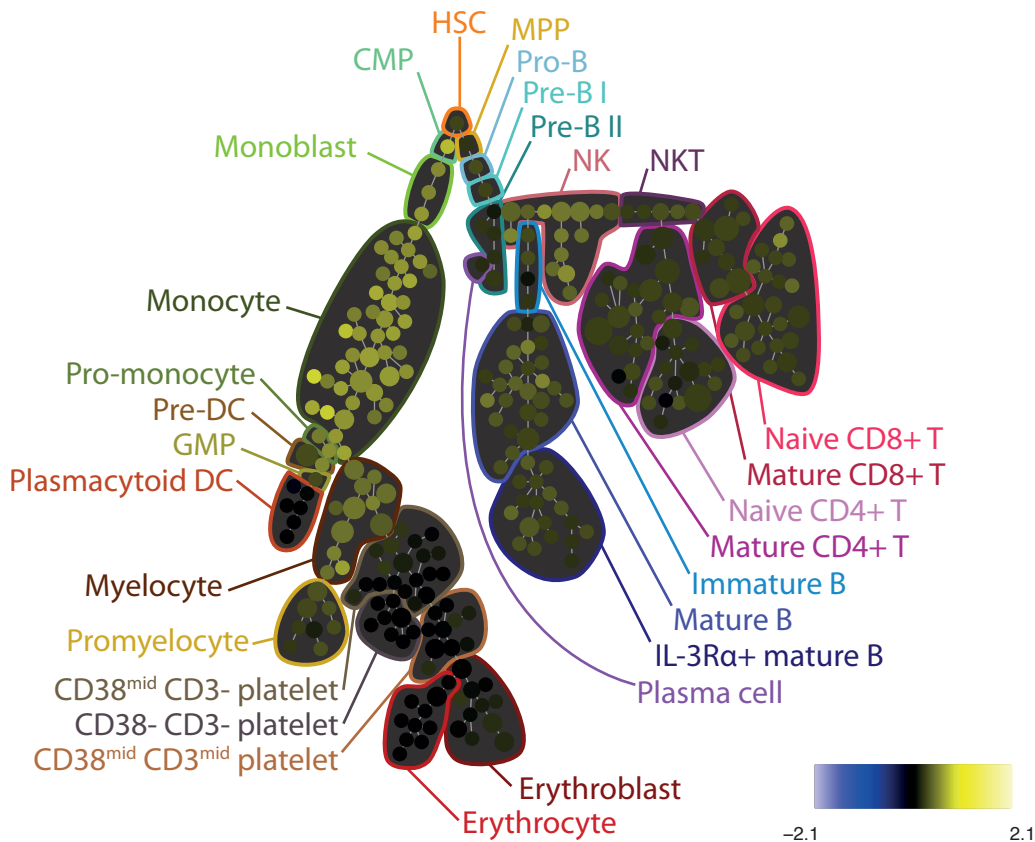


Figure S8A

164-pSLP-76 ---- GMCSF vs Ref Ratio

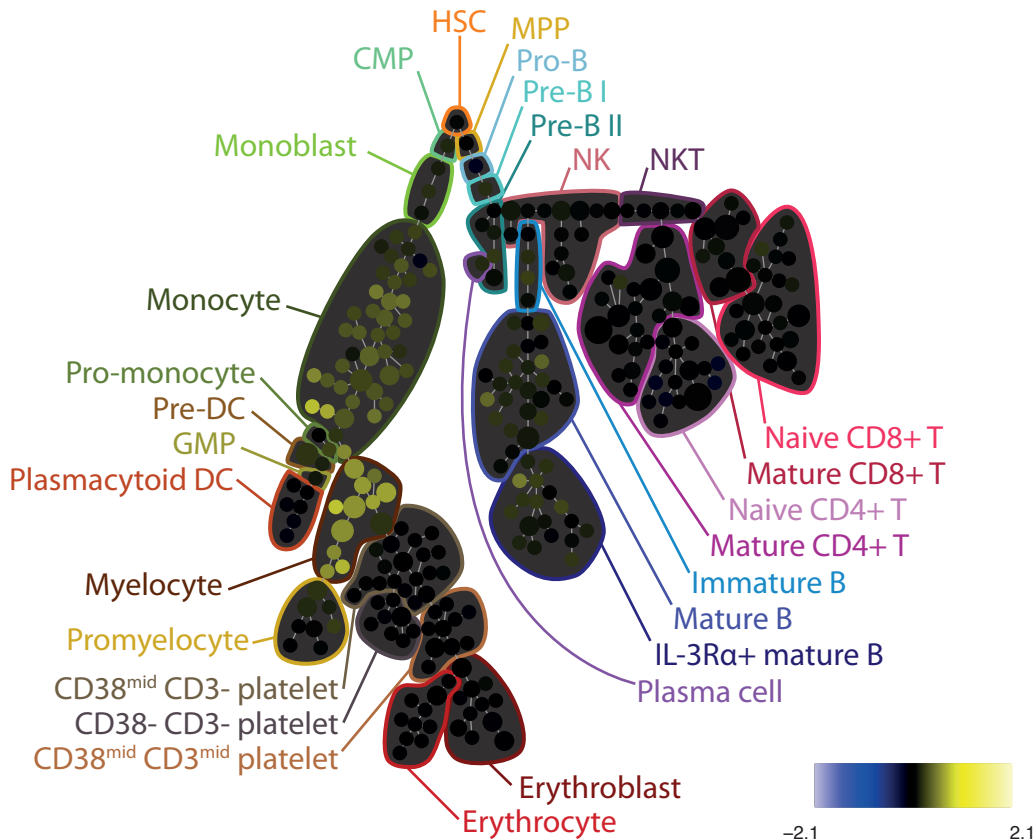


Figure S8A

164-pSLP-76 ---- IFNad vs Ref Ratio

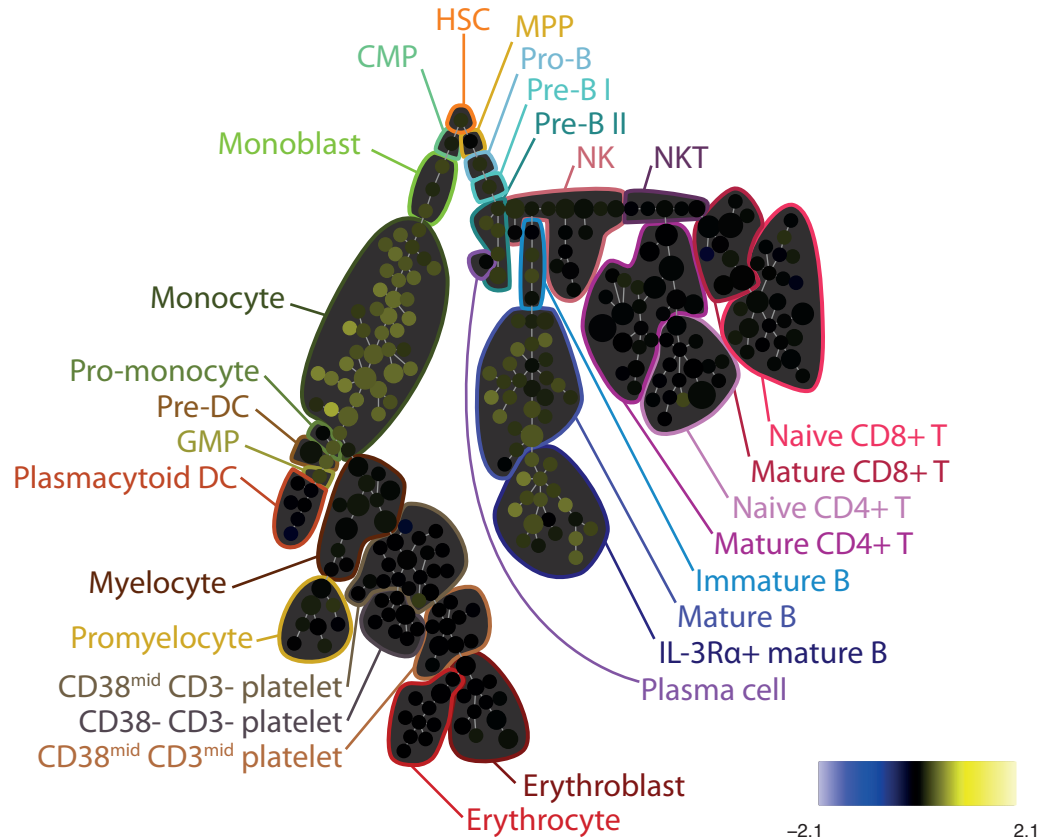


Figure S8A

164-pSLP-76 ---- IL3 vs Ref Ratio

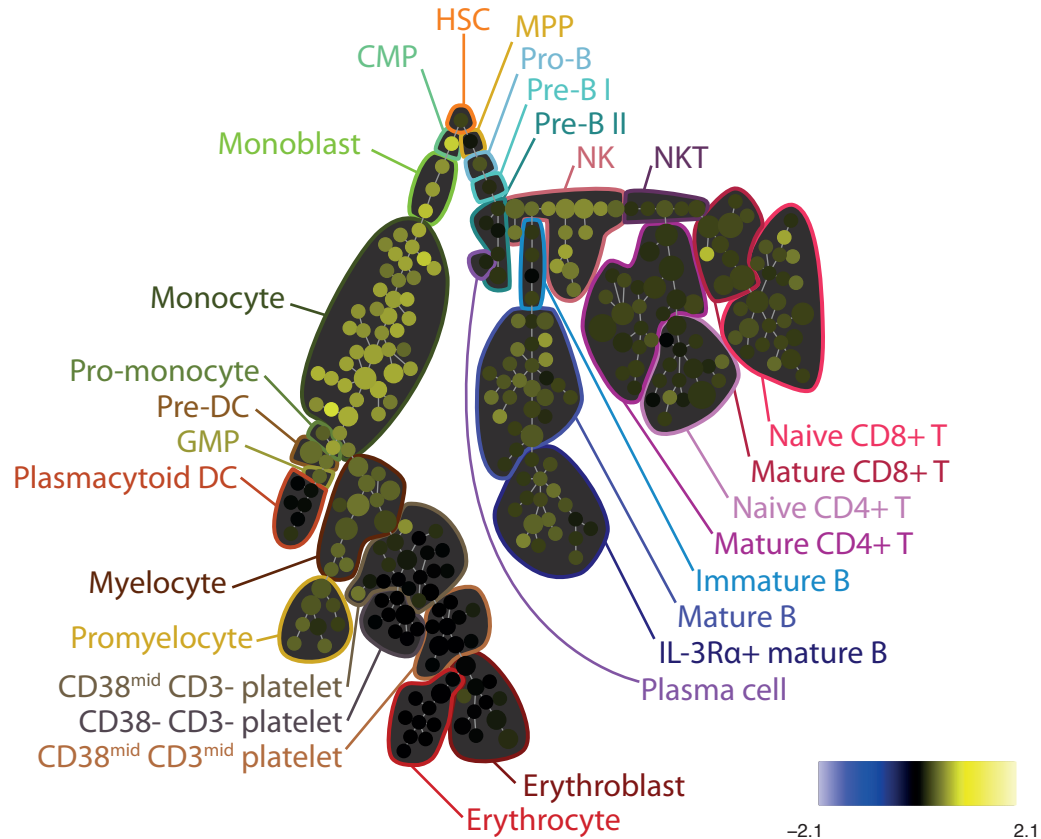


Figure S8A

164-pSLP-76 ---- IL7 vs Ref Ratio

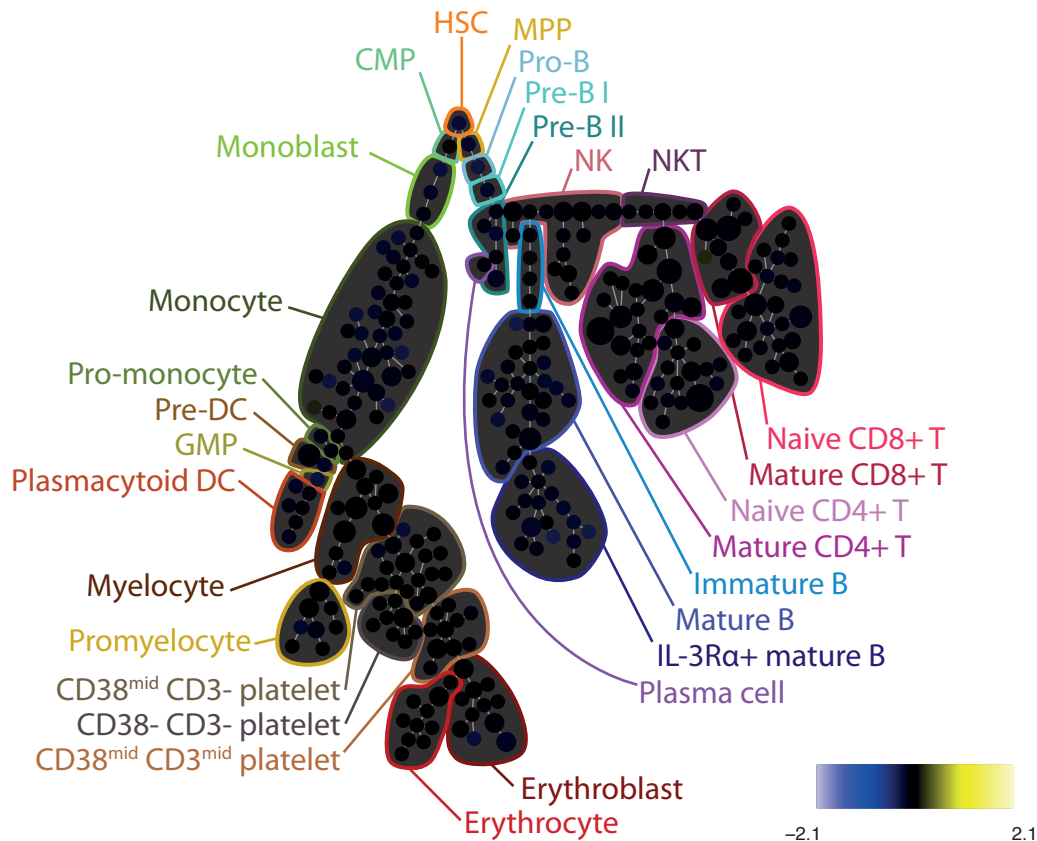


Figure S8A

164-pSLP-76 --- LPS vs Ref Ratio

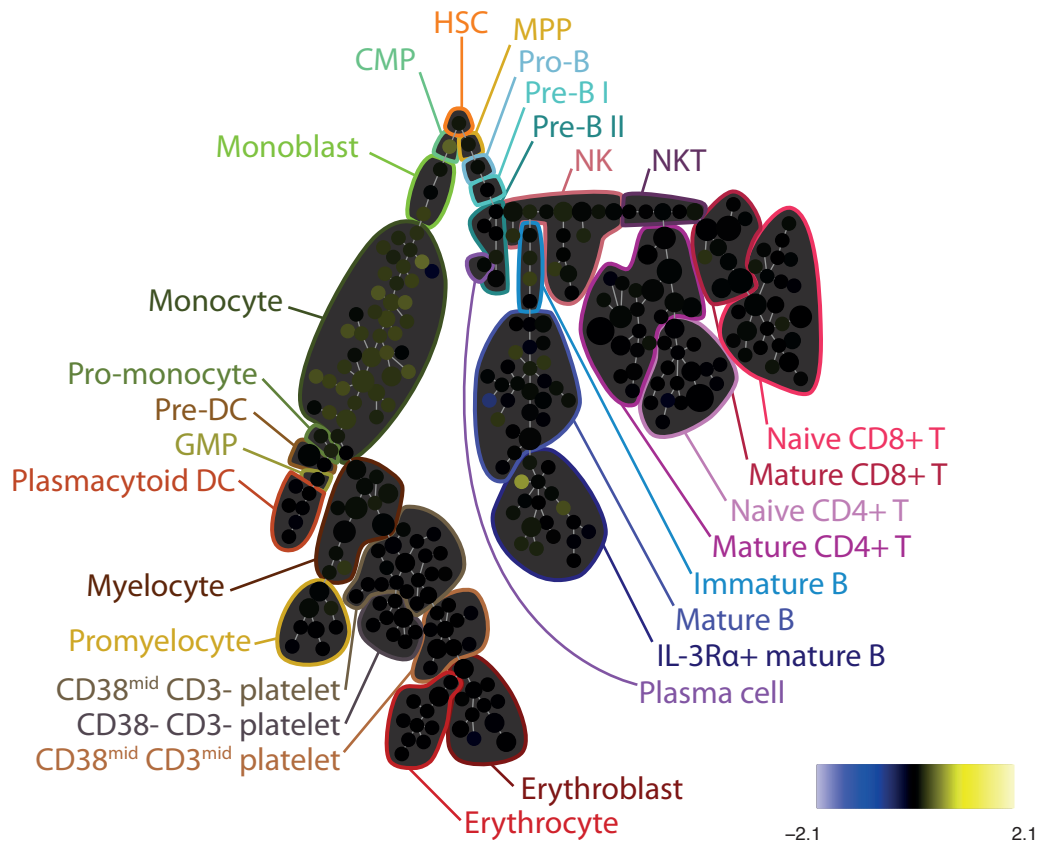


Figure S8A

164-pSLP-76 ---- PMAiono vs Ref Ratio

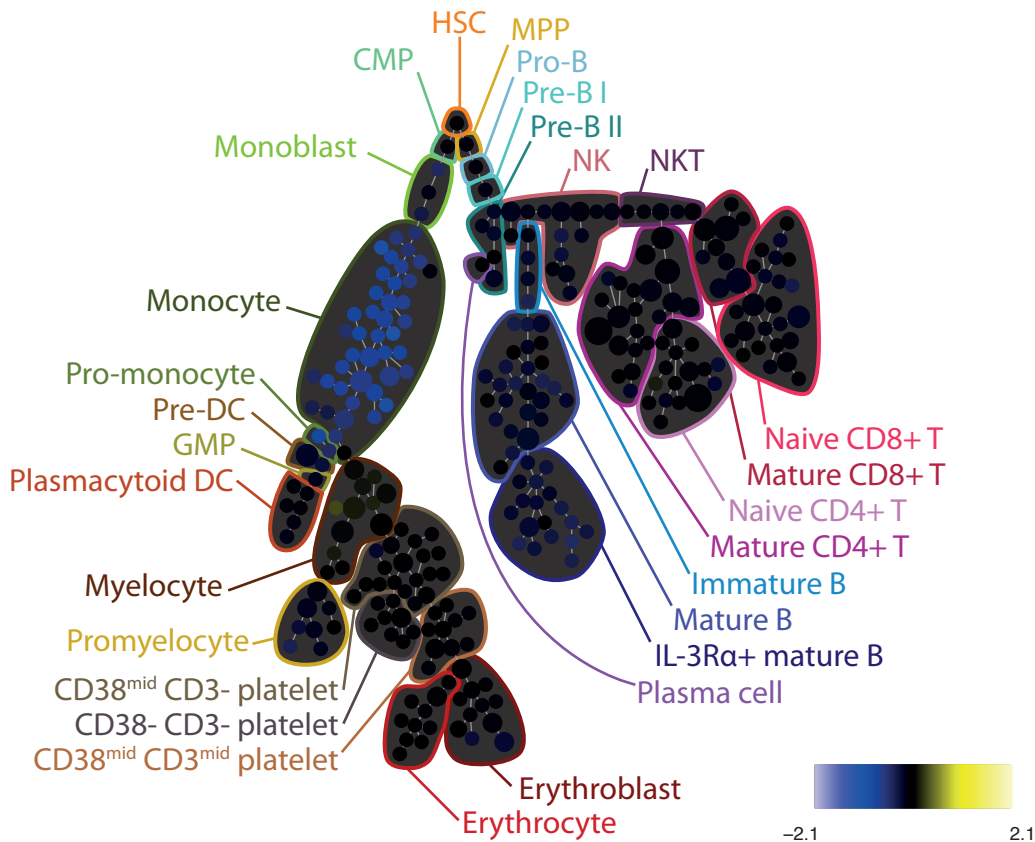


Figure S8A

164-pSLP-76 ---- PVO4 vs Ref Ratio

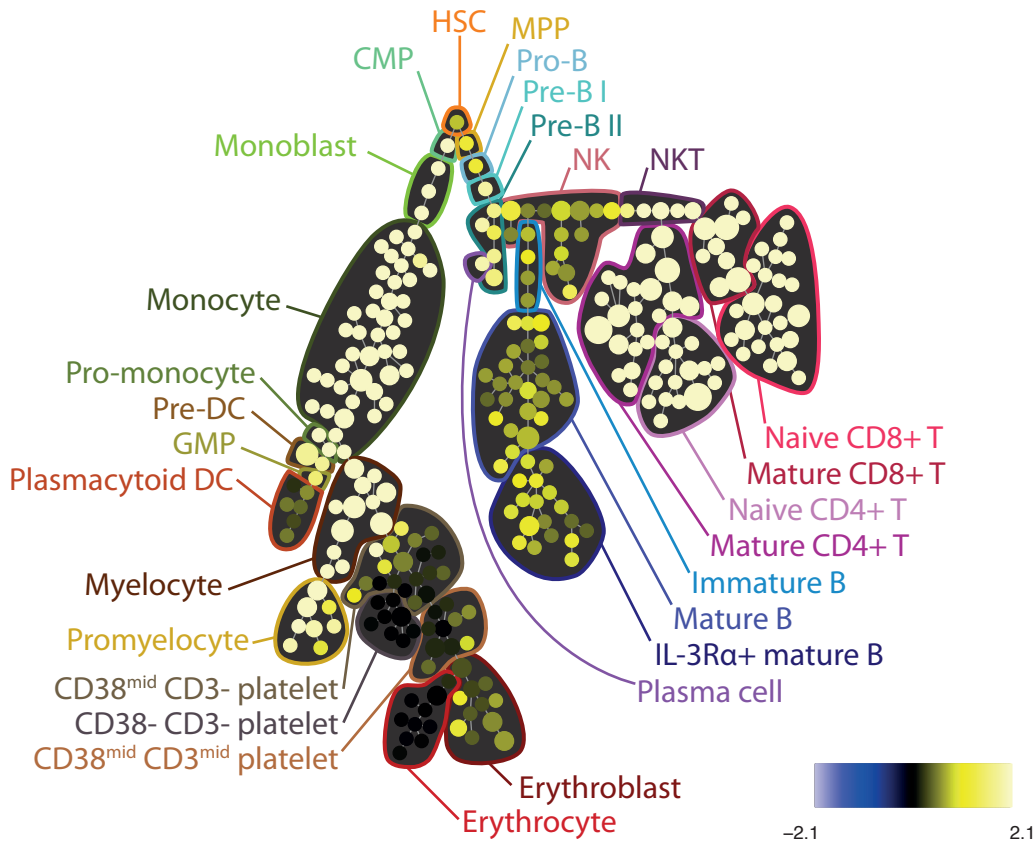


Figure S8A

164-pSLP-76 ---- SCF vs Ref Ratio

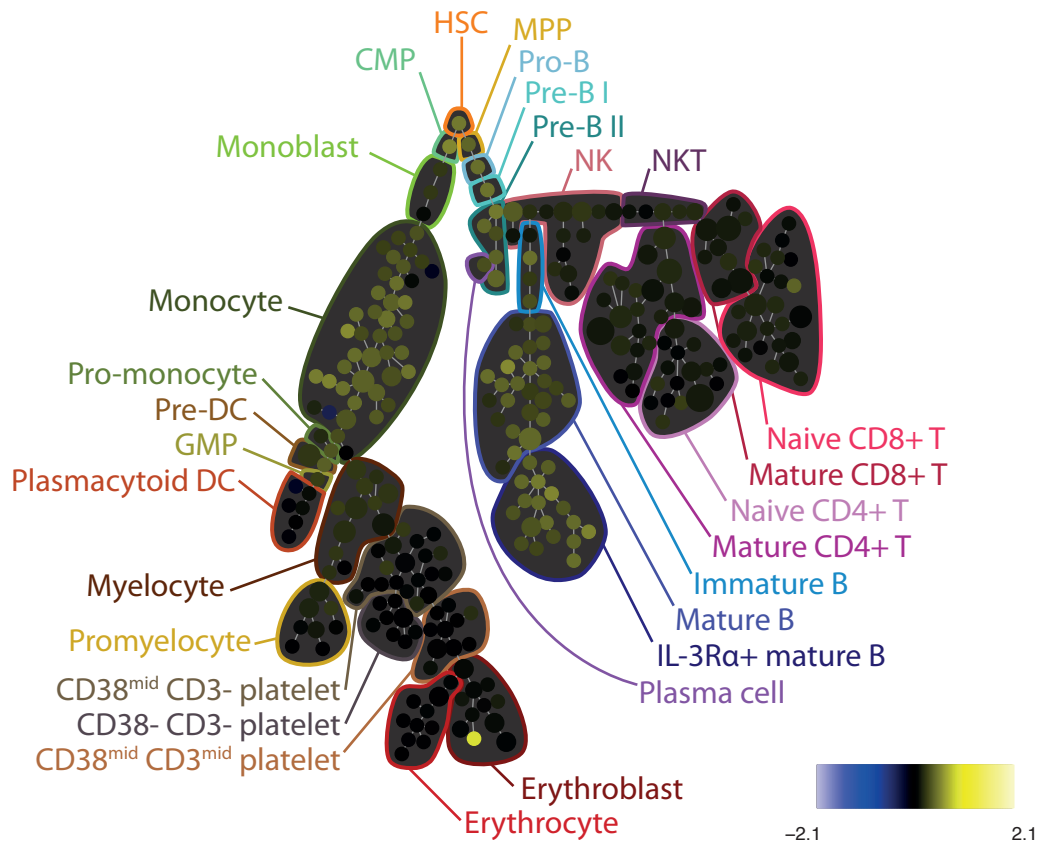


Figure S8A

164-pSLP-76 ---- TNFa vs Ref Ratio

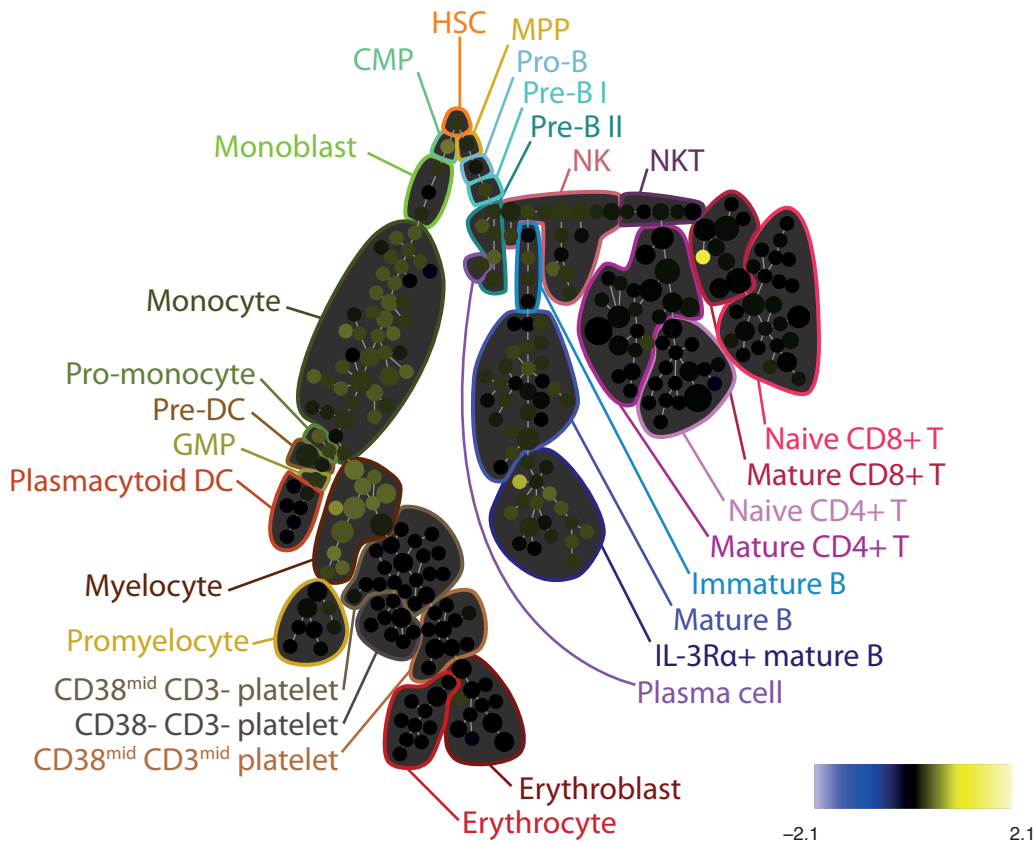


Figure S8A

164-pSLP-76 ---- TPO vs Ref Ratio

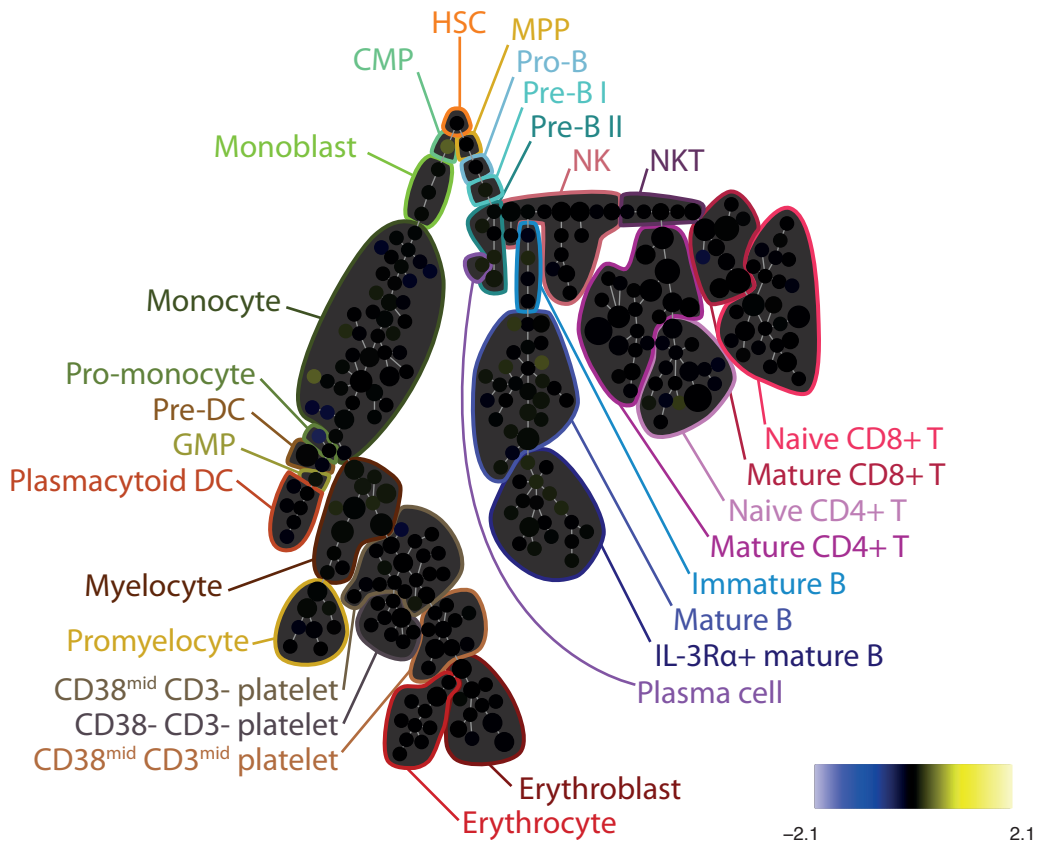


Figure S8A

165-pNFkB ---- BCR vs Ref Ratio

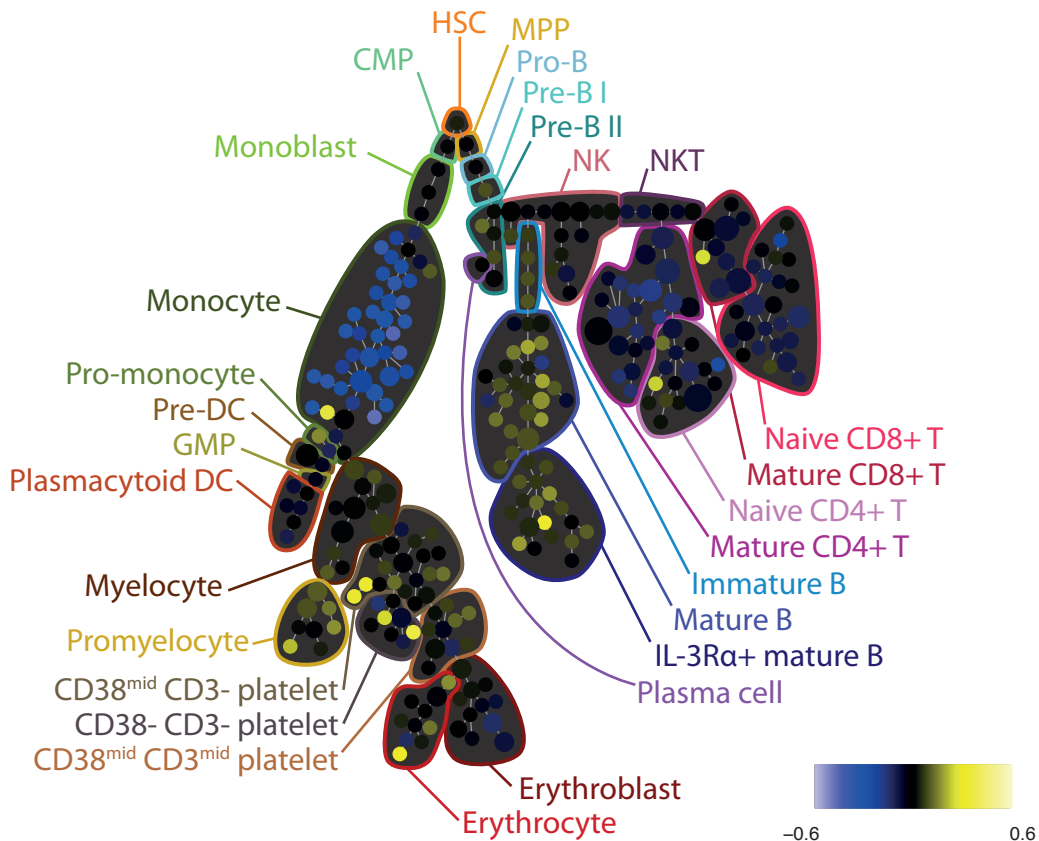


Figure S8A

165-pNFkB ---- DMSO vs Ref Ratio

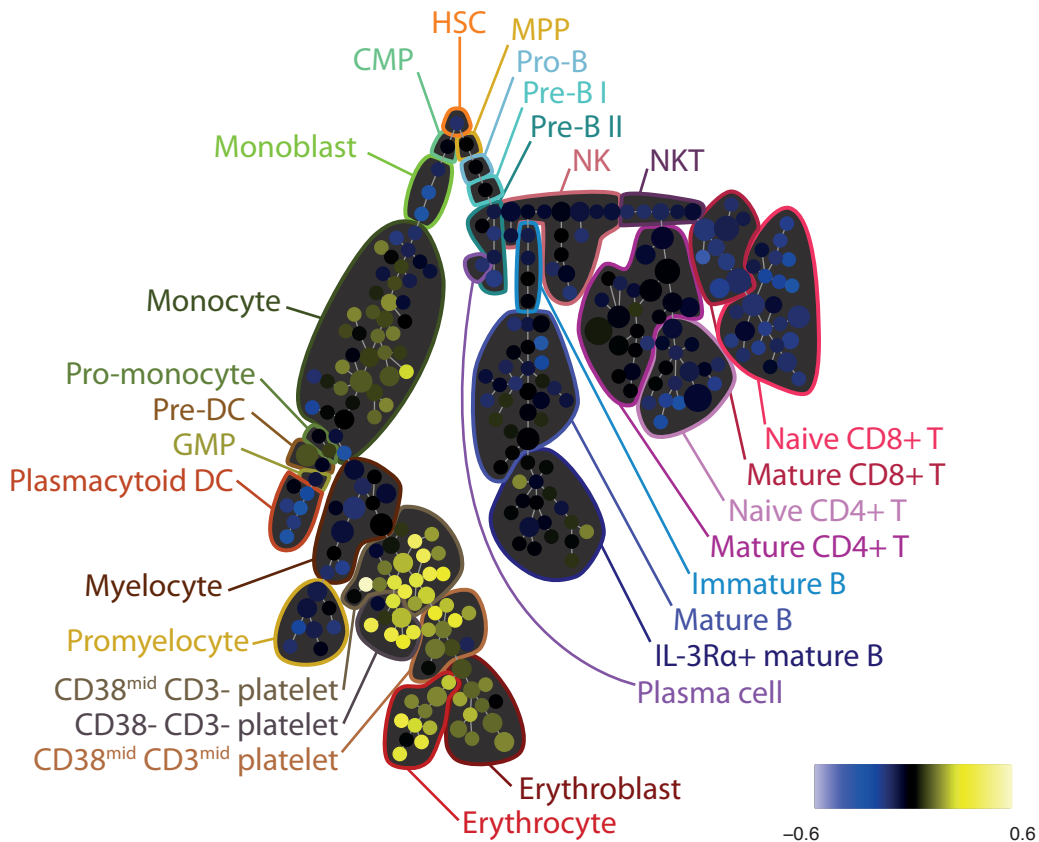


Figure S8A

165-pNFkB ---- Flt3L vs Ref Ratio

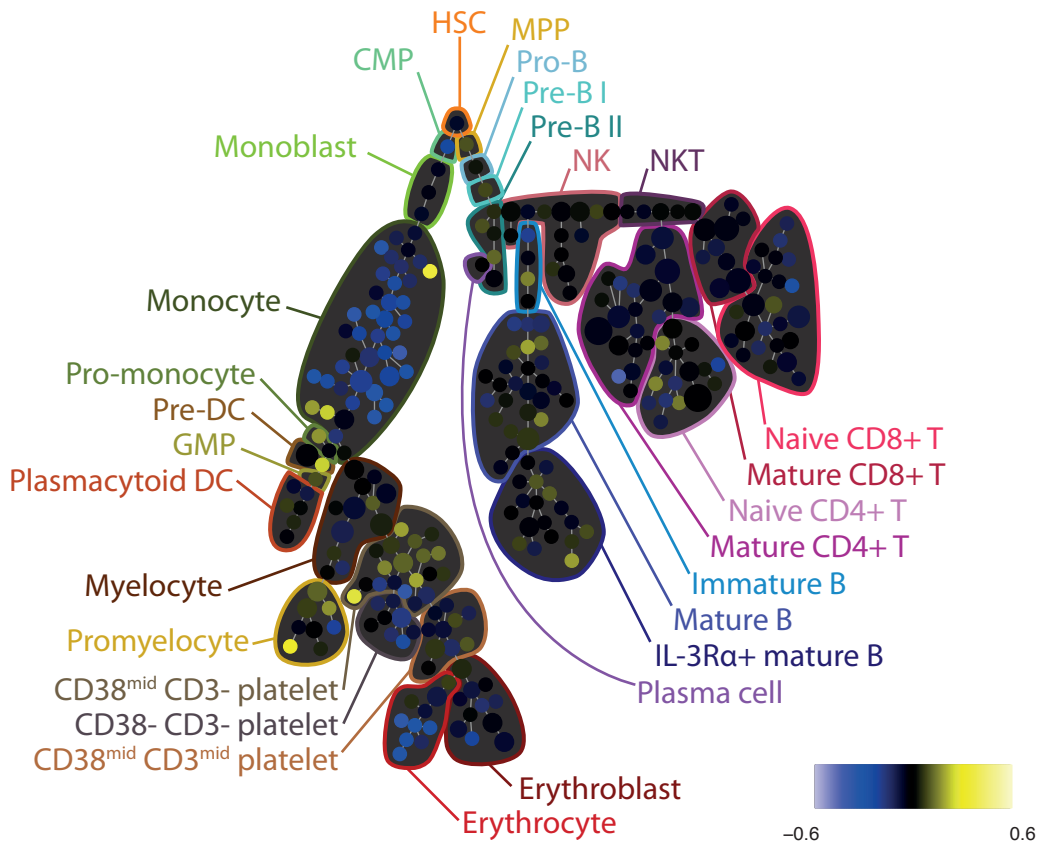


Figure S8A

165-pNFkB ---- GCSF vs Ref Ratio

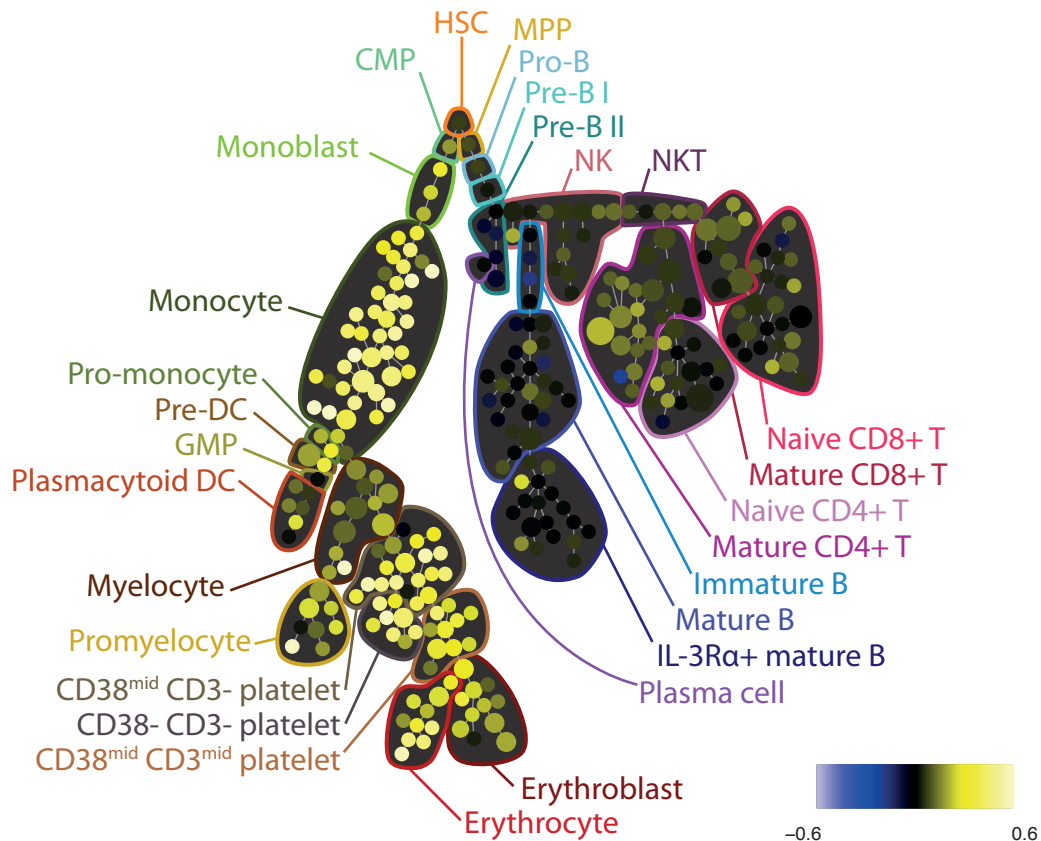


Figure S8A

165-pNFkB ---- GMCSF vs Ref Ratio

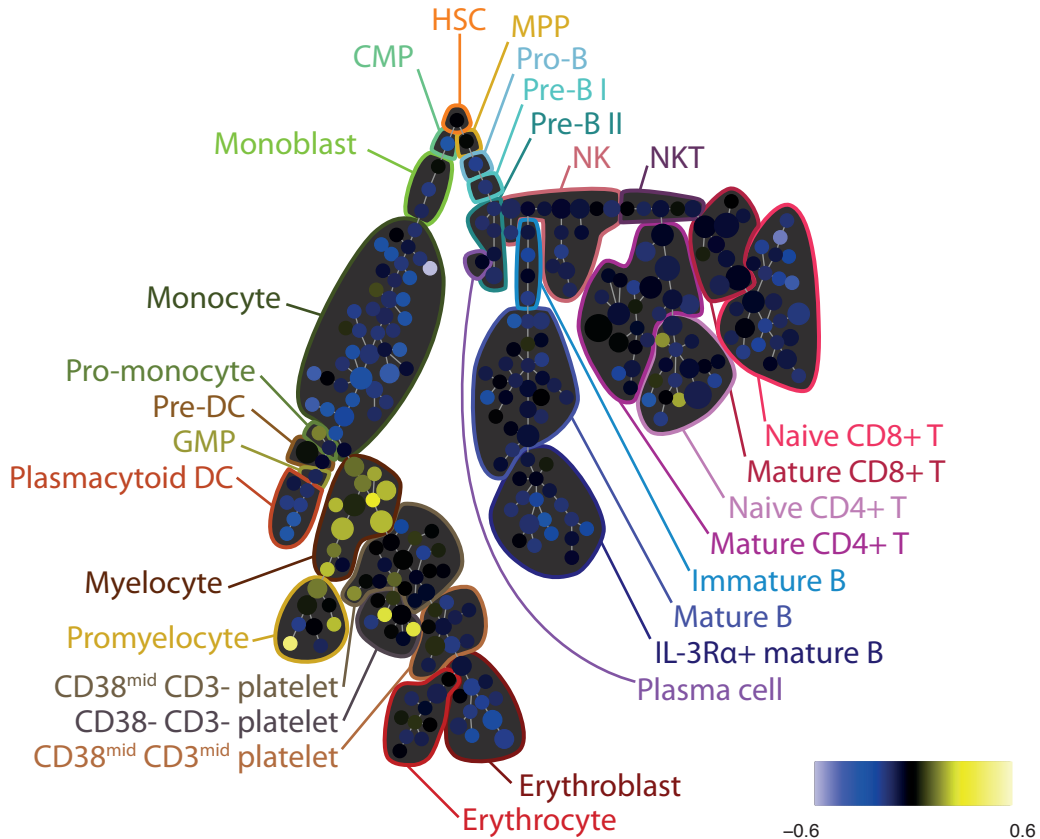


Figure S8A

165-pNFkB ---- IFNad vs Ref Ratio

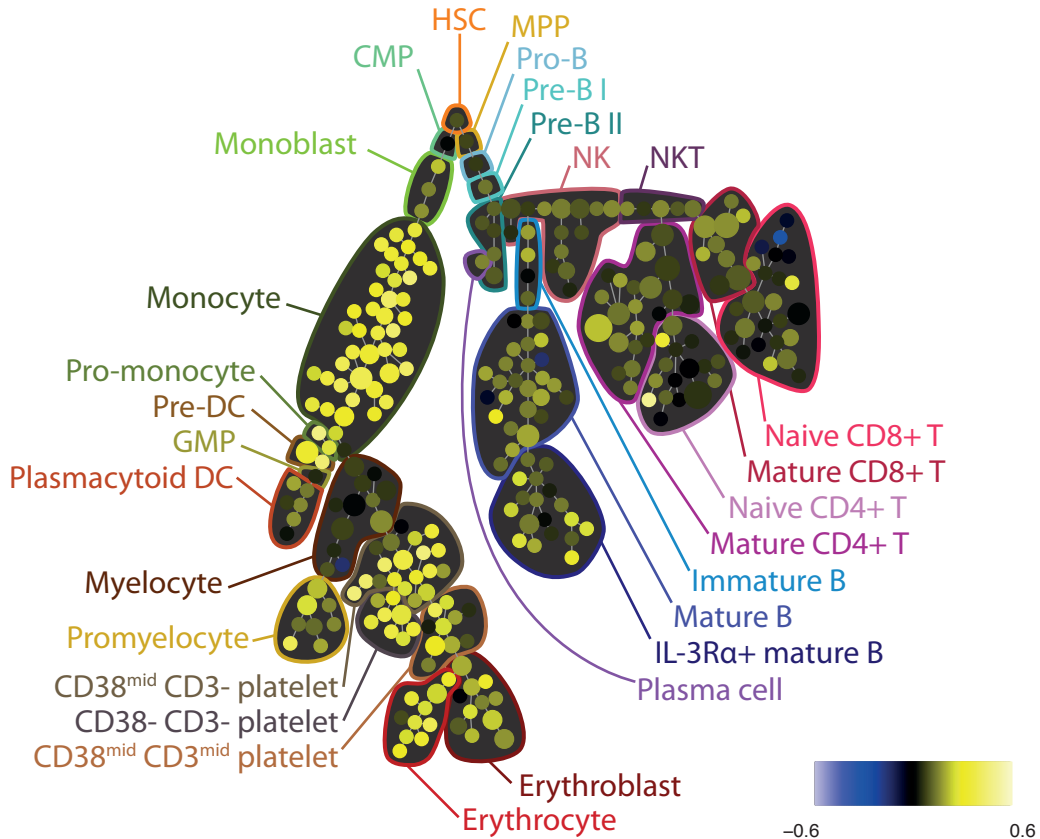


Figure S8A

165-pNFkB ---- IL3 vs Ref Ratio

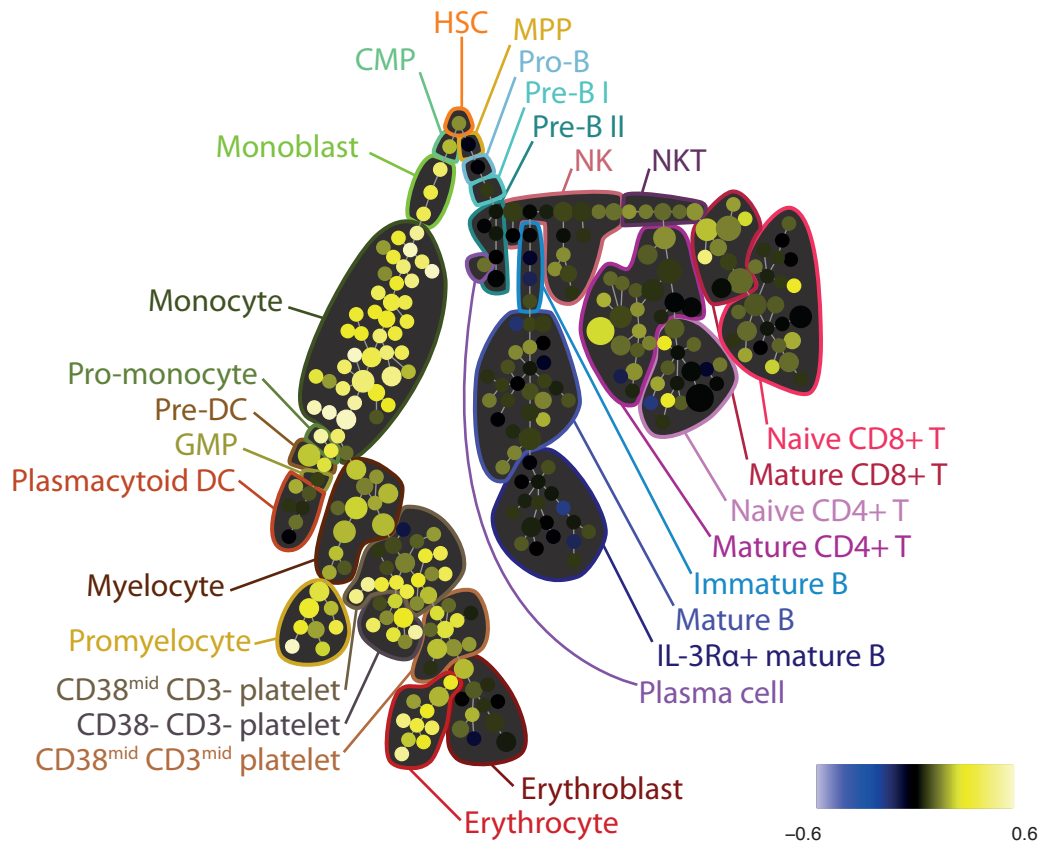


Figure S8A

165-pNFkB ---- IL7 vs Ref Ratio

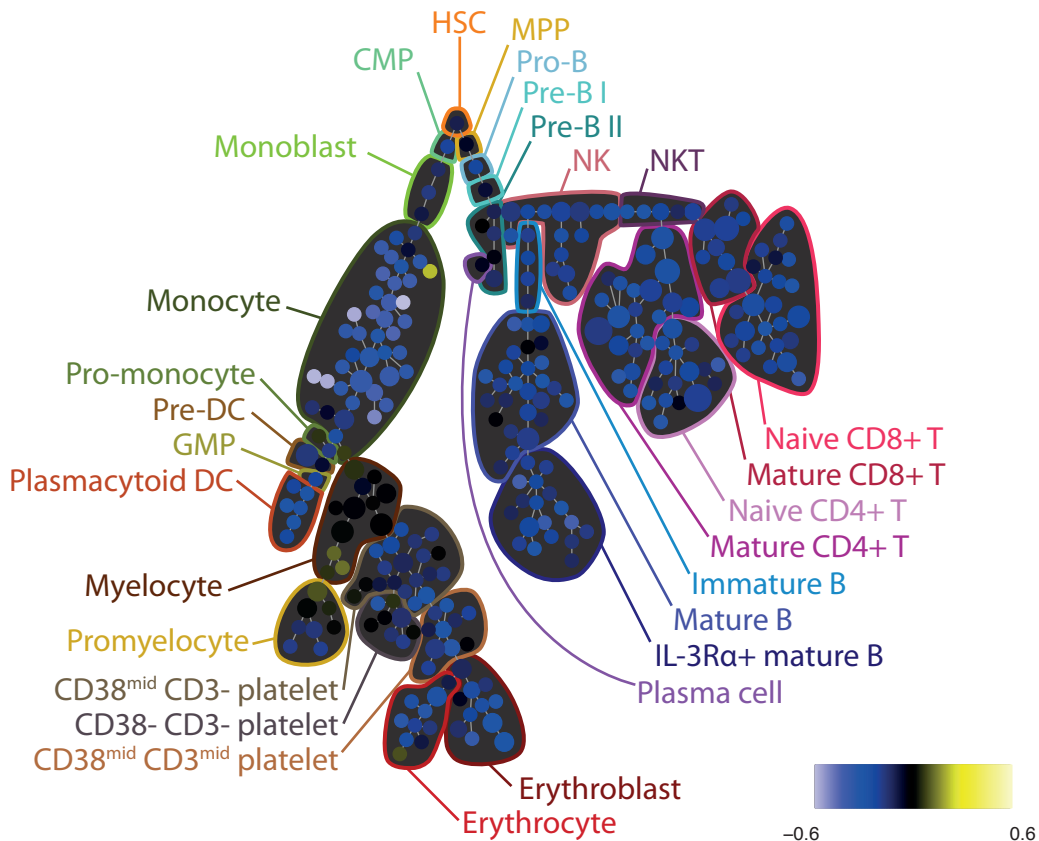


Figure S8A

165-pNFkB --- LPS vs Ref Ratio

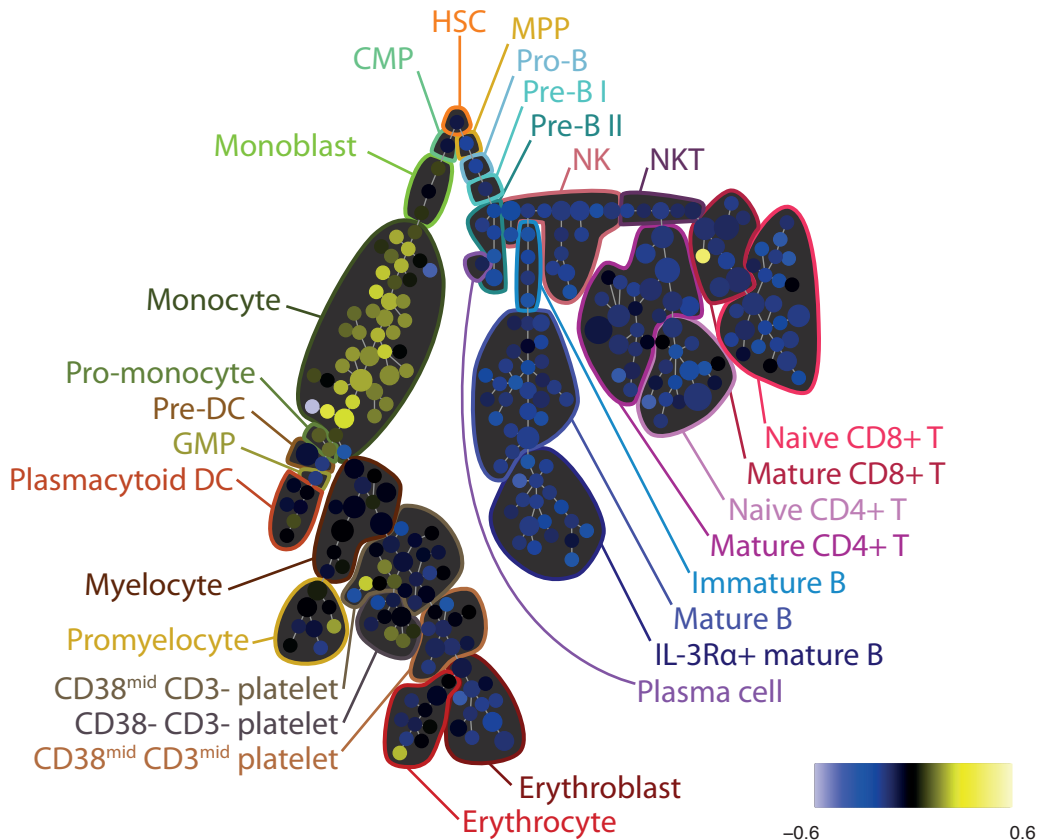


Figure S8A

165-pNFkB ---- PMAiono vs Ref Ratio

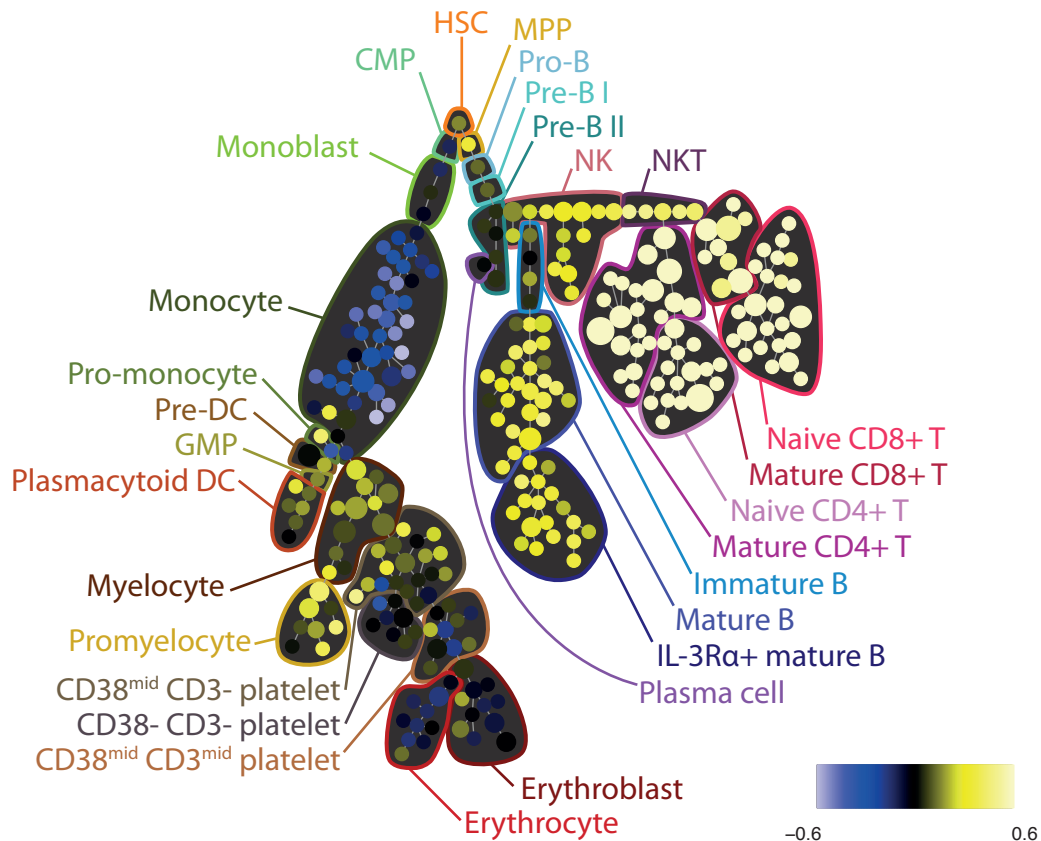


Figure S8A

165-pNFkB ---- PVO4 vs Ref Ratio

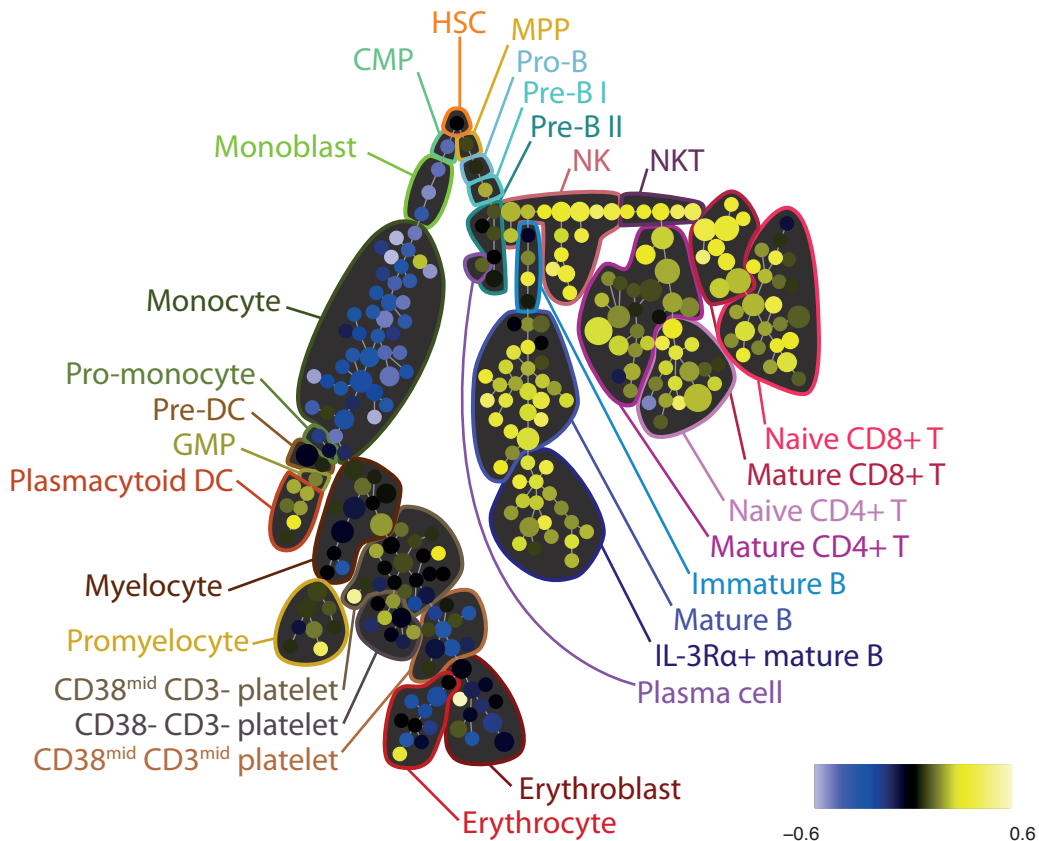


Figure S8A

165-pNFkB ---- SCF vs Ref Ratio

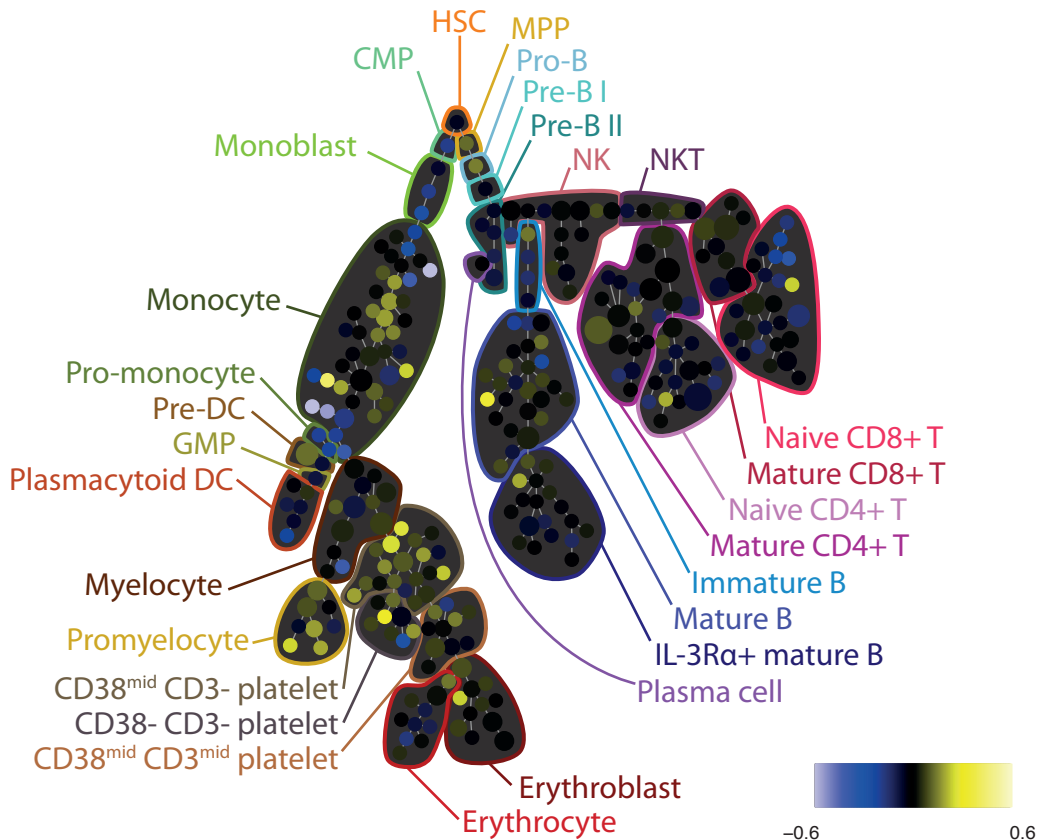


Figure S8A

165-pNFkB ---- TNFa vs Ref Ratio

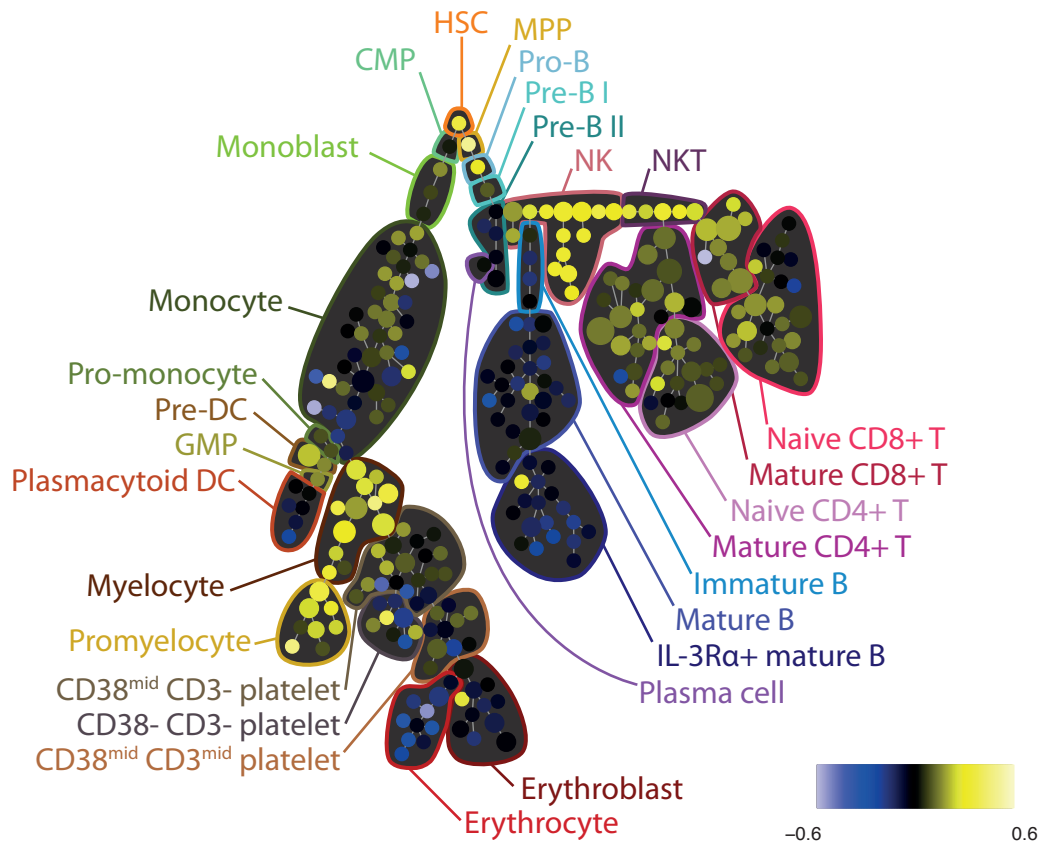


Figure S8A

165-pNFkB ---- TPO vs Ref Ratio

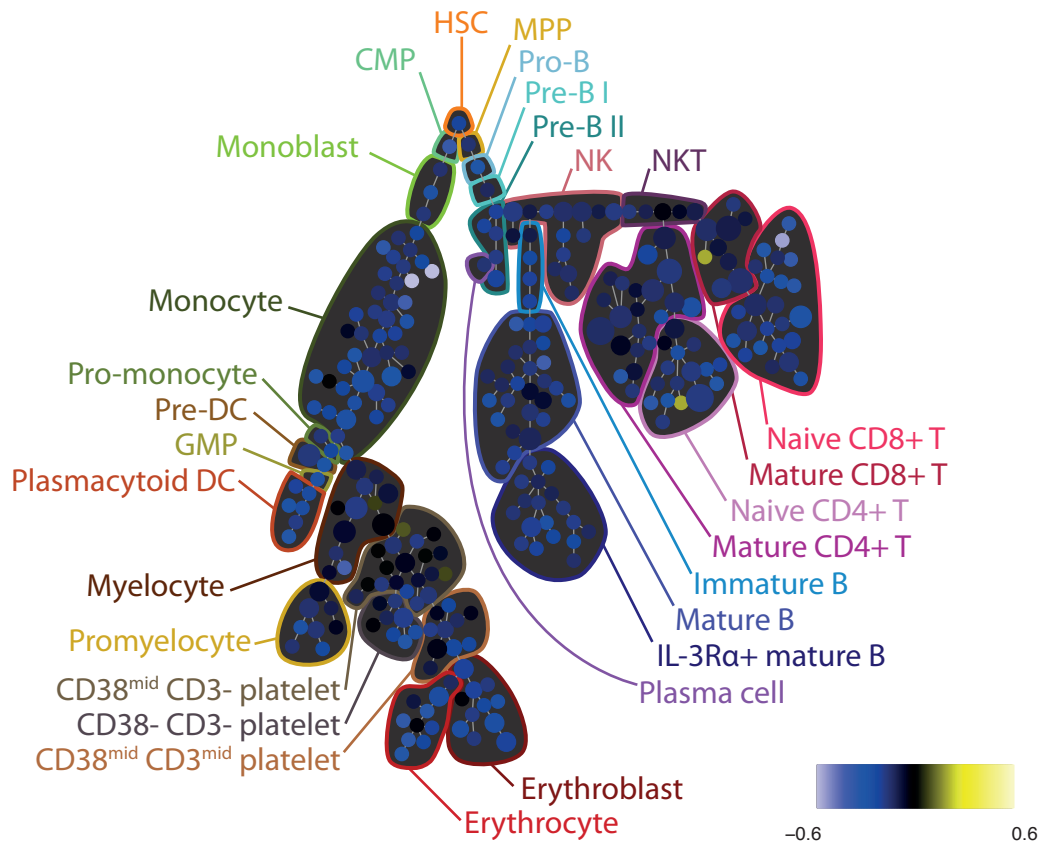


Figure S8A

166-IkBalpha ---- BCR vs Ref Ratio

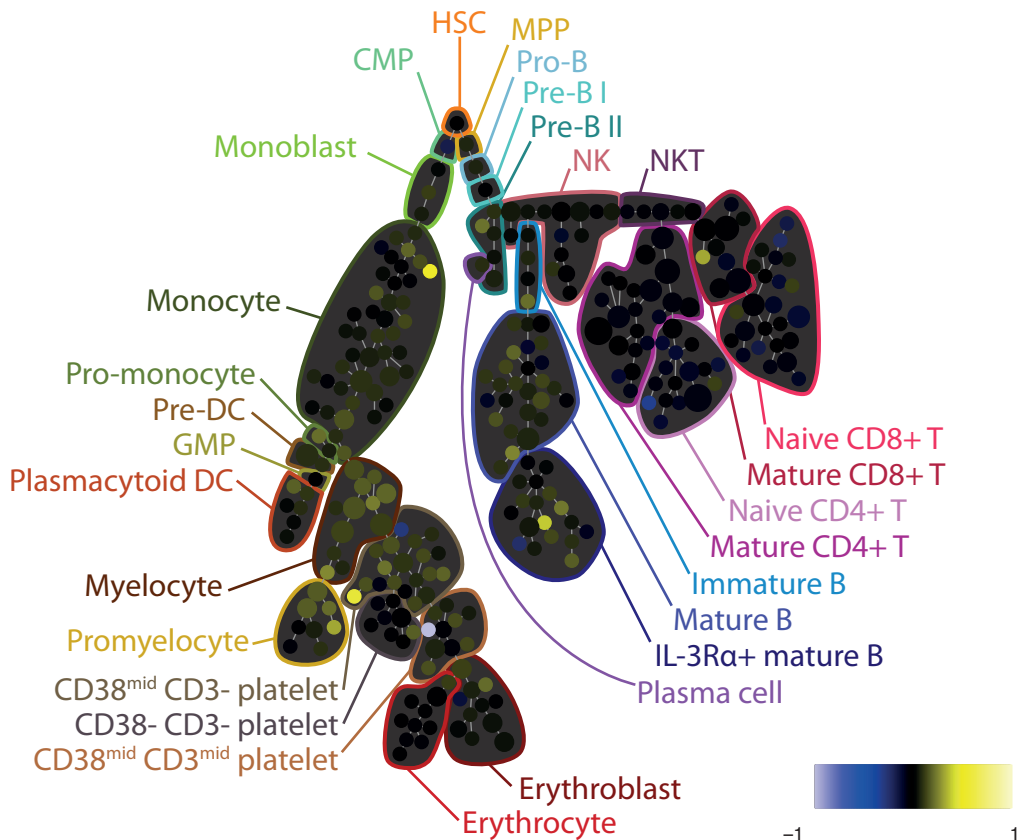


Figure S8A

166-IkBalpha ---- DMSO vs Ref Ratio

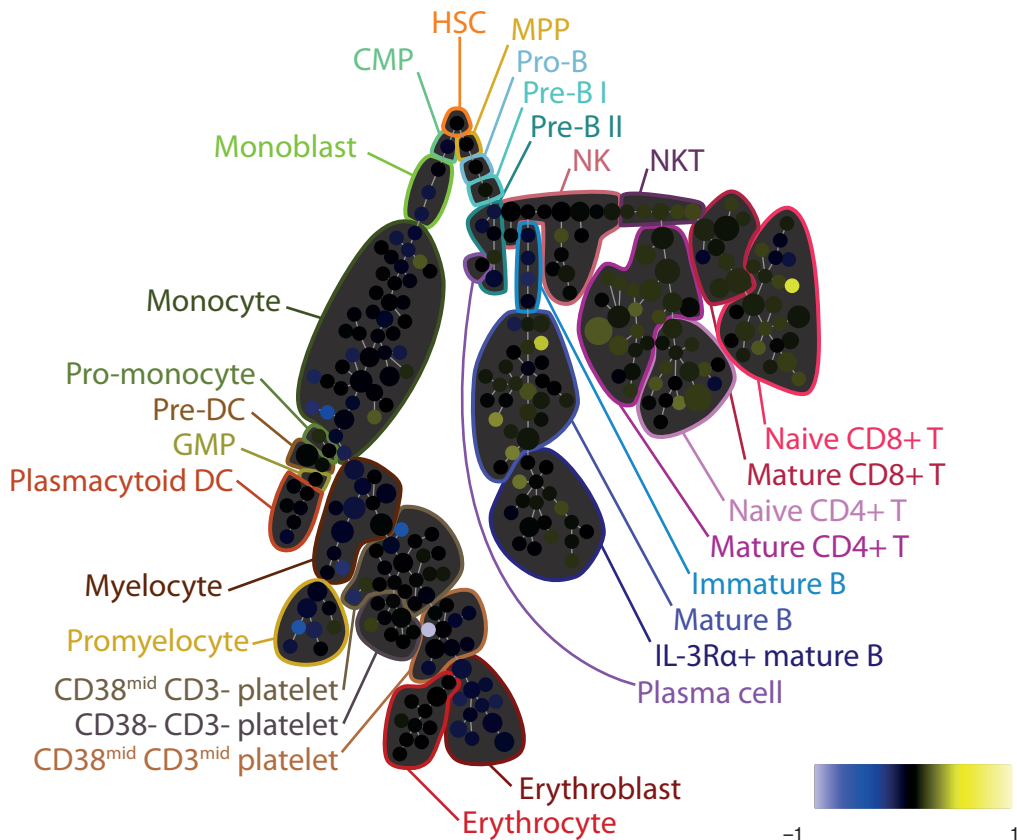


Figure S8A

166-IkBalpha ---- Flt3L vs Ref Ratio

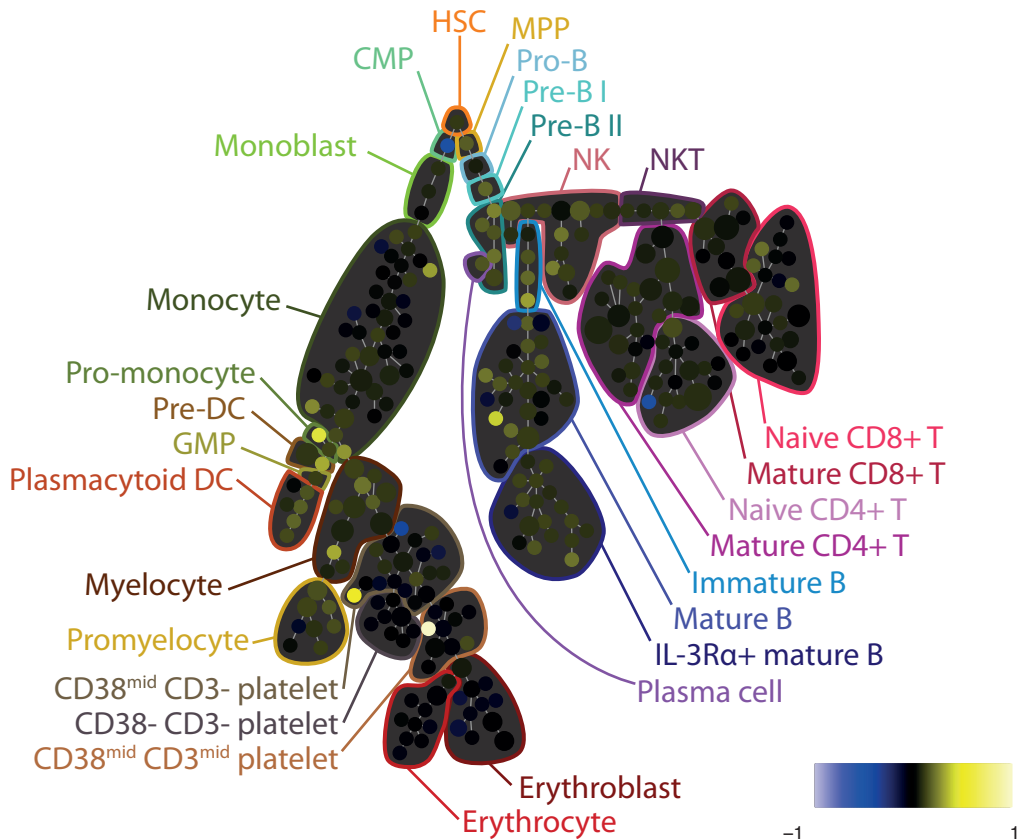


Figure S8A

166-IkBalpha ---- GCSF vs Ref Ratio

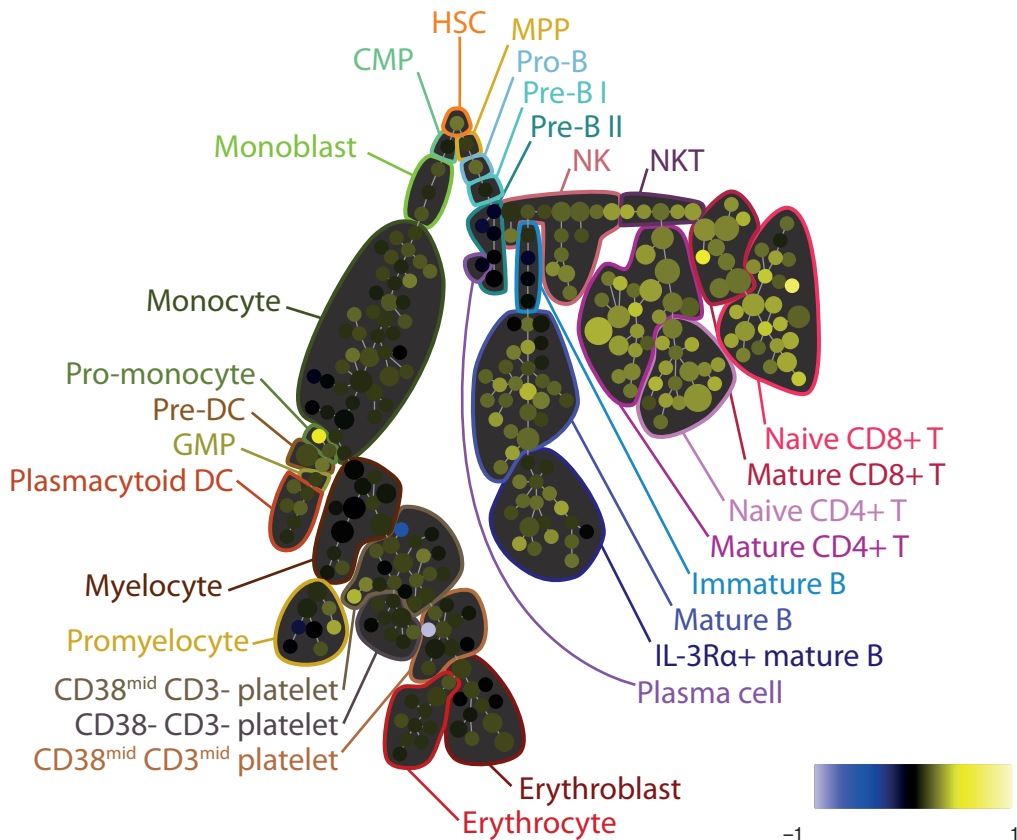


Figure S8A

166-IkBalpha ---- GMCSF vs Ref Ratio

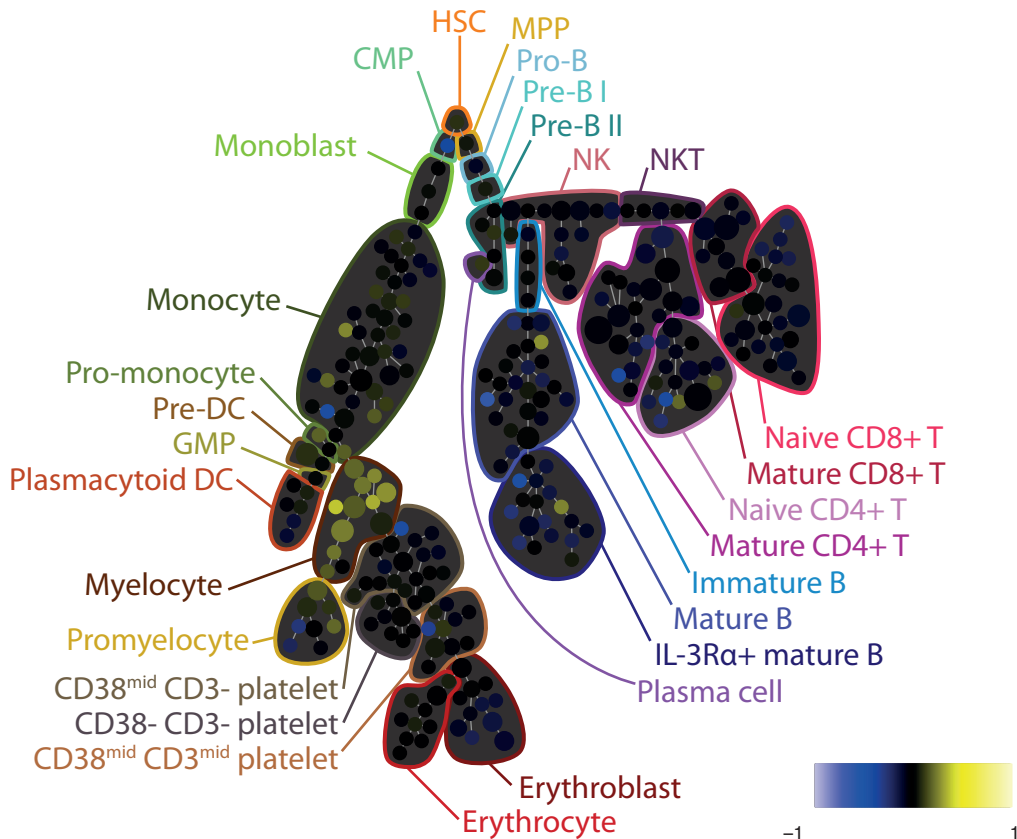


Figure S8A

166-IkBalpa ---- IFNad vs Ref Ratio

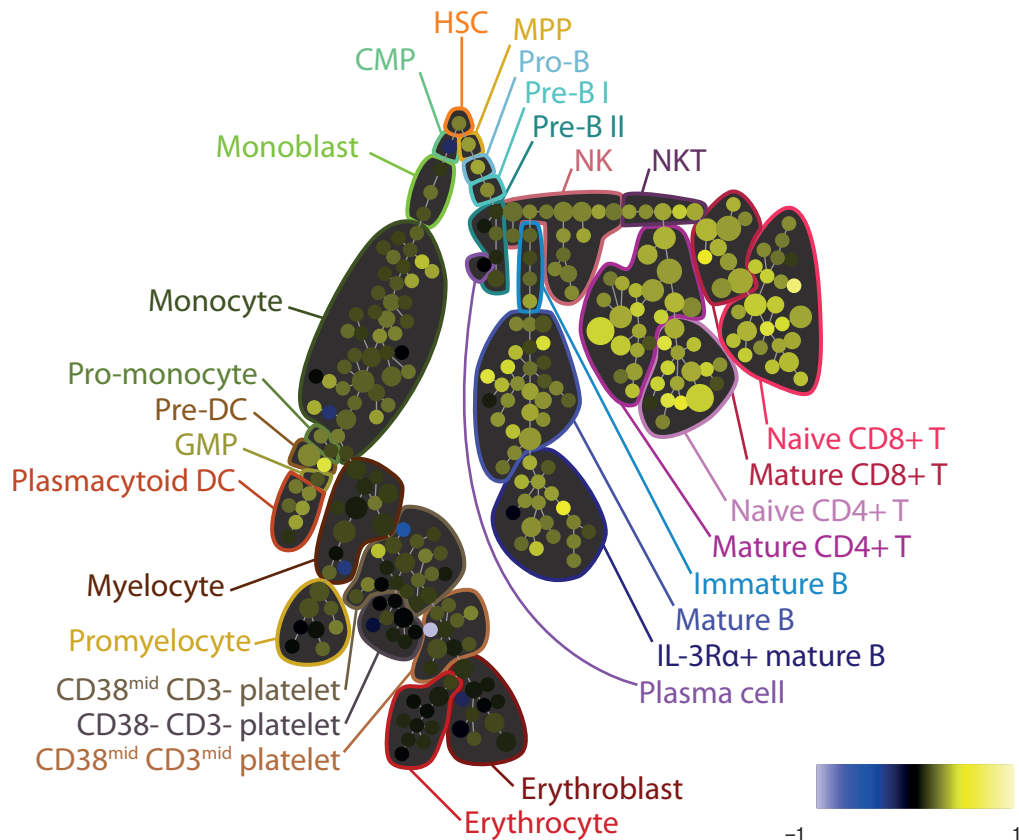


Figure S8A

166-IkBAlpha ---- IL3 vs Ref Ratio

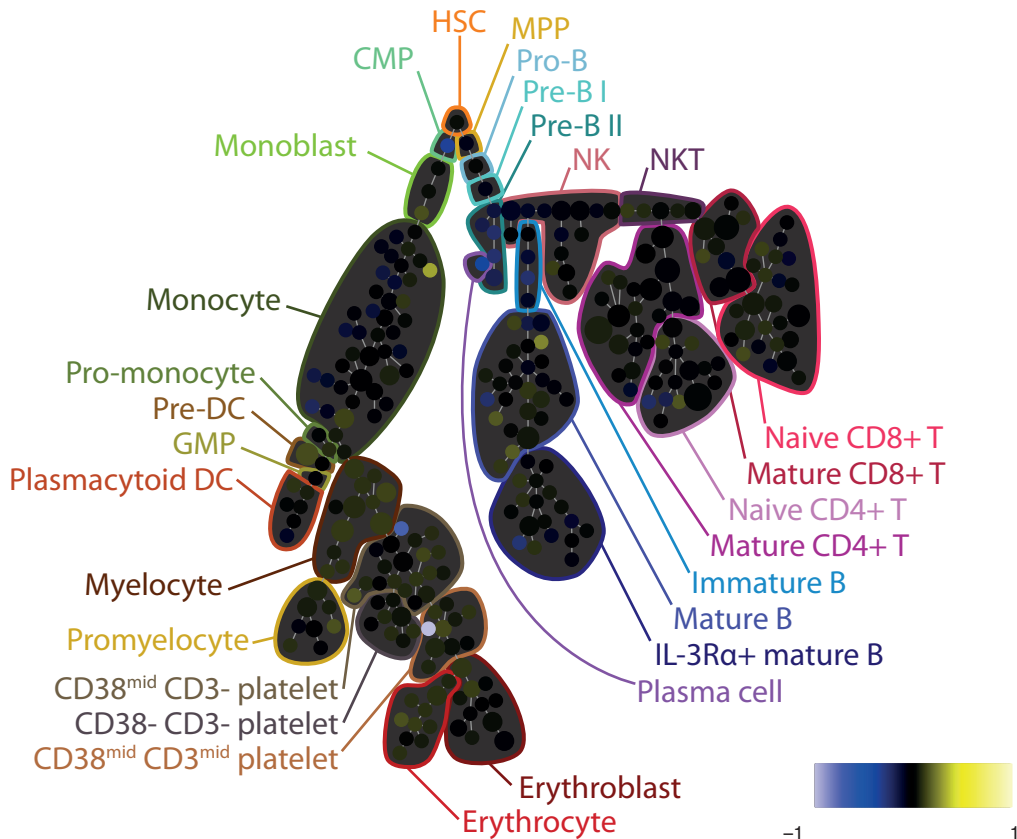


Figure S8A

166-IkBAlpha ---- IL7 vs Ref Ratio

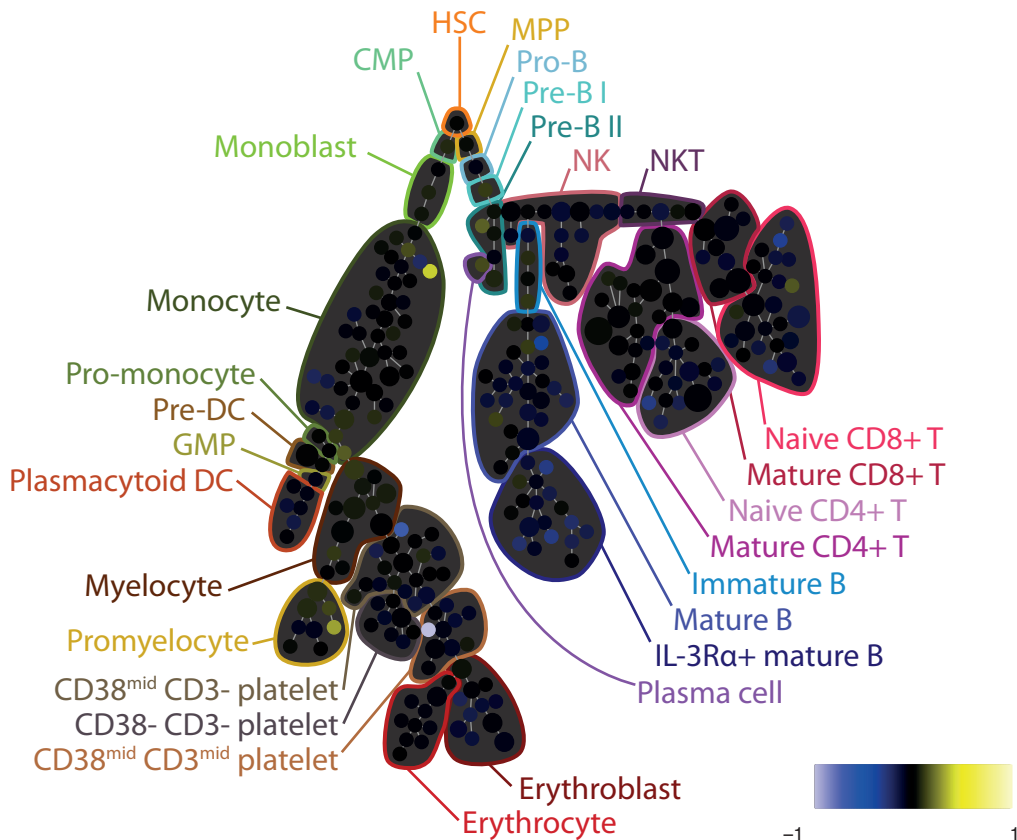


Figure S8A

166-IkBalpha ---- LPS vs Ref Ratio

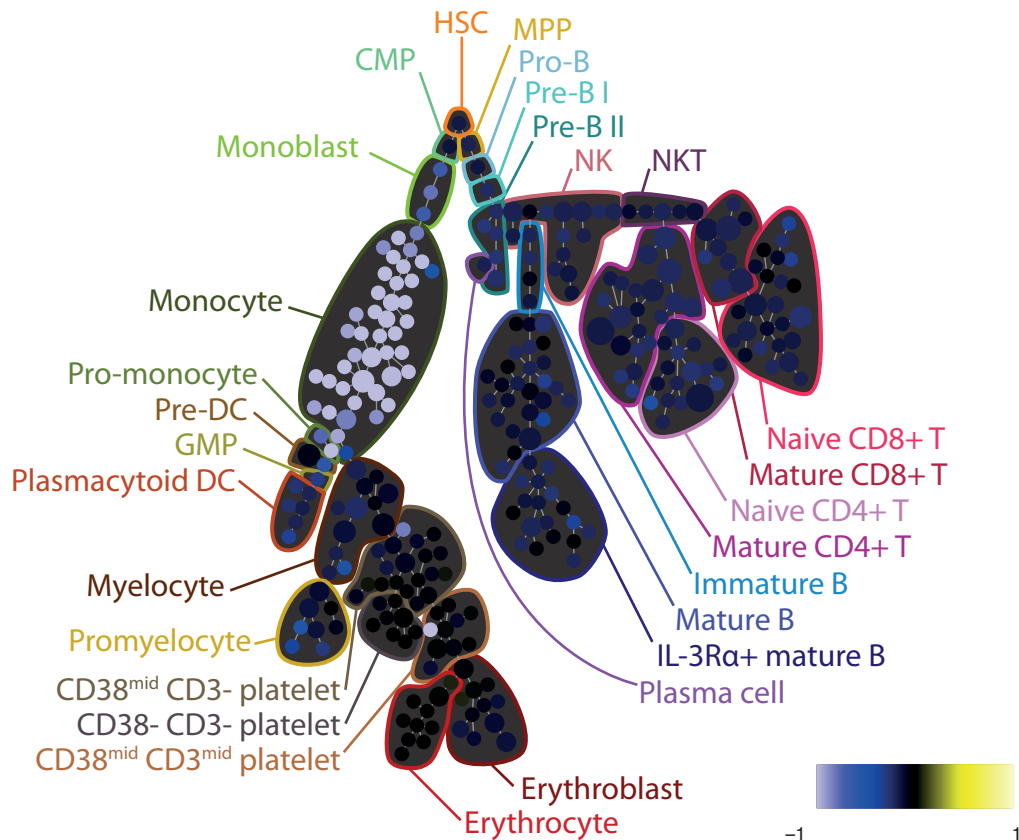


Figure S8A

166-IkBalpha ---- PMAiono vs Ref Ratio

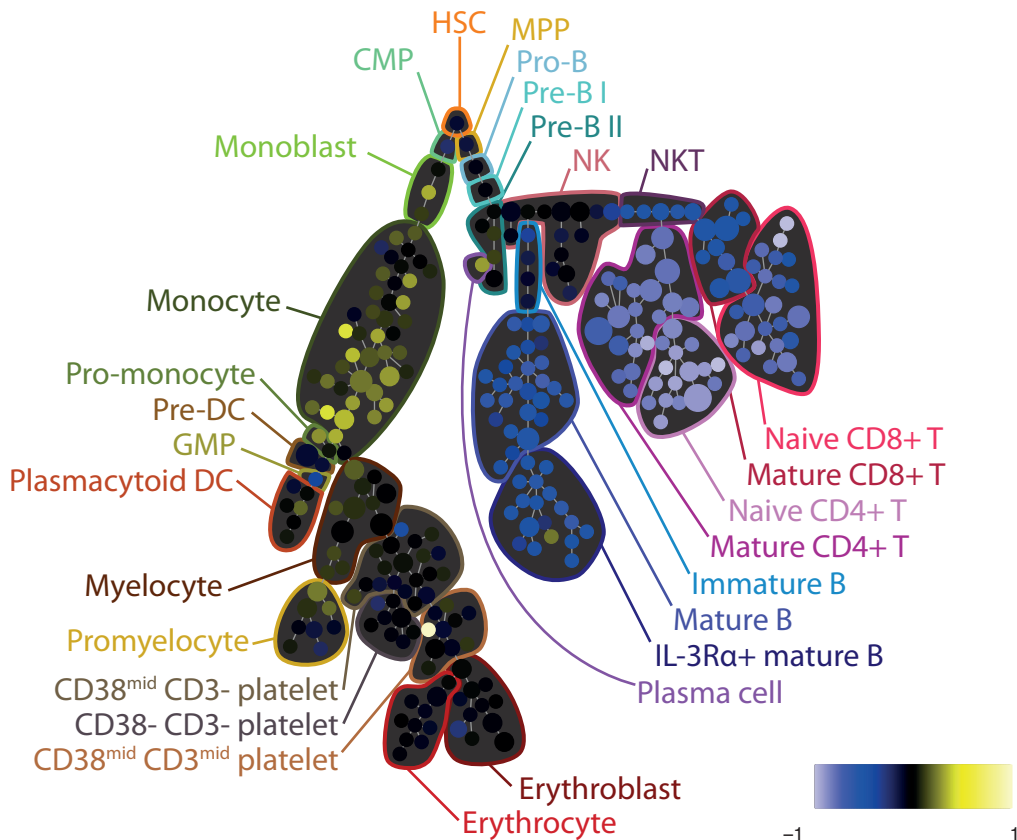


Figure S8A

166-IkBalpa ---- PVO4 vs Ref Ratio

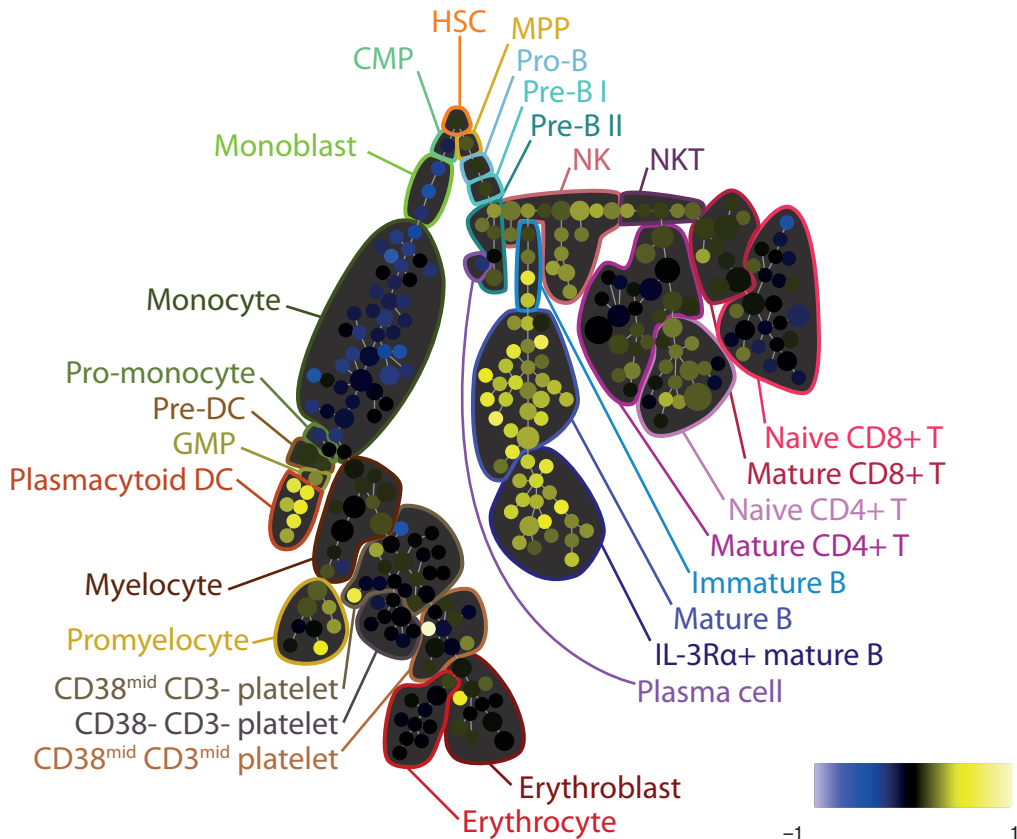


Figure S8A

166-IkBalpha ---- SCF vs Ref Ratio

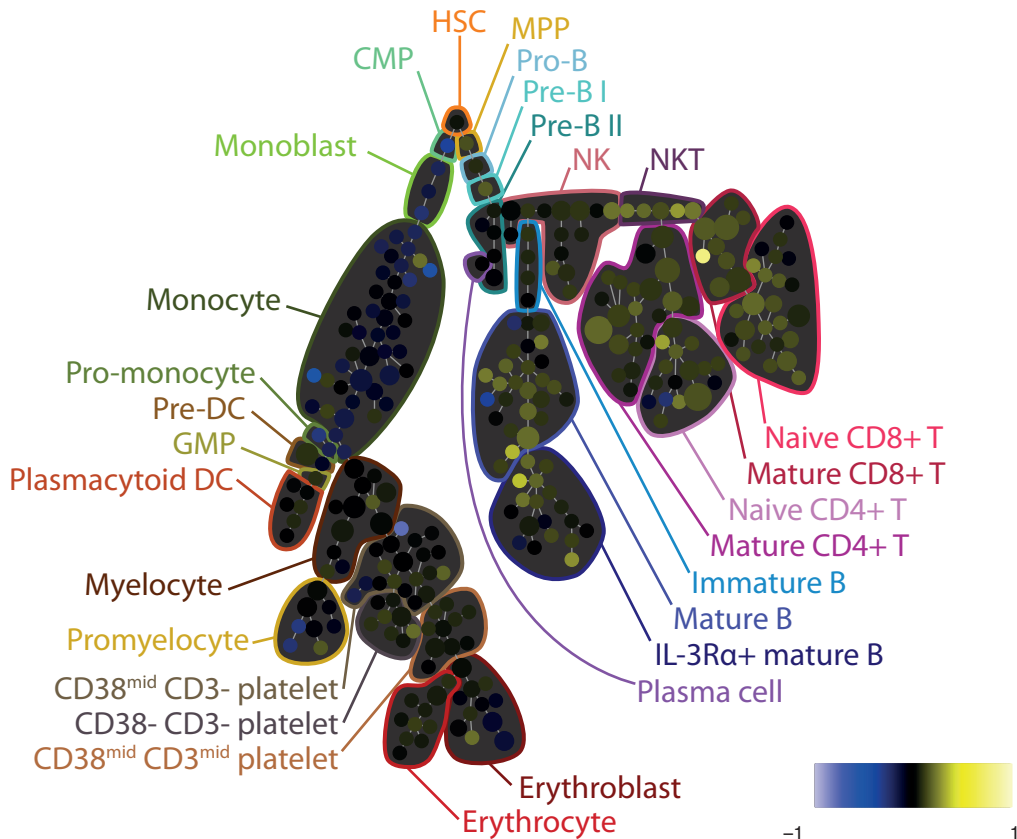


Figure S8A

166-IkBalpa ---- TNFa vs Ref Ratio

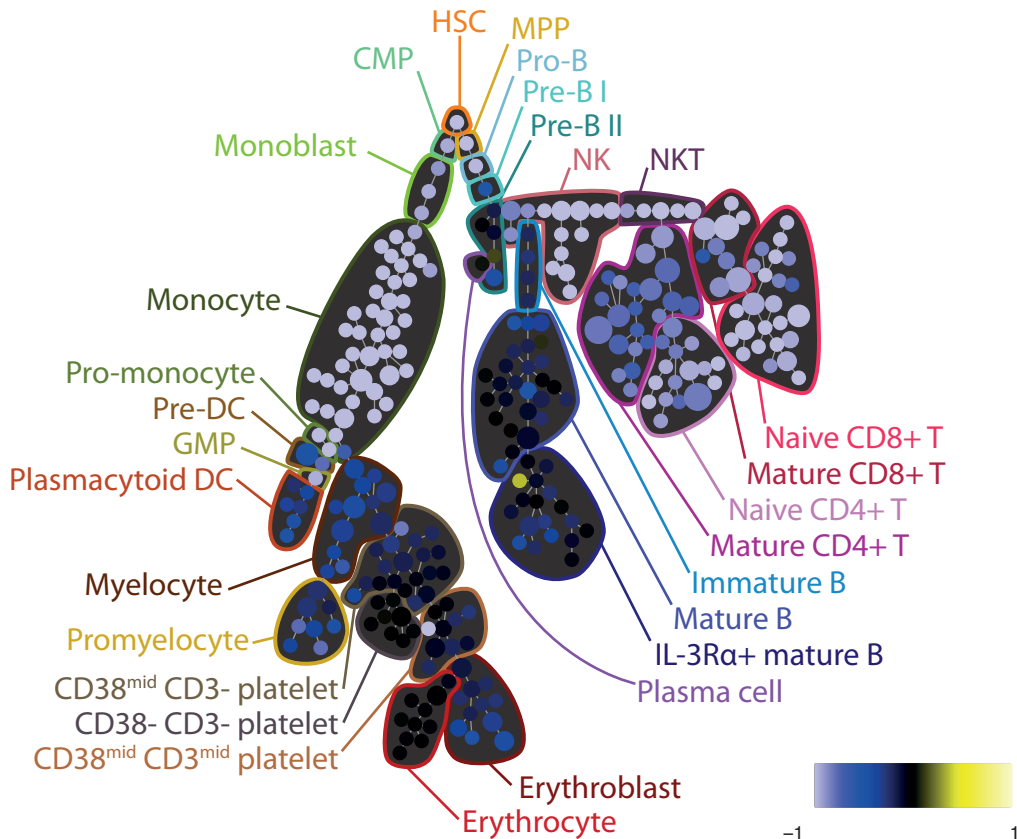


Figure S8A

166-IkBalpha ---- TPO vs Ref Ratio

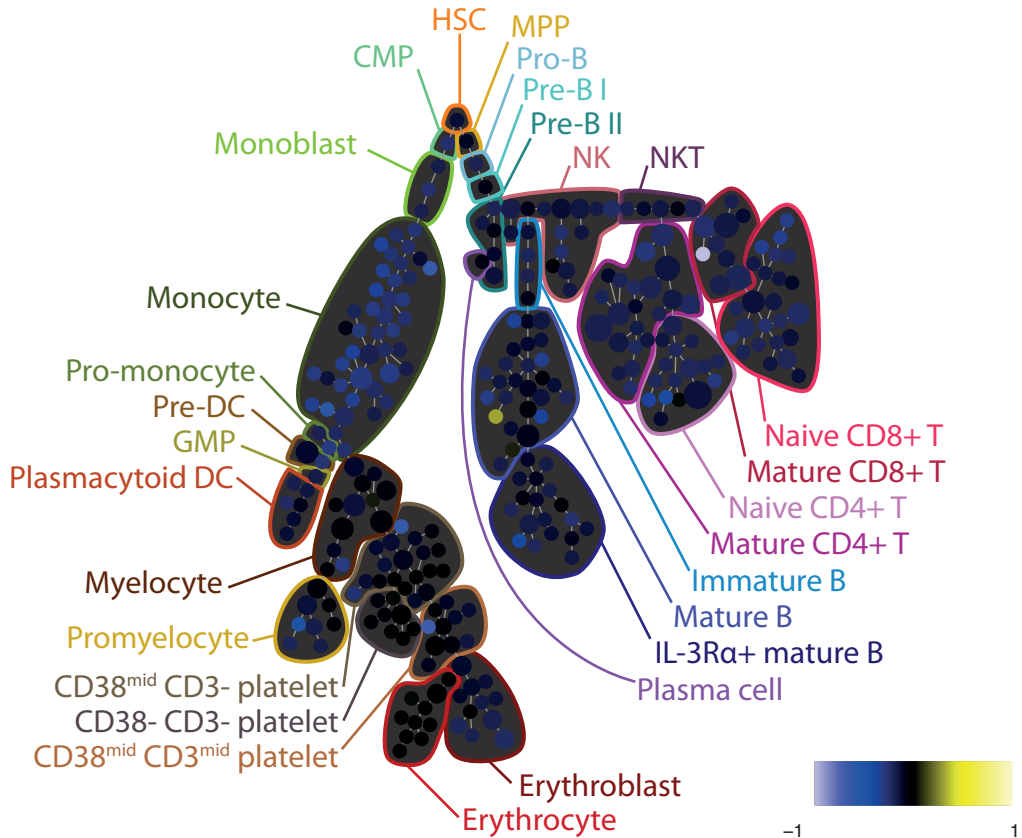


Figure S8A

168-pH3 ---- BCR vs Ref Ratio

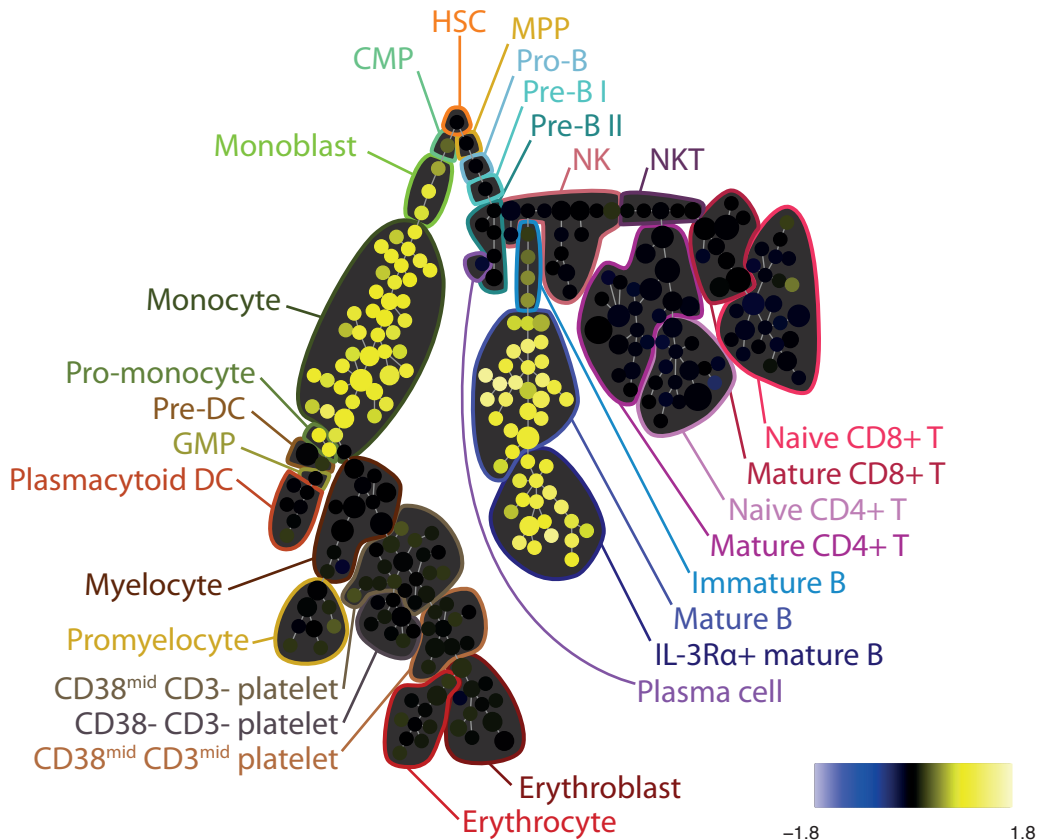


Figure S8A

168-pH3 --- DMSO vs Ref Ratio

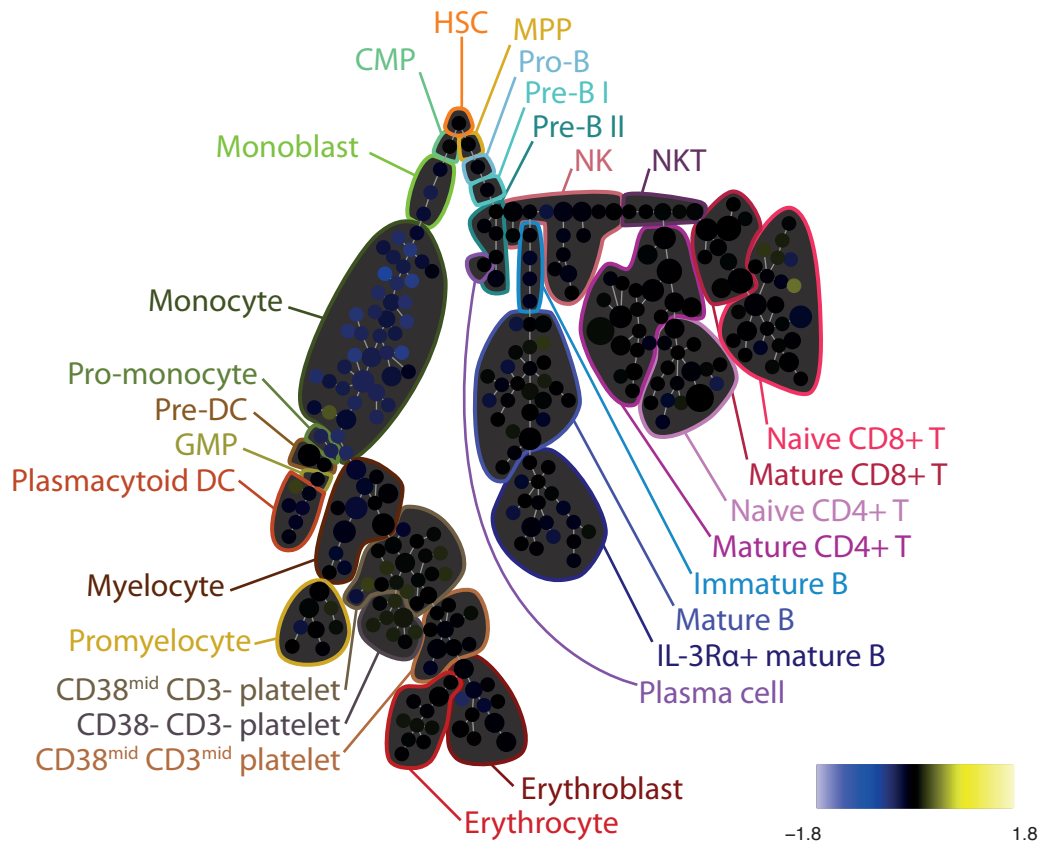


Figure S8A

168-pH3 ---- Flt3L vs Ref Ratio

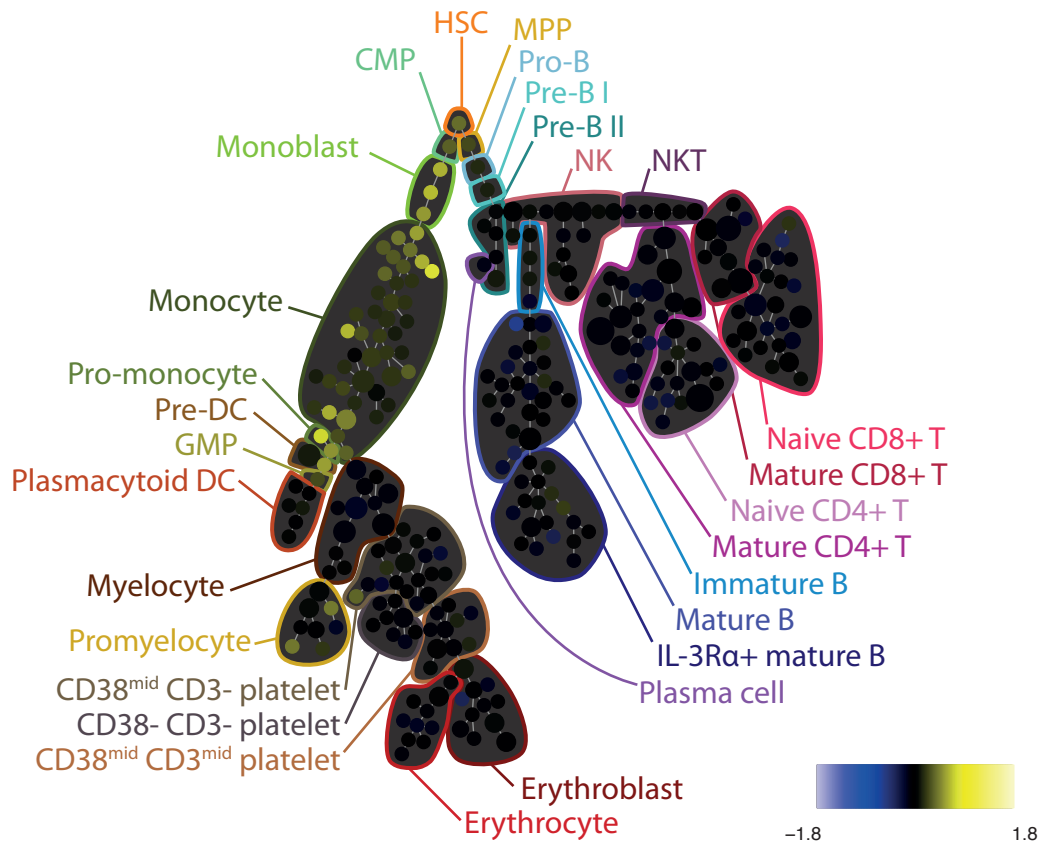


Figure S8A

168-pH3 ---- GCSF vs Ref Ratio

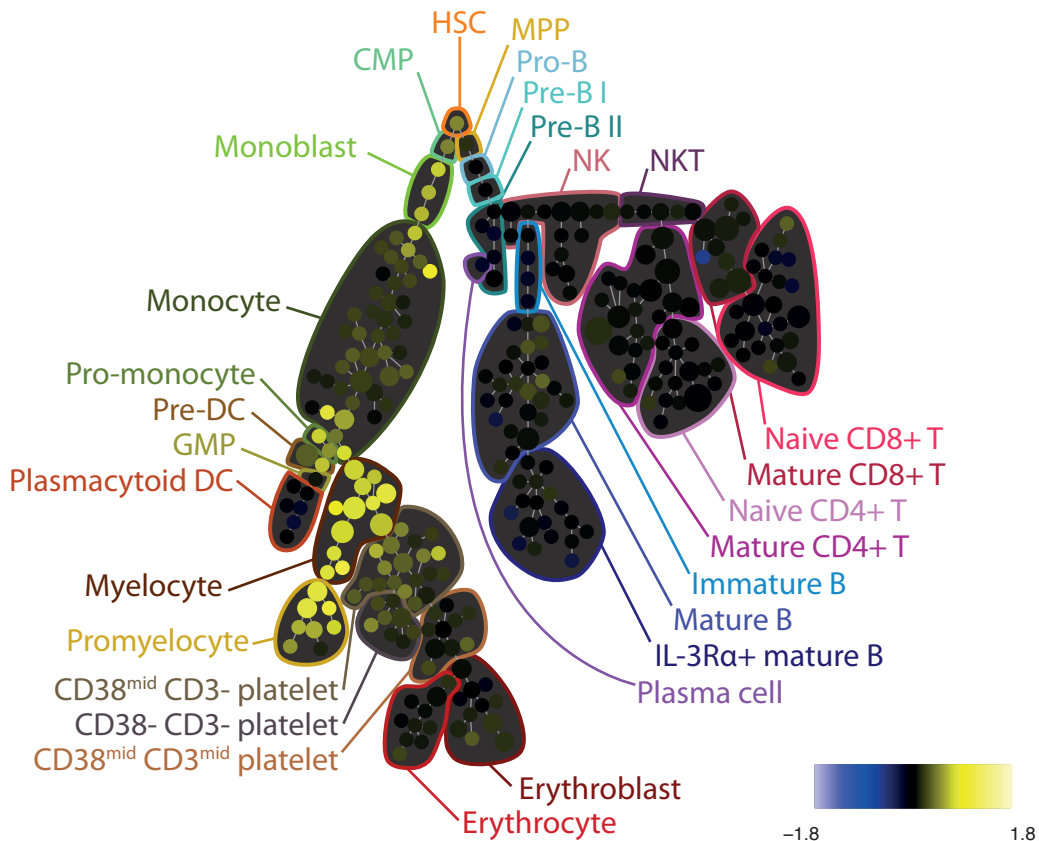


Figure S8A

168-pH3 ---- GMCSF vs Ref Ratio

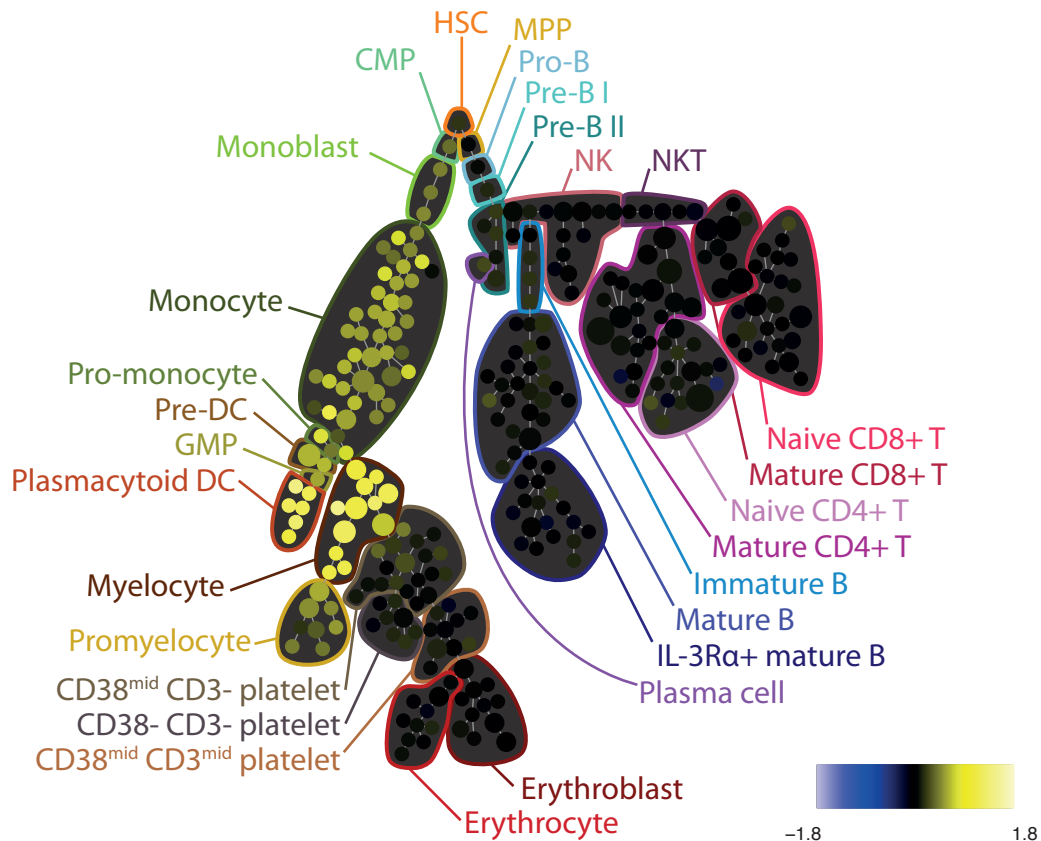


Figure S8A

168-pH3 ---- IFNad vs Ref Ratio

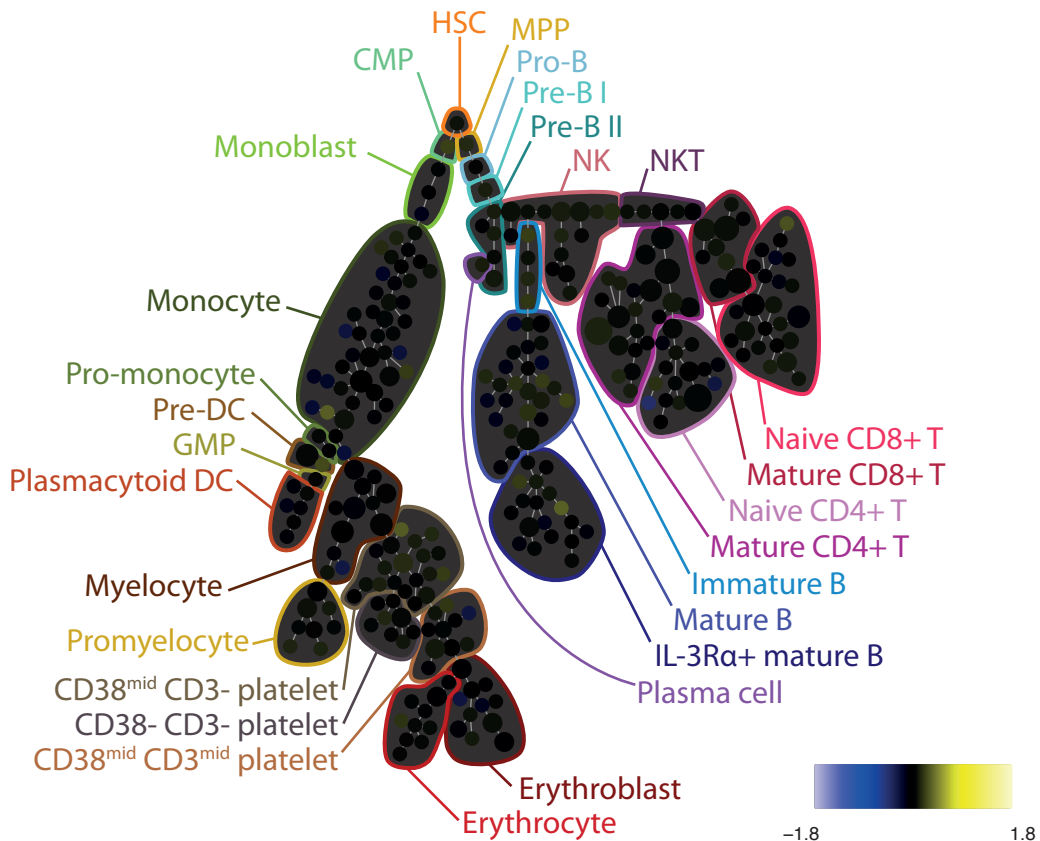


Figure S8A

168-pH3 ---- IL3 vs Ref Ratio

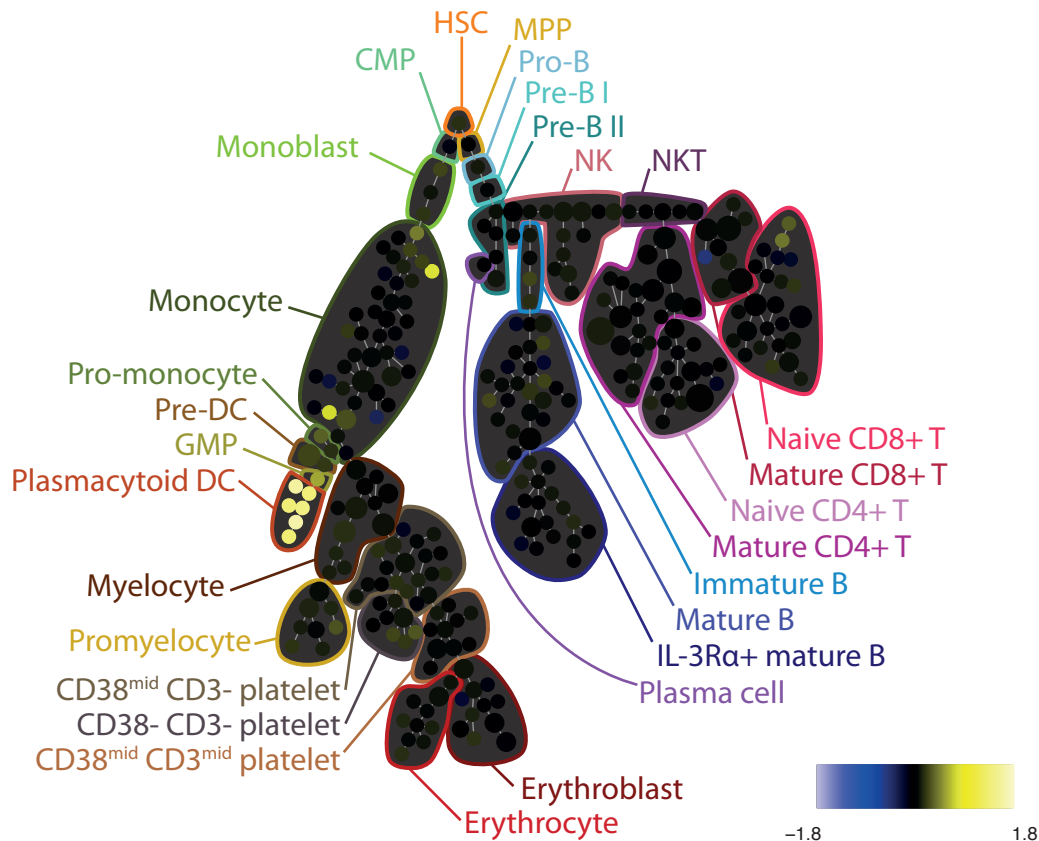


Figure S8A

168-pH3 ---- IL7 vs Ref Ratio

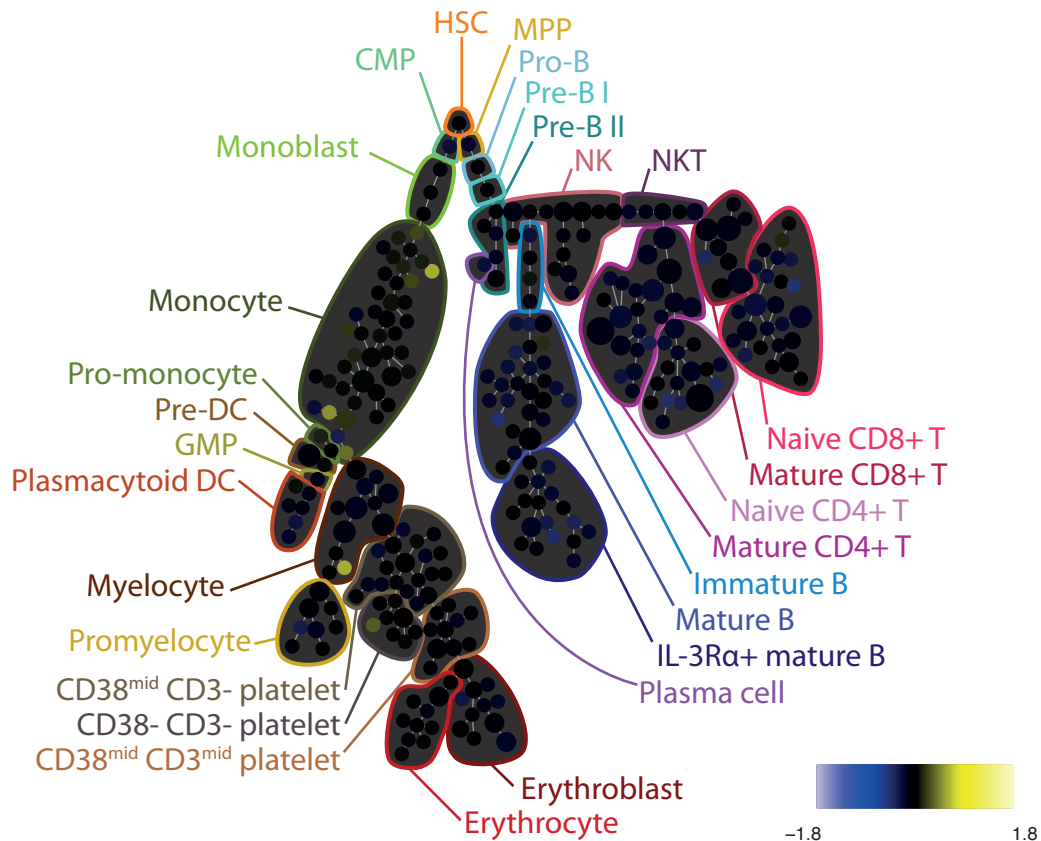


Figure S8A

168-pH3 --- LPS vs Ref Ratio

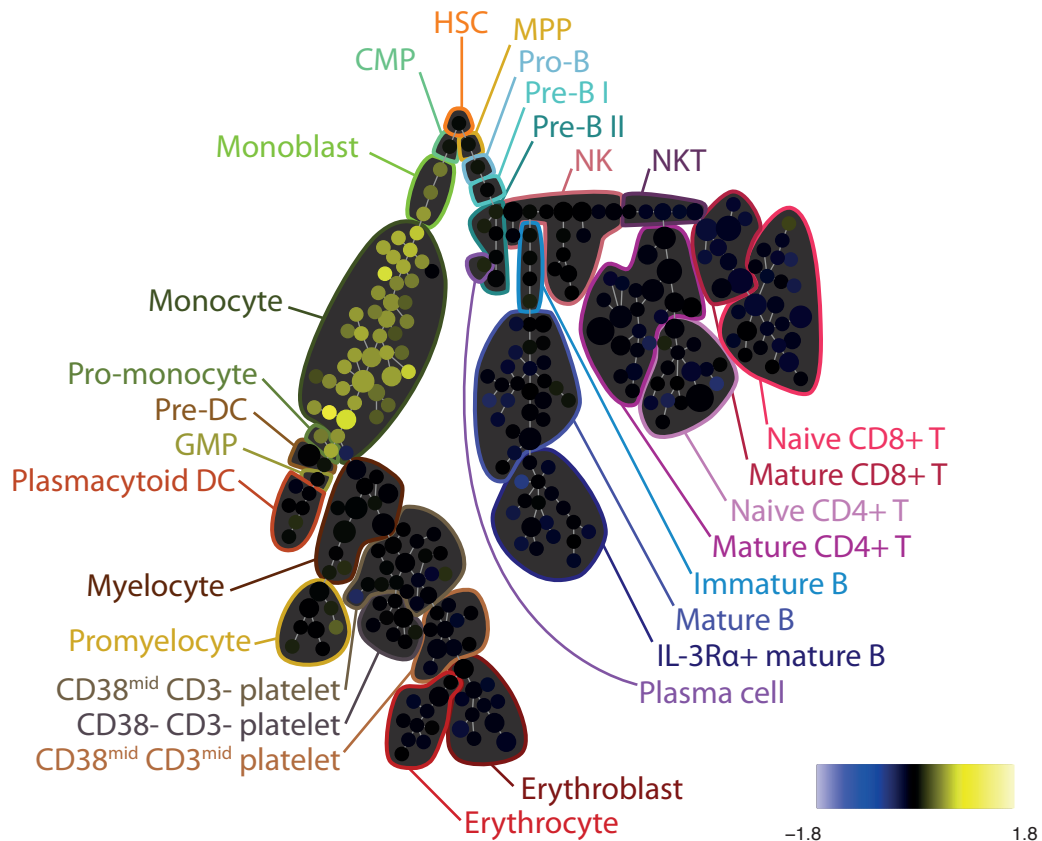


Figure S8A

168-pH3 ---- PMAiono vs Ref Ratio

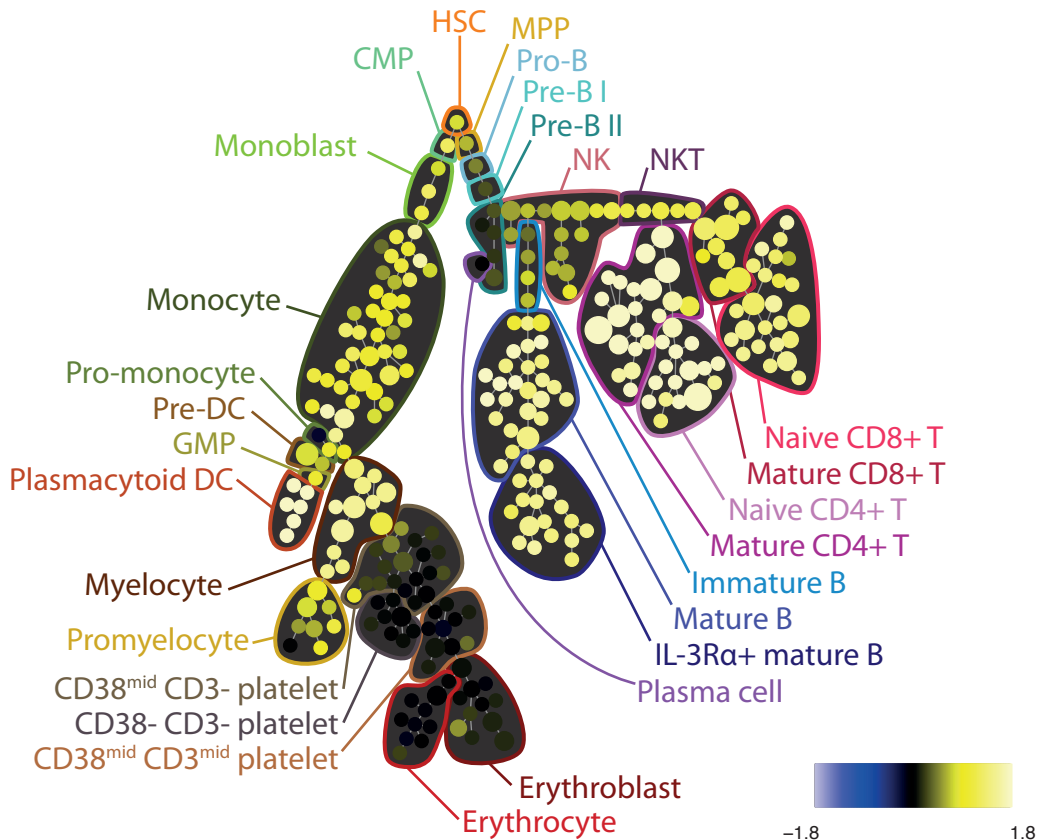


Figure S8A

168-pH3 ---- PVO4 vs Ref Ratio

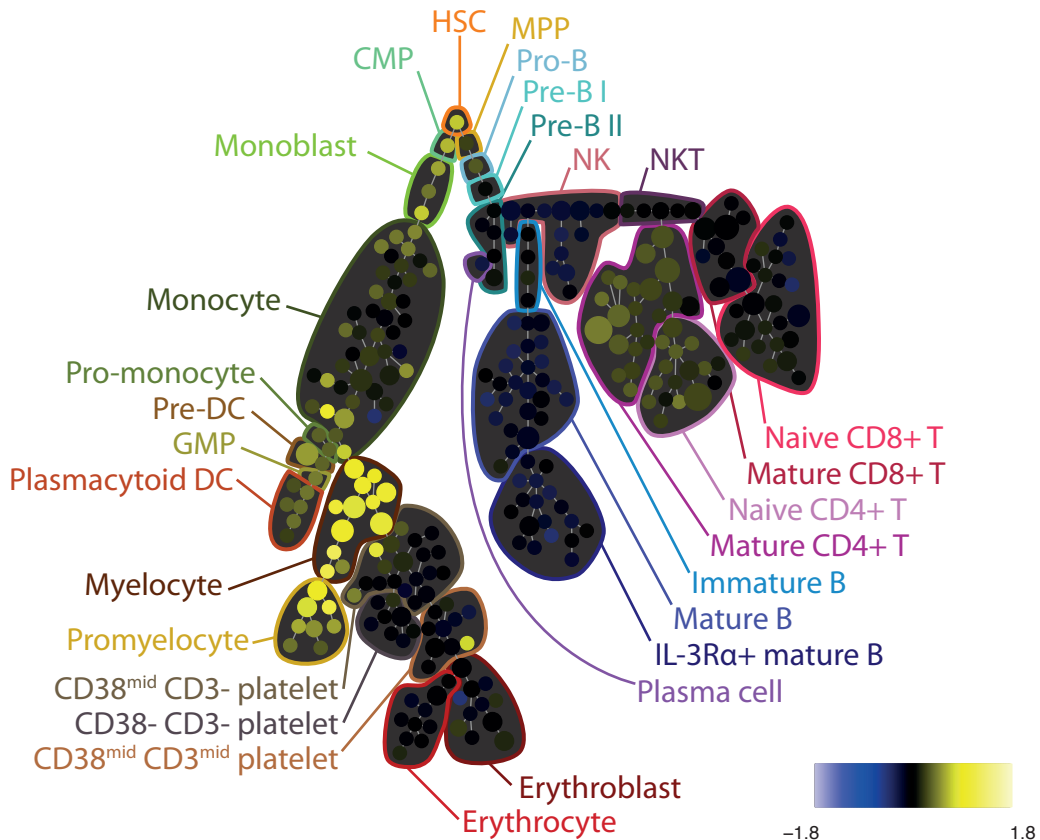


Figure S8A

168-pH3 ---- SCF vs Ref Ratio

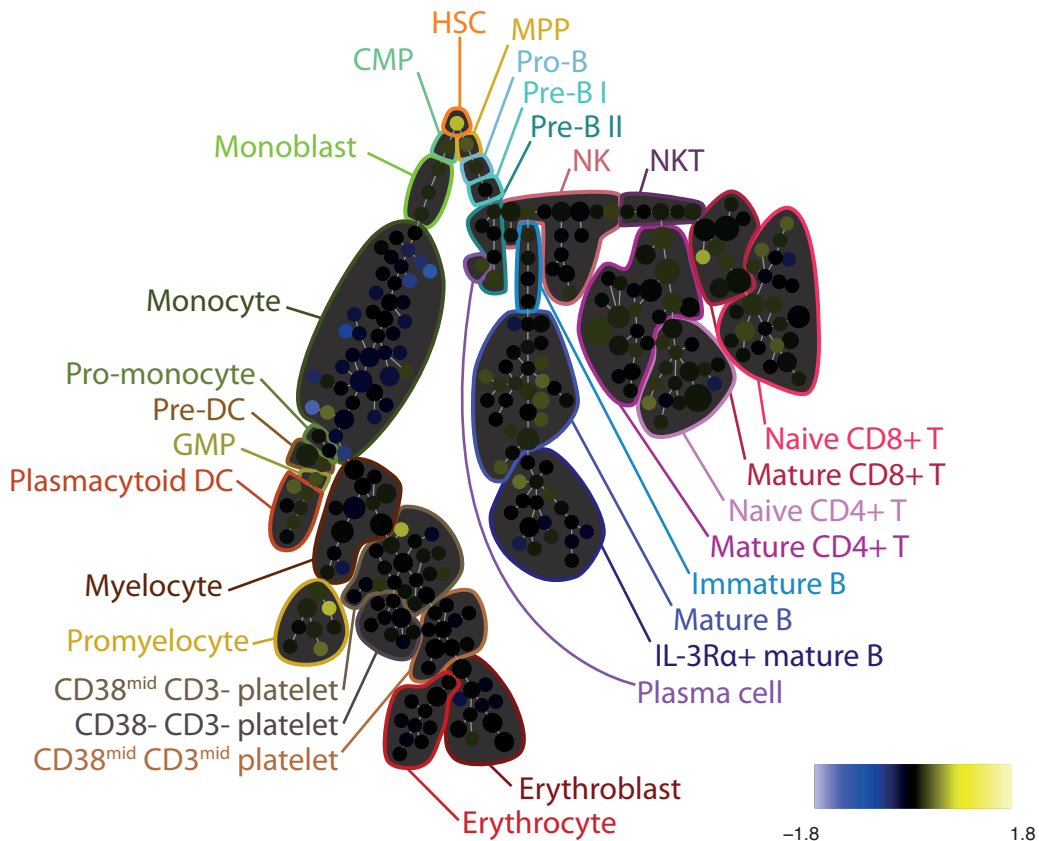


Figure S8A

168-pH3 ---- TNFa vs Ref Ratio

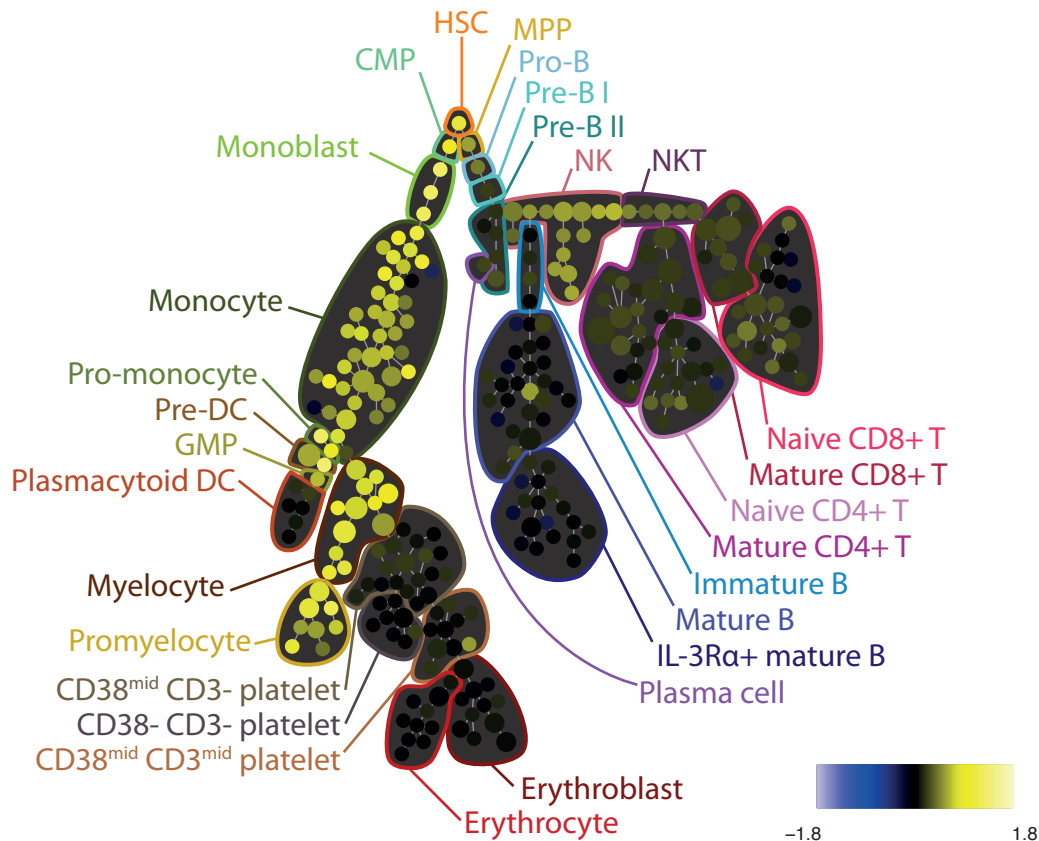


Figure S8A

168-pH3 ---- TPO vs Ref Ratio

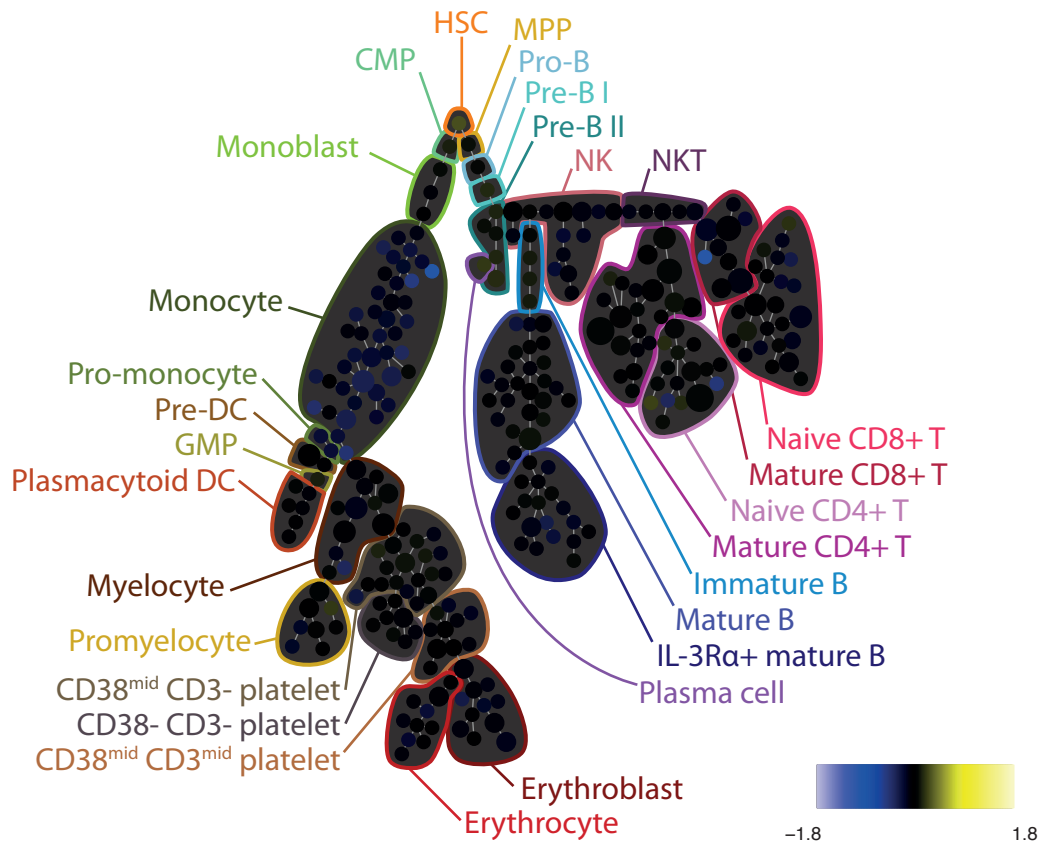


Figure S8A

169-pP38 ---- BCR vs Ref Ratio

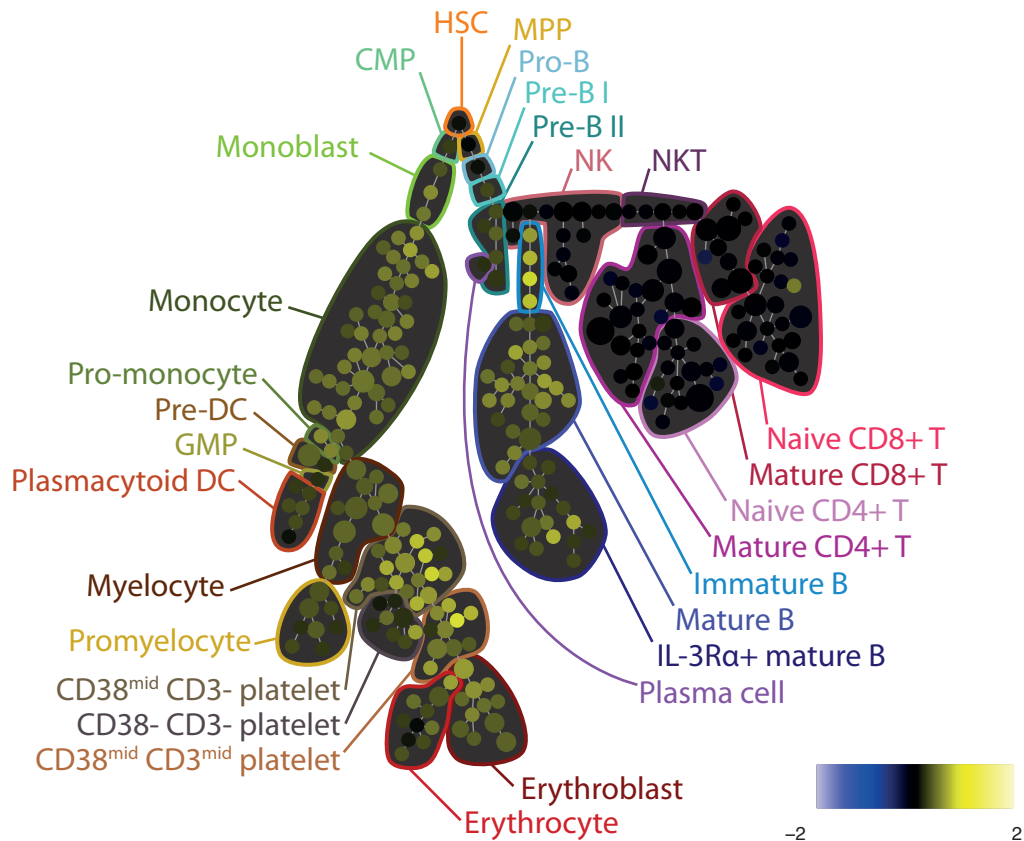


Figure S8A

169-pP38 ---- DMSO vs Ref Ratio

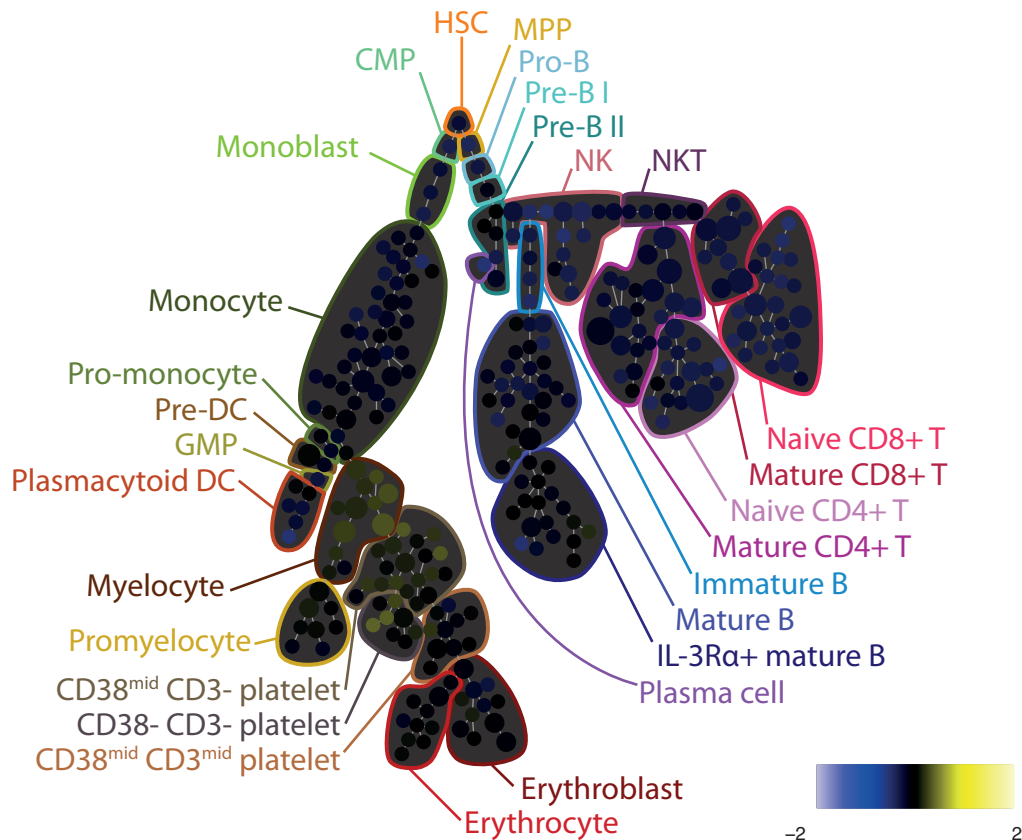


Figure S8A

169-pP38 ---- Flt3L vs Ref Ratio

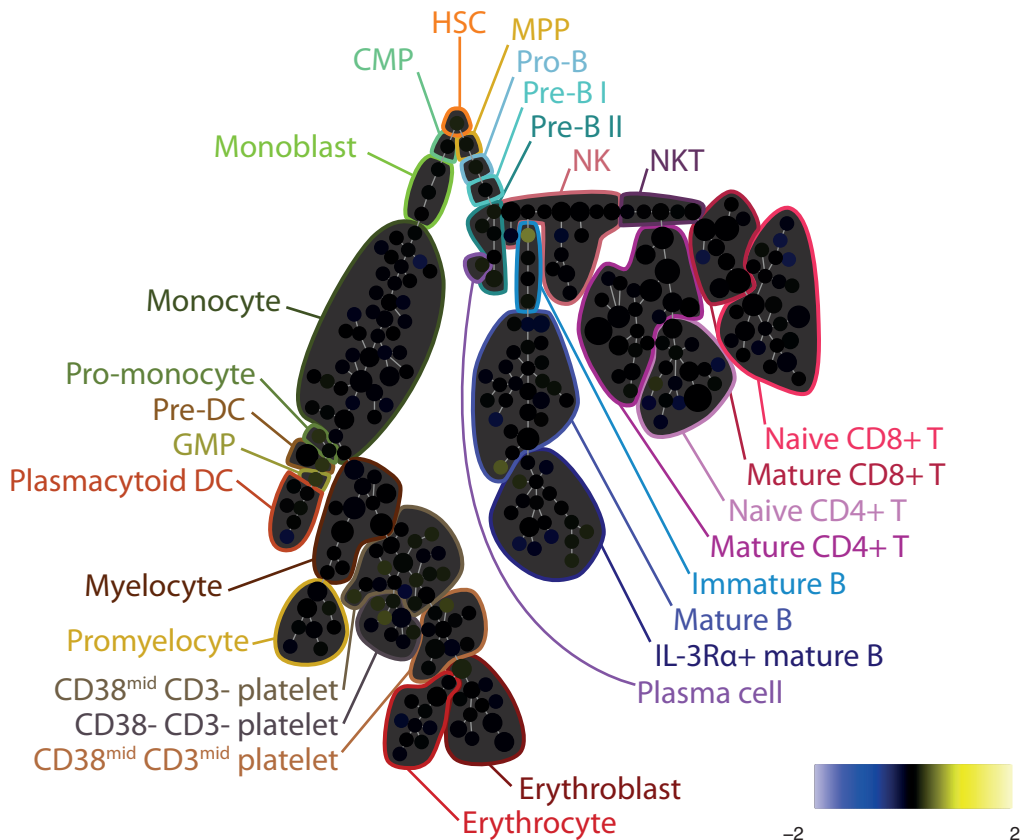


Figure S8A

169-pP38 — GCSF vs Ref Ratio

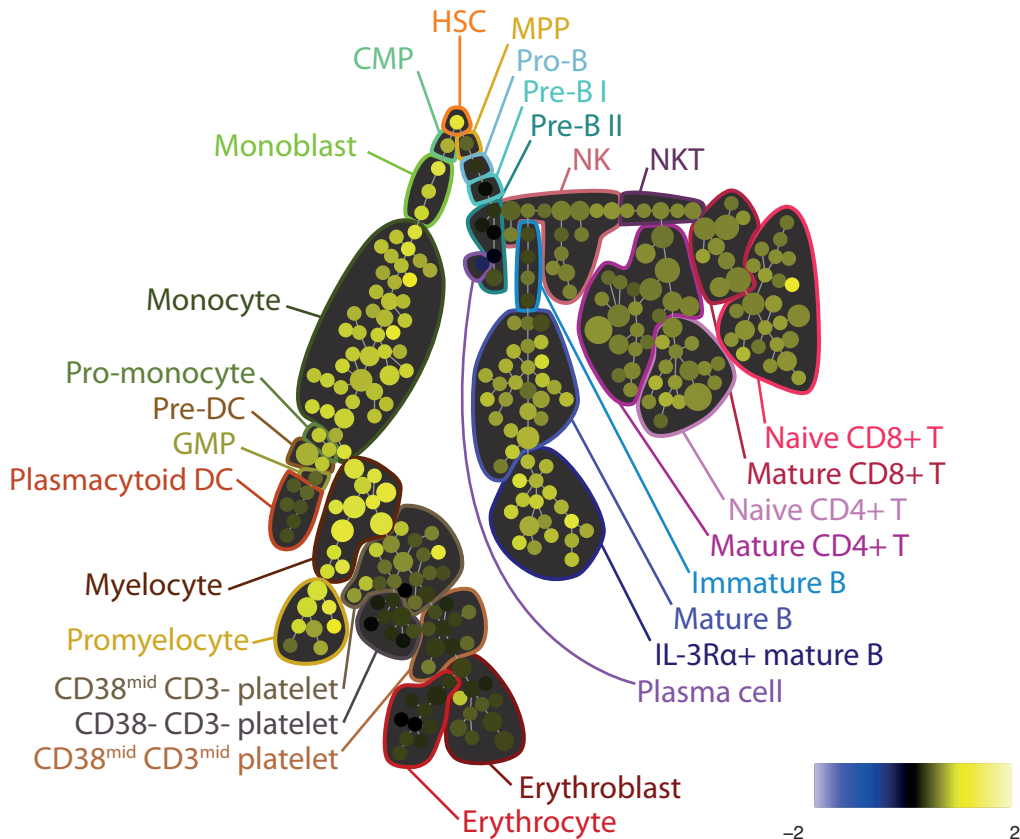


Figure S8A

169-pP38 --- GMCSF vs Ref Ratio

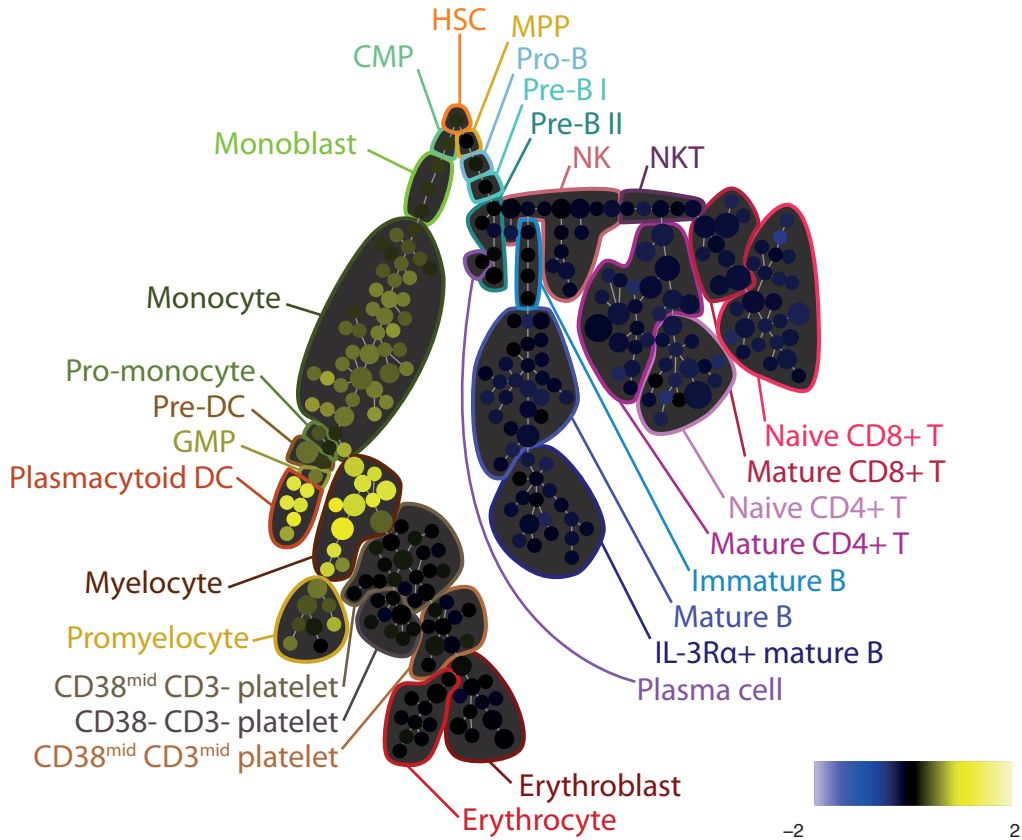


Figure S8A

169-pP38 ---- IFNad vs Ref Ratio

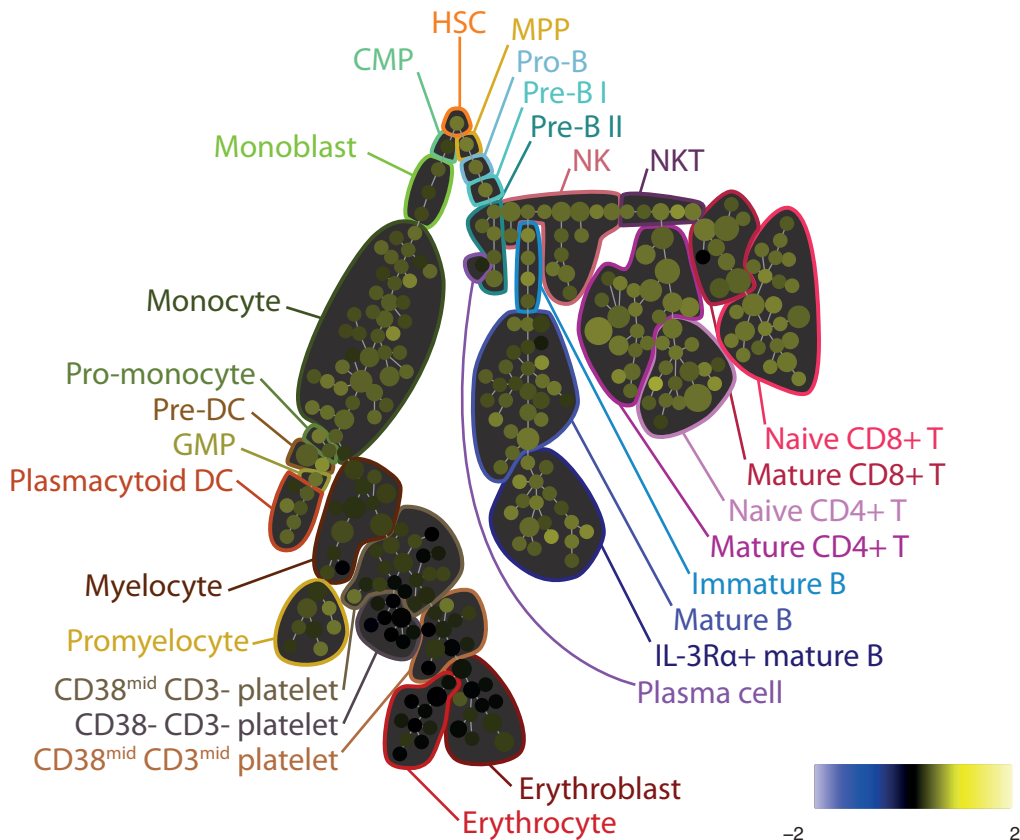


Figure S8A

169-pP38 ---- IL3 vs Ref Ratio

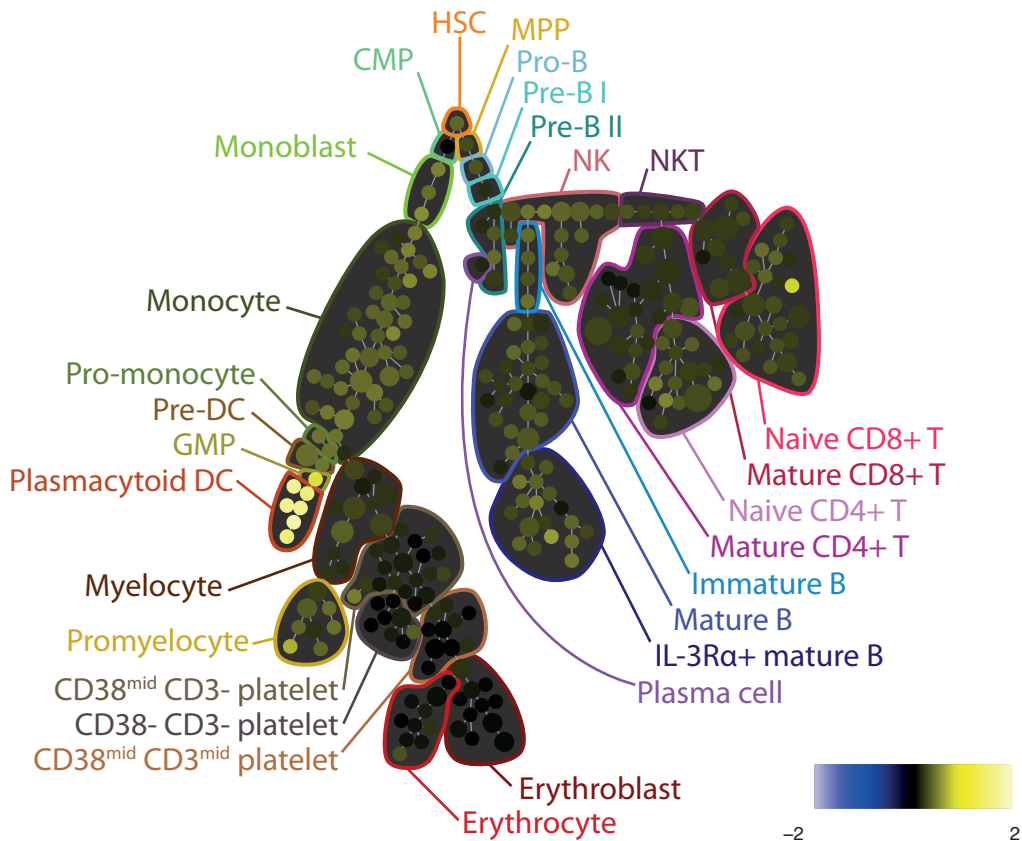


Figure S8A

169-pP38 ---- IL7 vs Ref Ratio

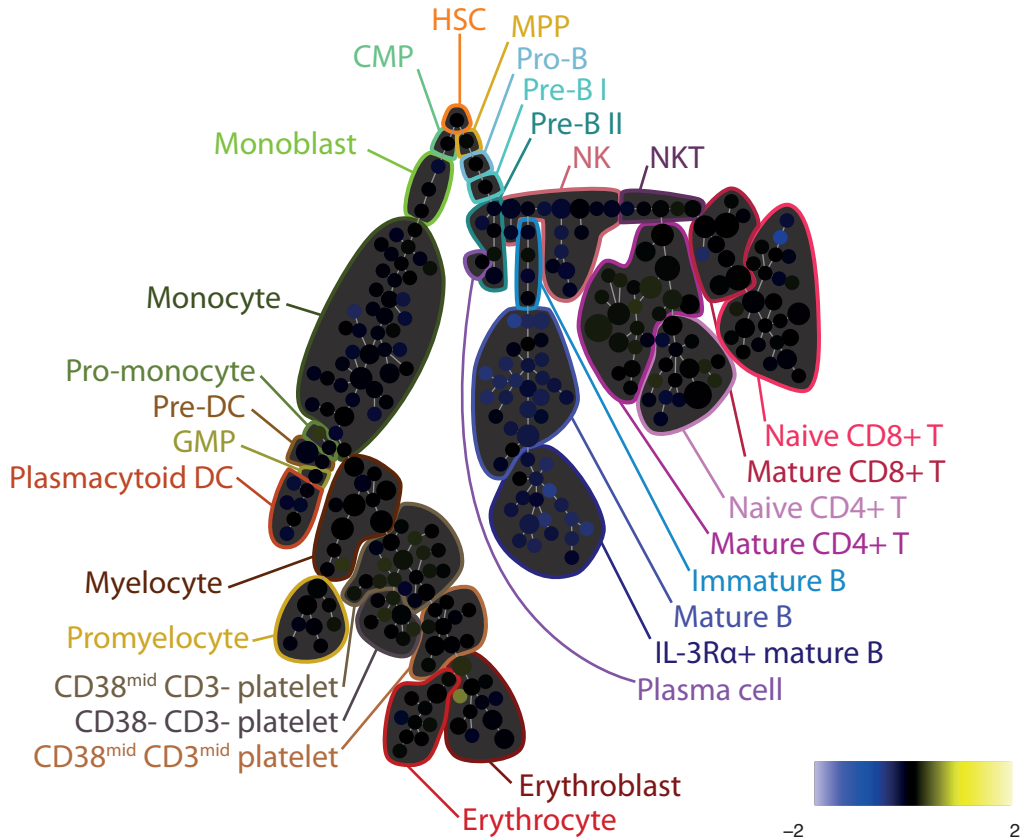


Figure S8A

169-pP38 ---- LPS vs Ref Ratio

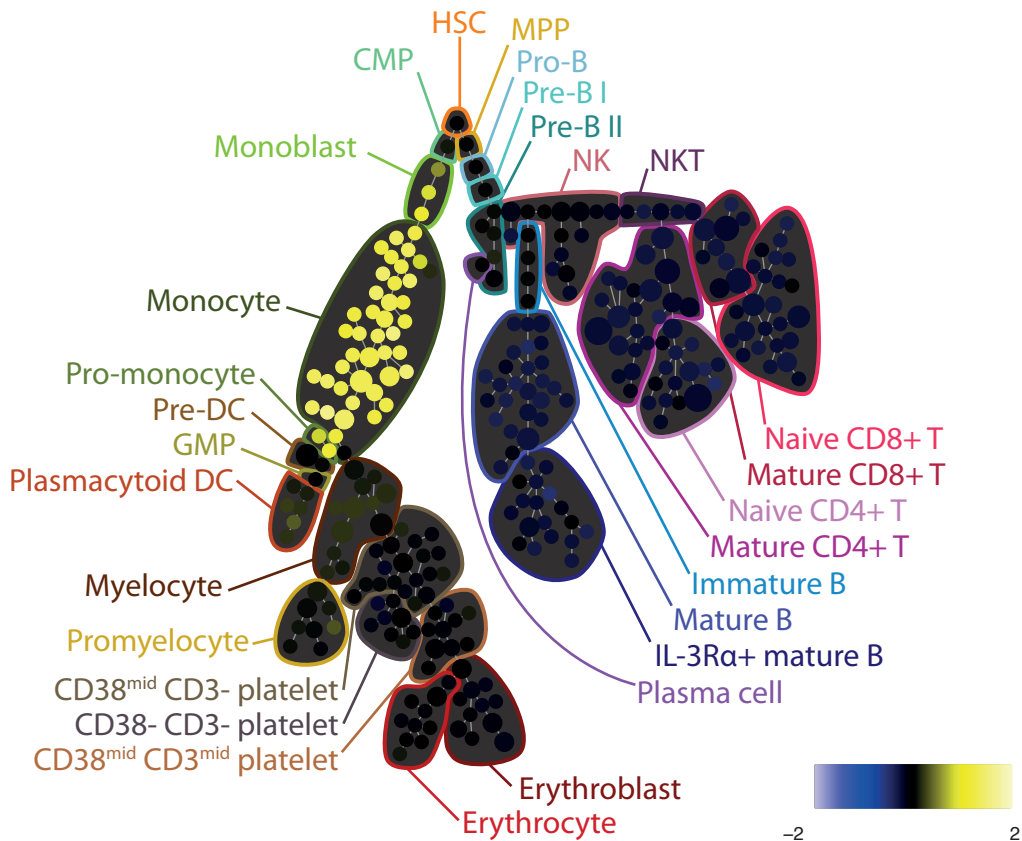


Figure S8A

169-pP38 ---- PMAiono vs Ref Ratio

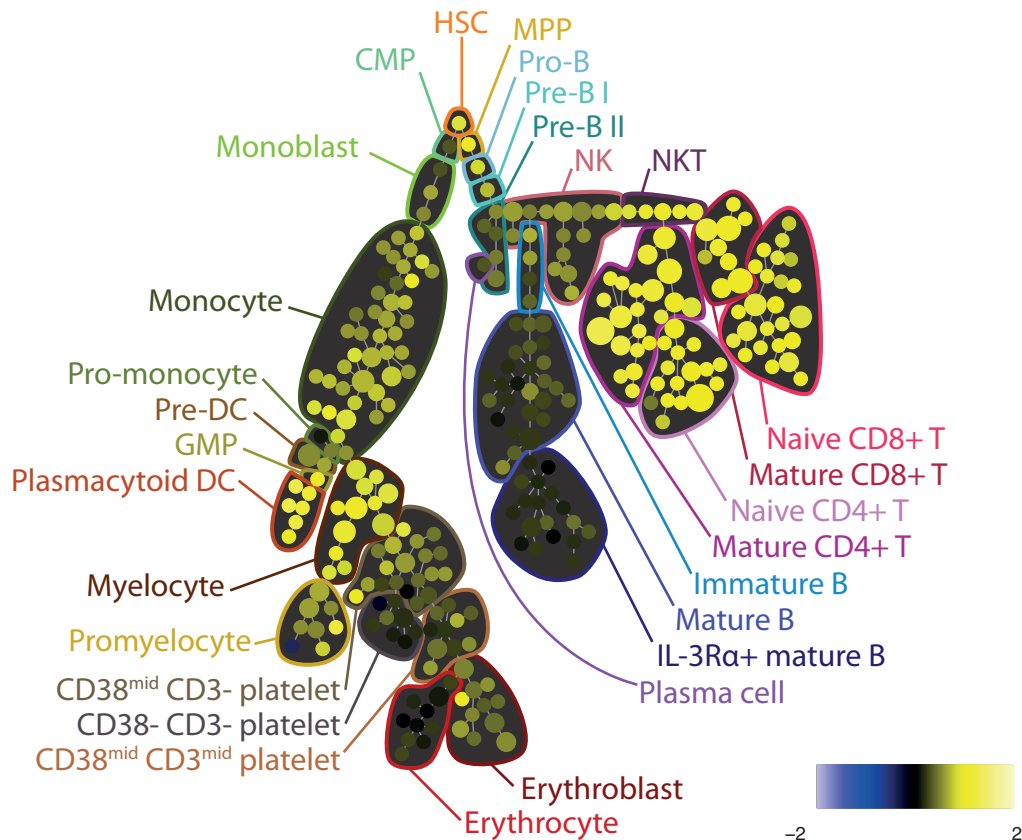


Figure S8A

169-pP38 ---- PVO4 vs Ref Ratio

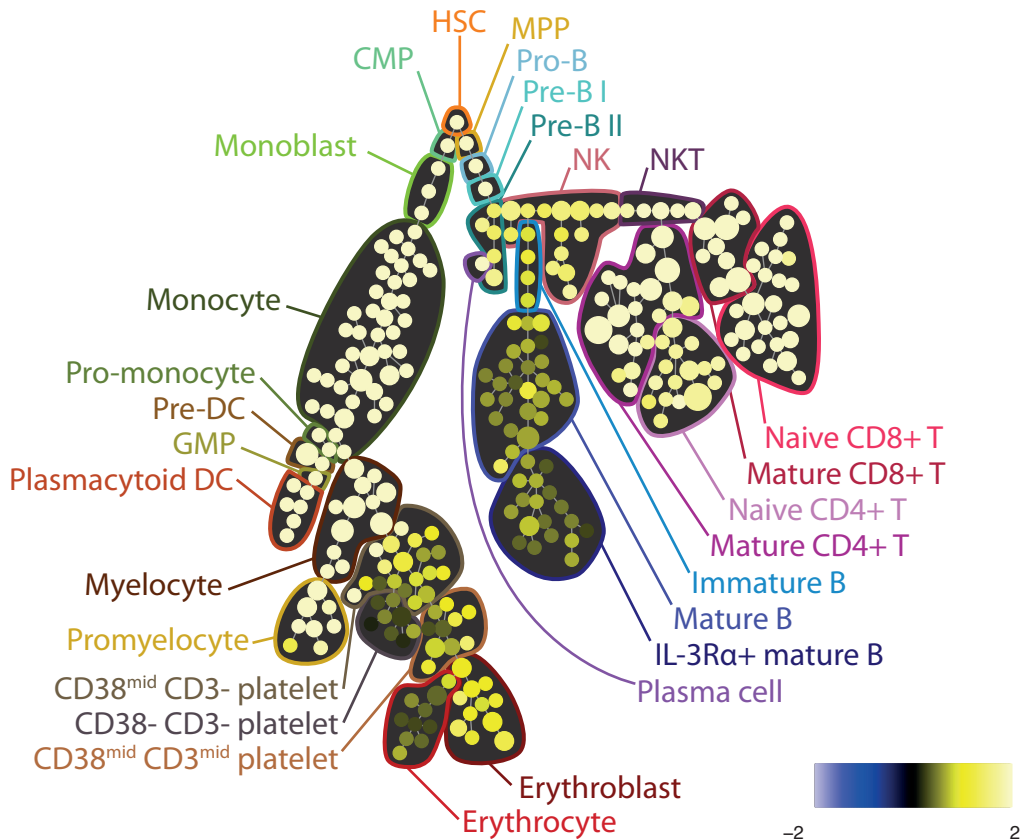


Figure S8A

169-pP38 ---- SCF vs Ref Ratio

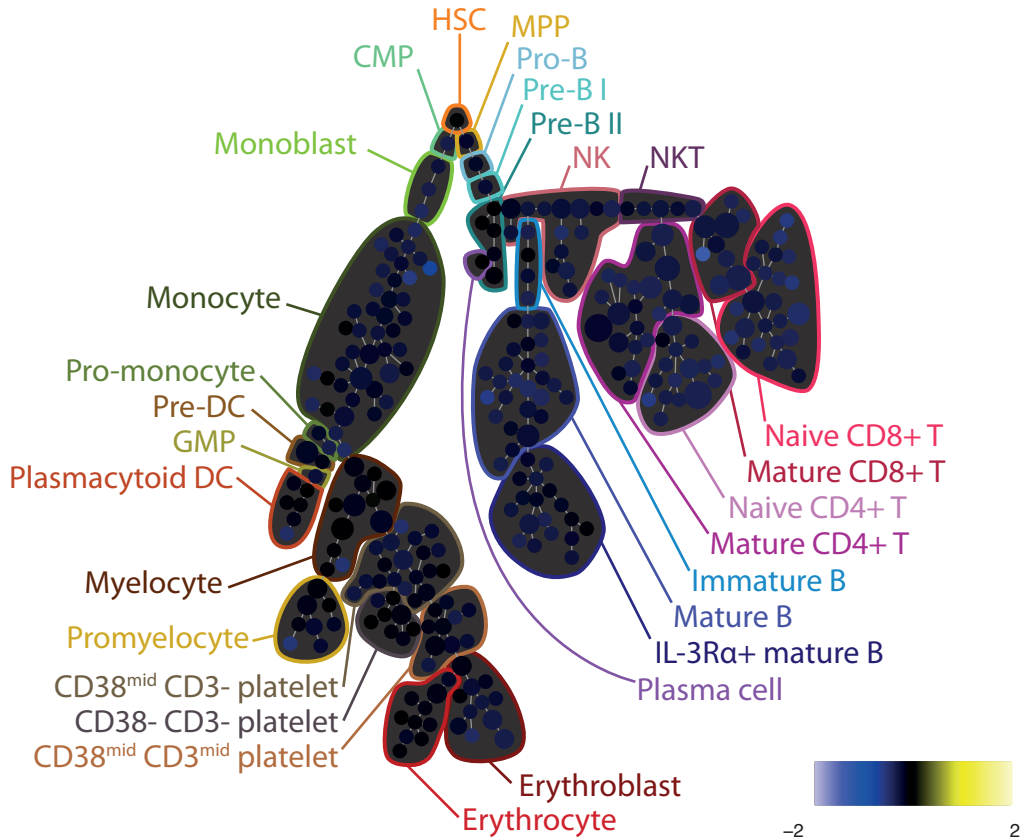


Figure S8A

169-pP38 --- TNFa vs Ref Ratio

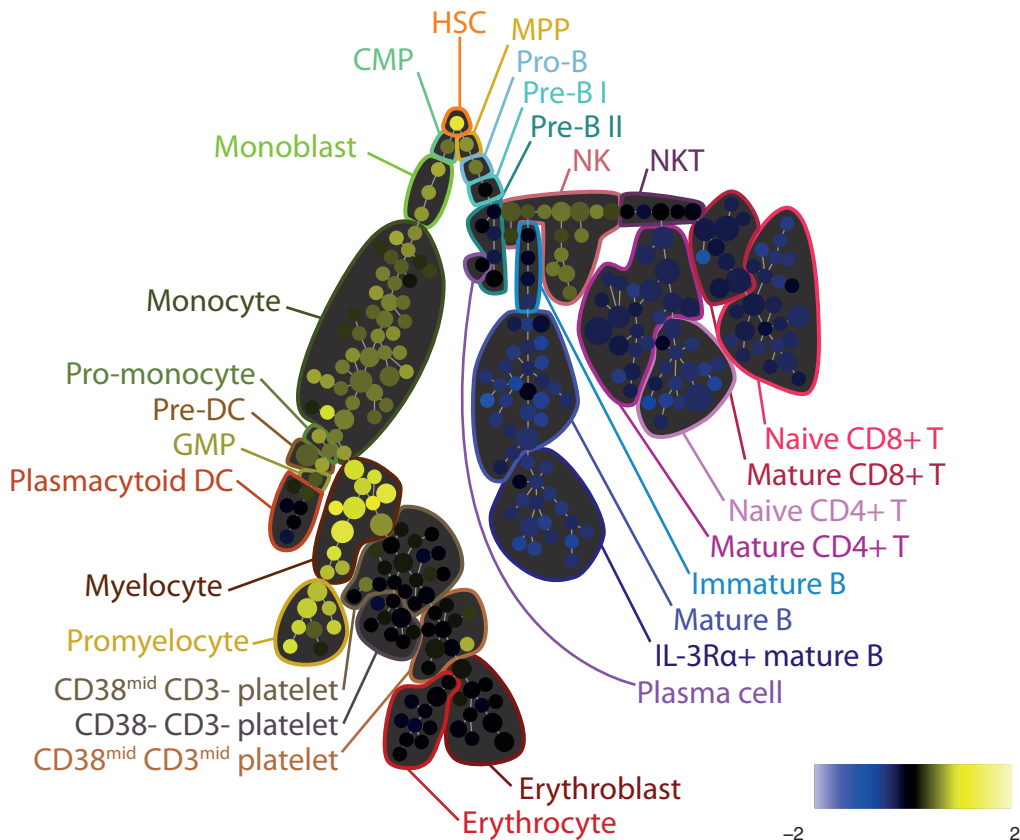


Figure S8A

169-pP38 ---- TPO vs Ref Ratio

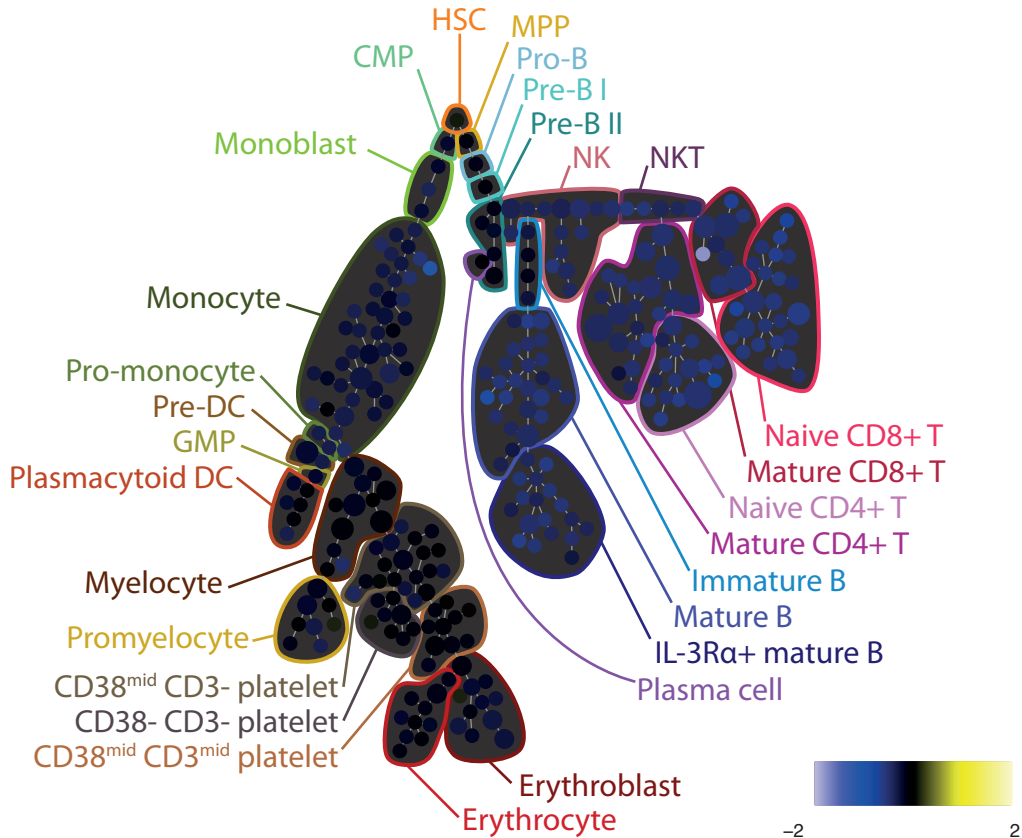


Figure S8A

171-pBtk/Itk ---- BCR vs Ref Ratio

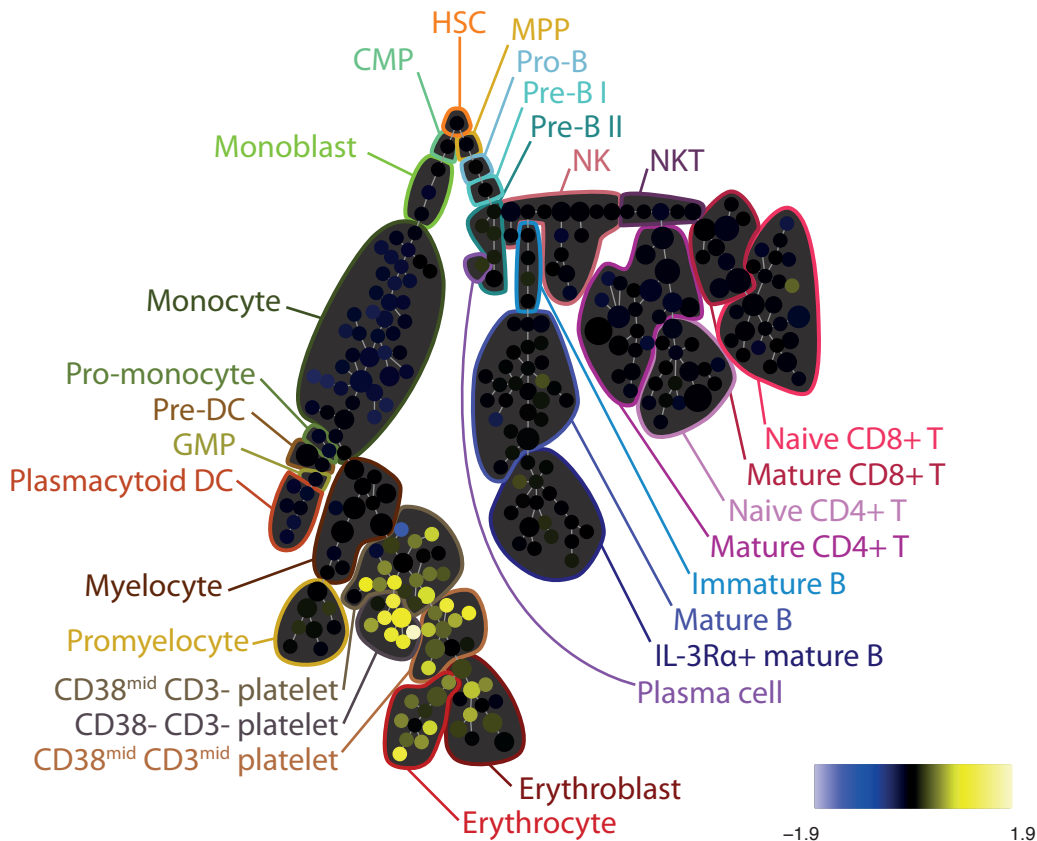


Figure S8A

171-pBtk/Itk ---- DMSO vs Ref Ratio

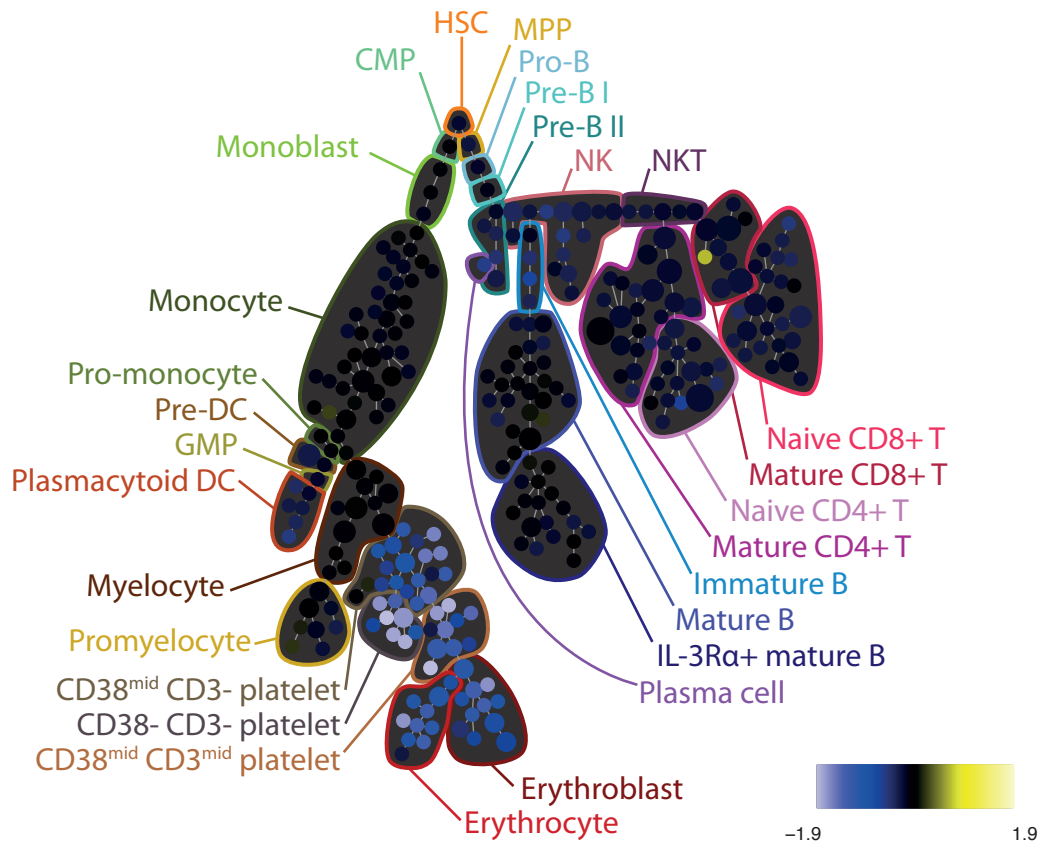


Figure S8A

171-pBtk/Itk ---- Flt3L vs Ref Ratio

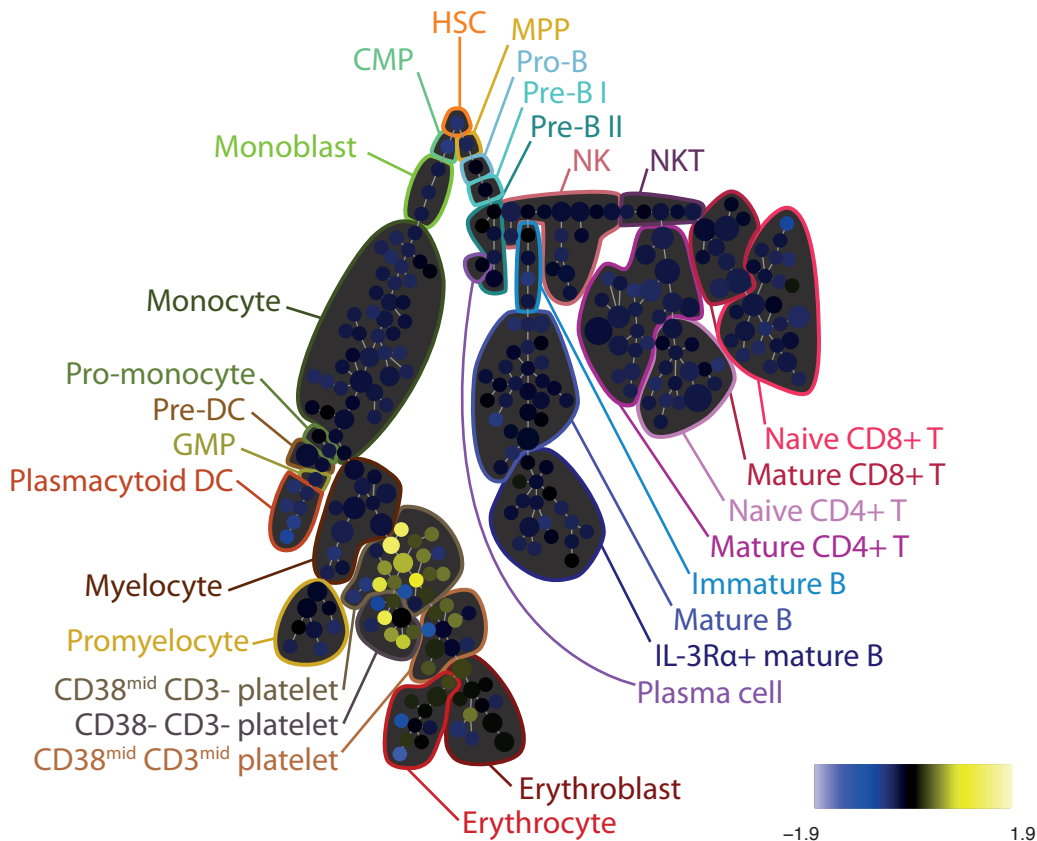


Figure S8A

171-pBtk/Itk ---- GCSF vs Ref Ratio

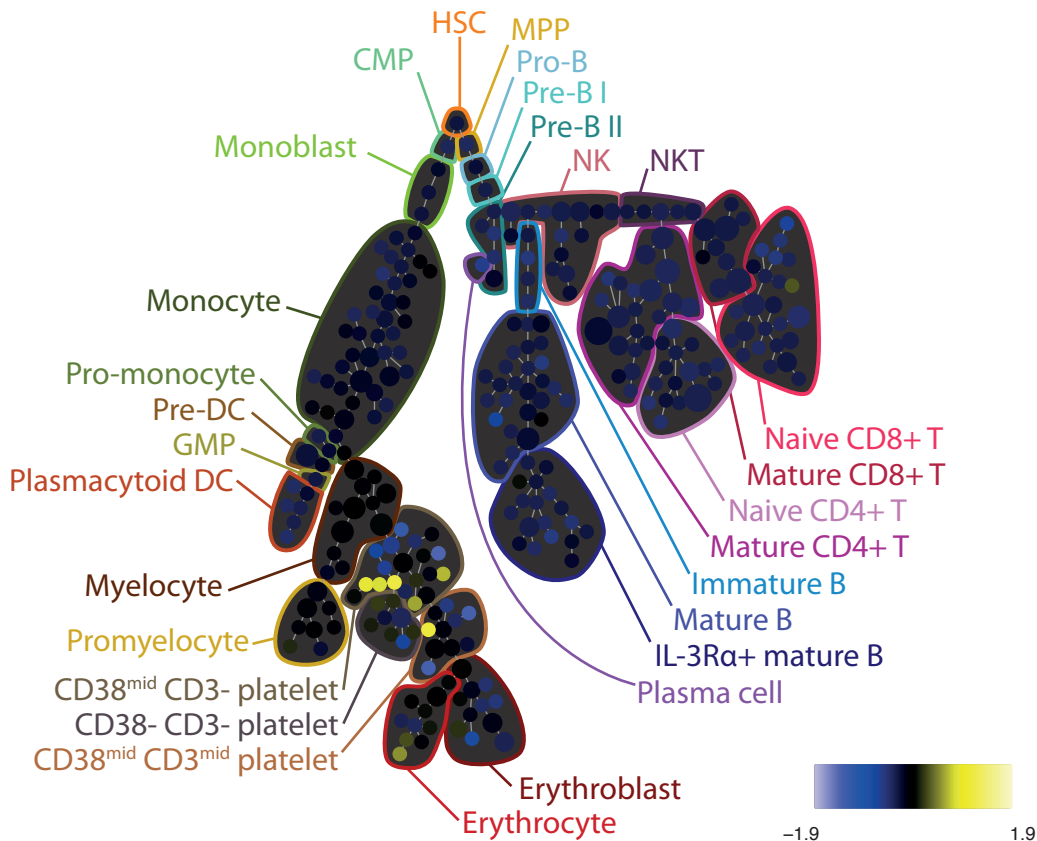


Figure S8A

171-pBtk/Itk ---- GMCSF vs Ref Ratio

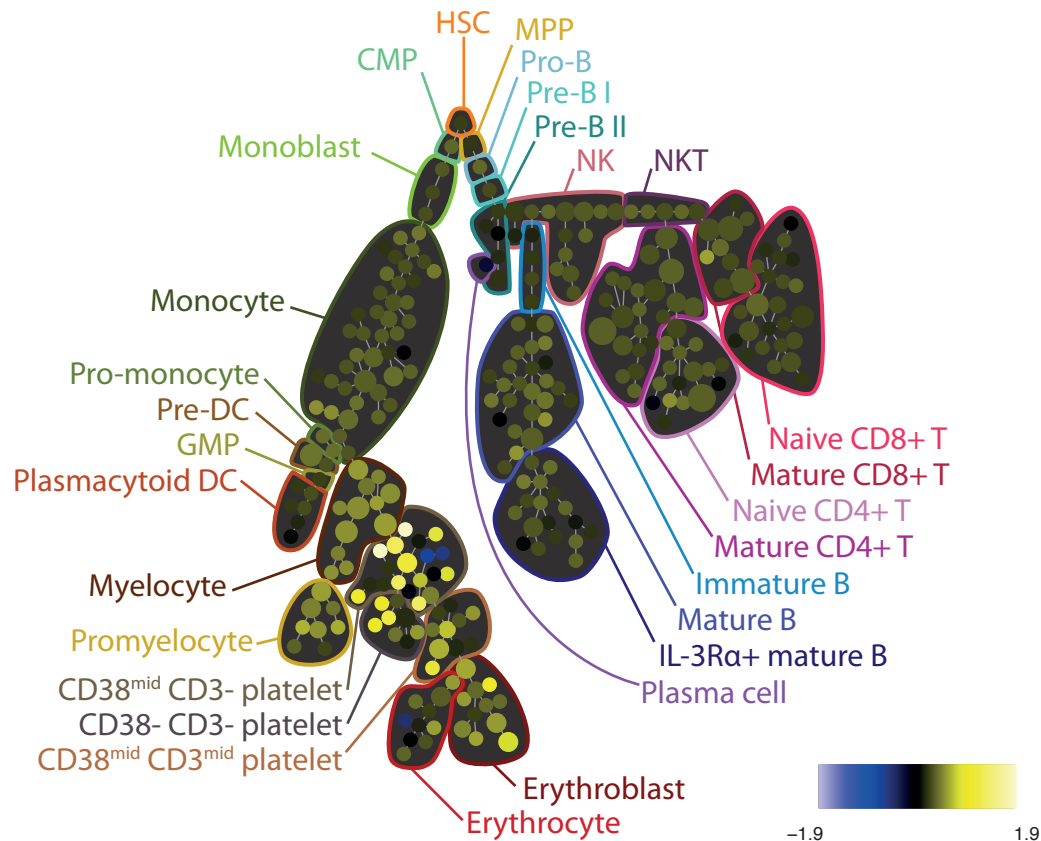


Figure S8A

171-pBtk/ltk ---- IFNad vs Ref Ratio

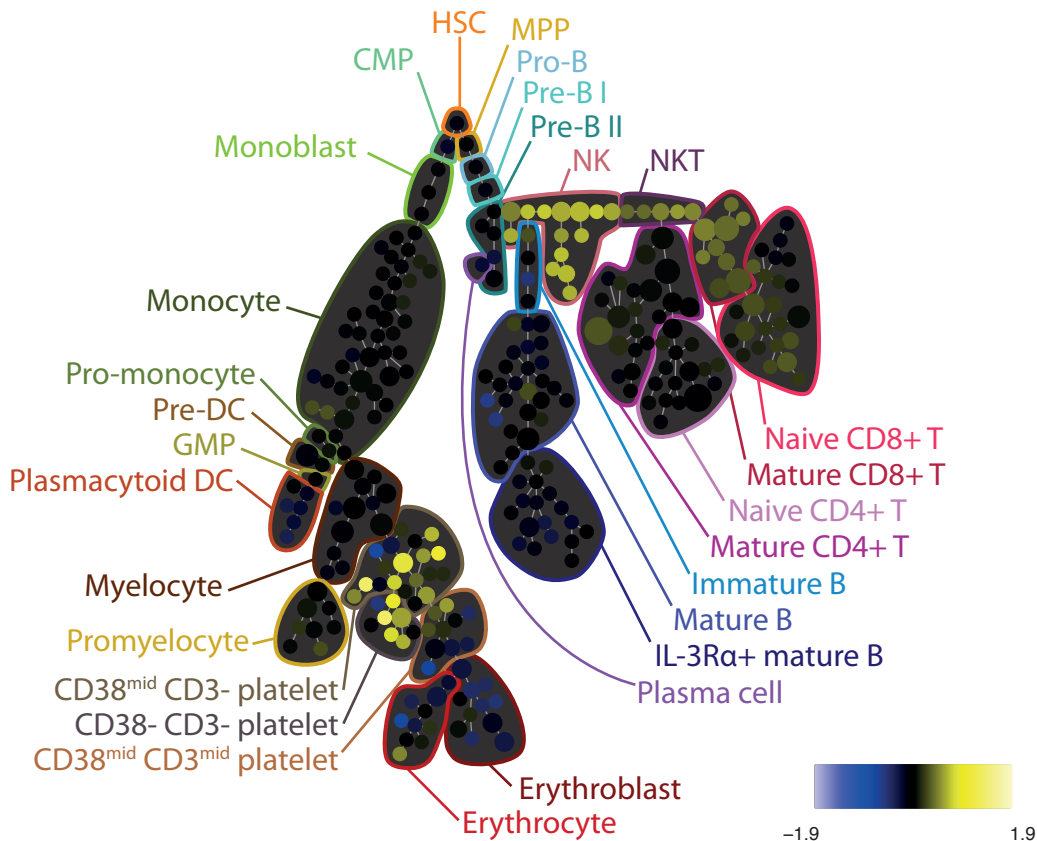


Figure S8A

171-pBtk/Itk — IL3 vs Ref Ratio

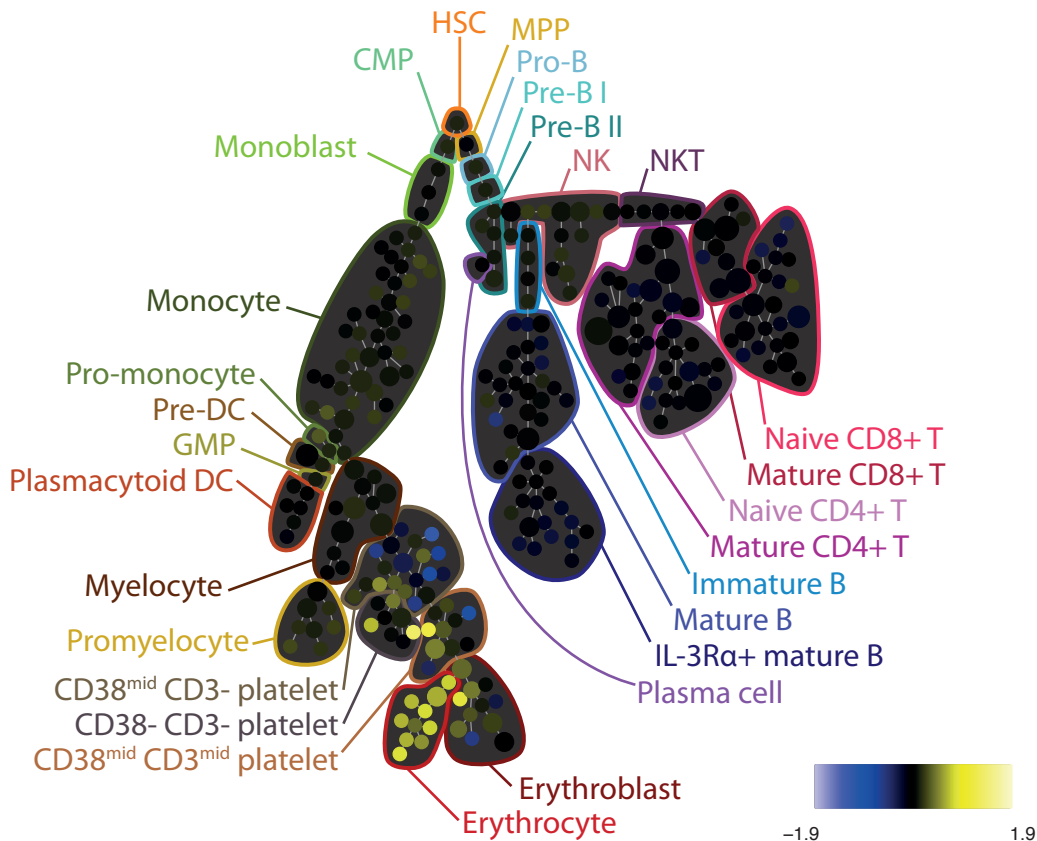


Figure S8A

171-pBtk/Itk — IL7 vs Ref Ratio

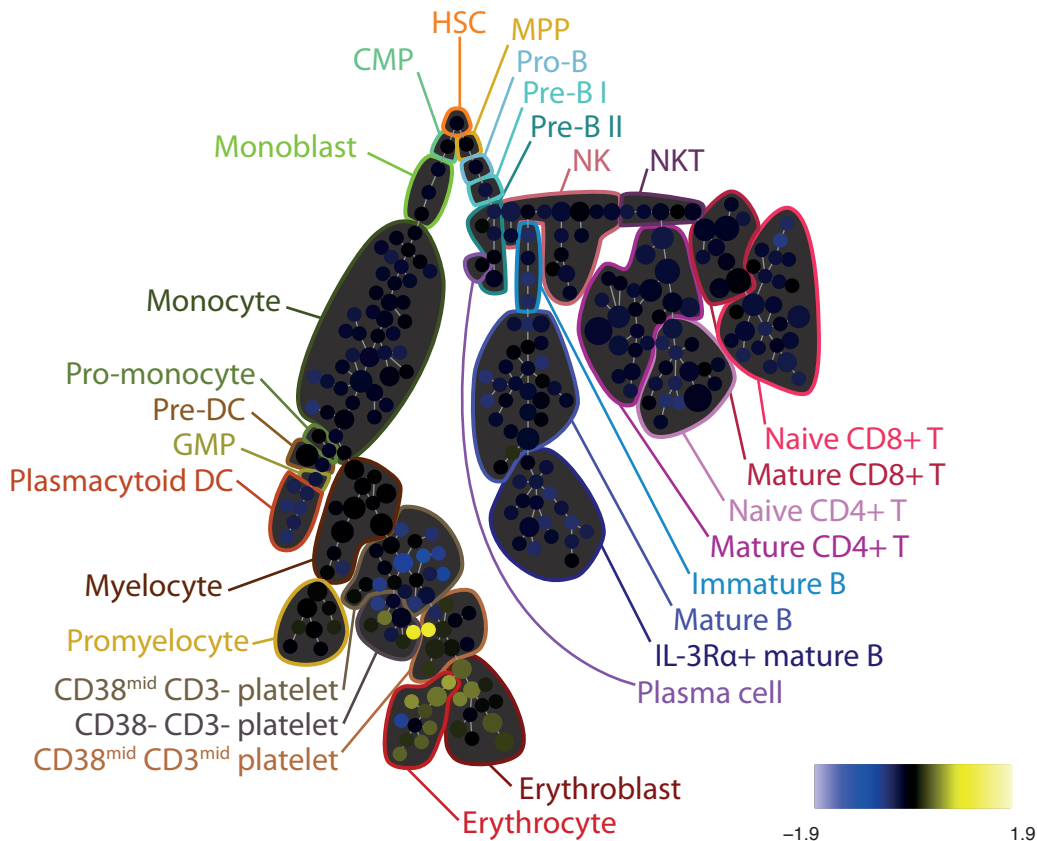


Figure S8A

171-pBtk/Itk ---- LPS vs Ref Ratio

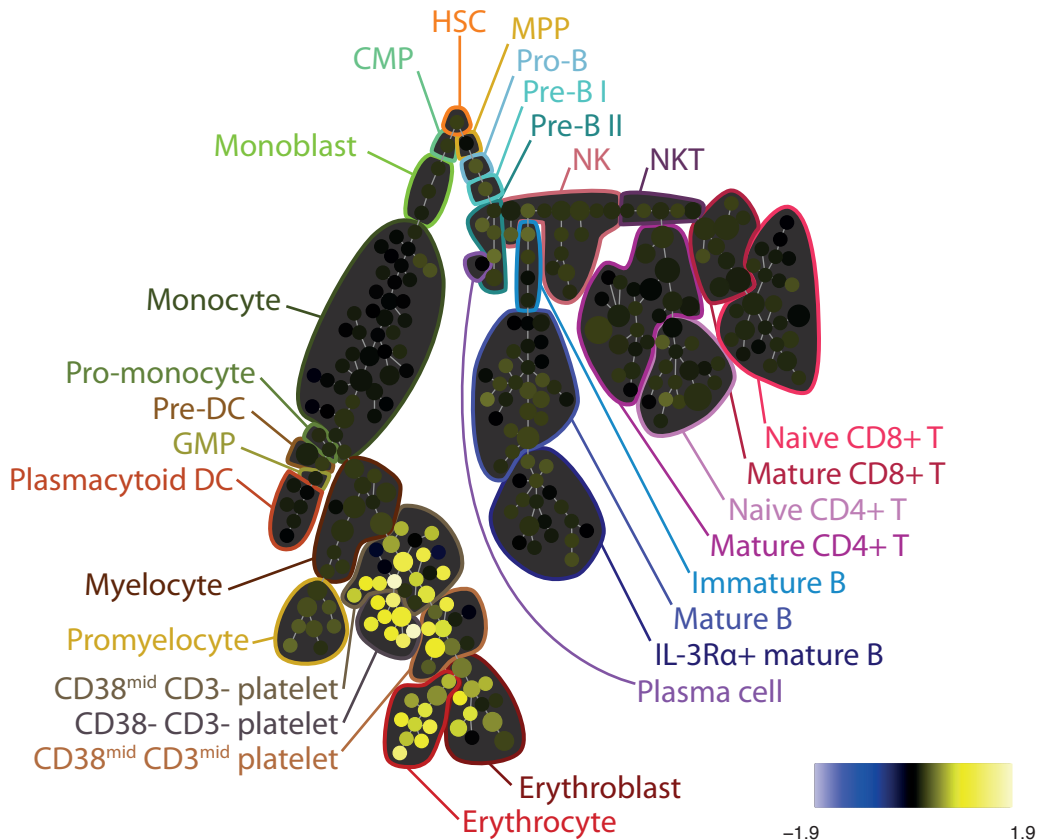


Figure S8A

171-pBtk/Itk ---- PMAiono vs Ref Ratio

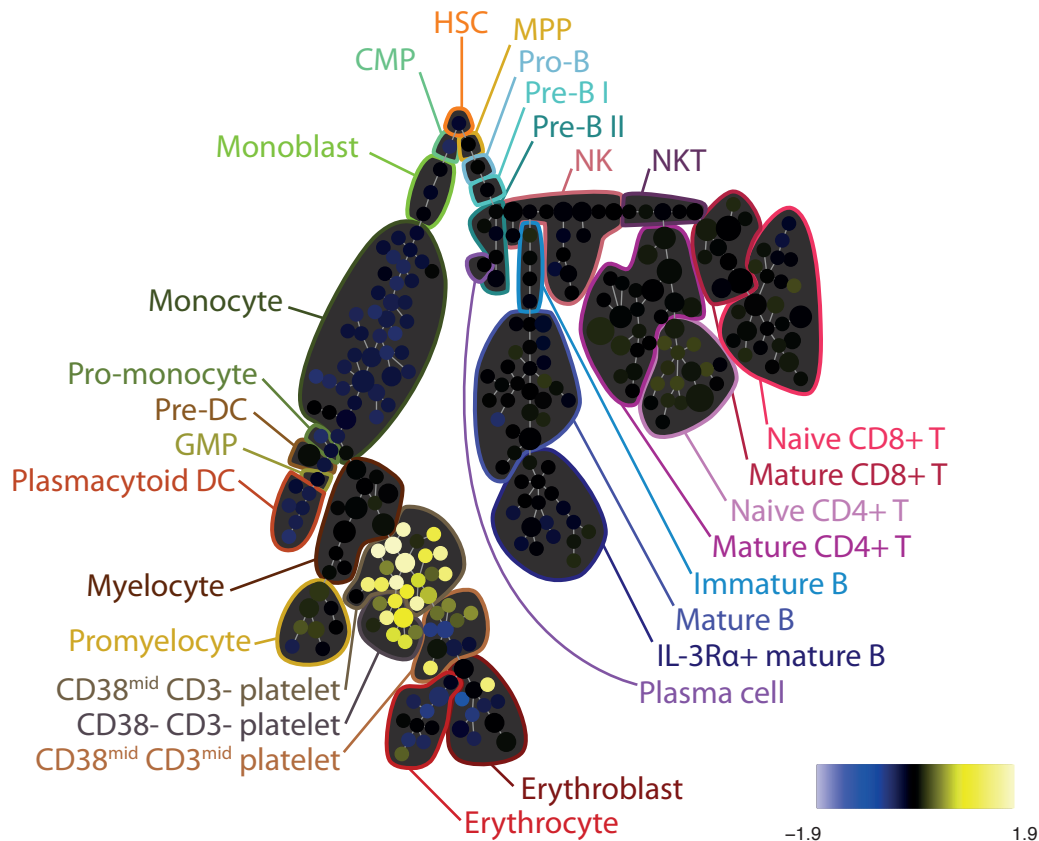


Figure S8A

171-pBtk/Itk — PVO4 vs Ref Ratio

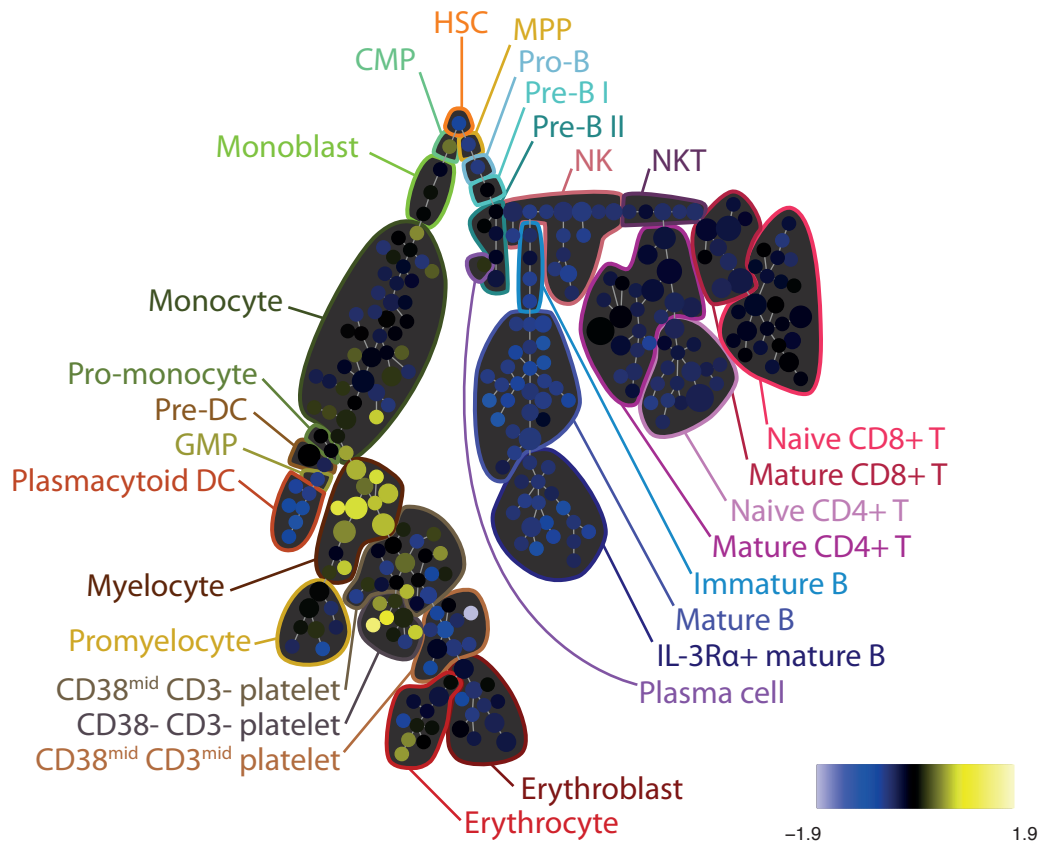


Figure S8A

171-pBtk/Itk ---- SCF vs Ref Ratio

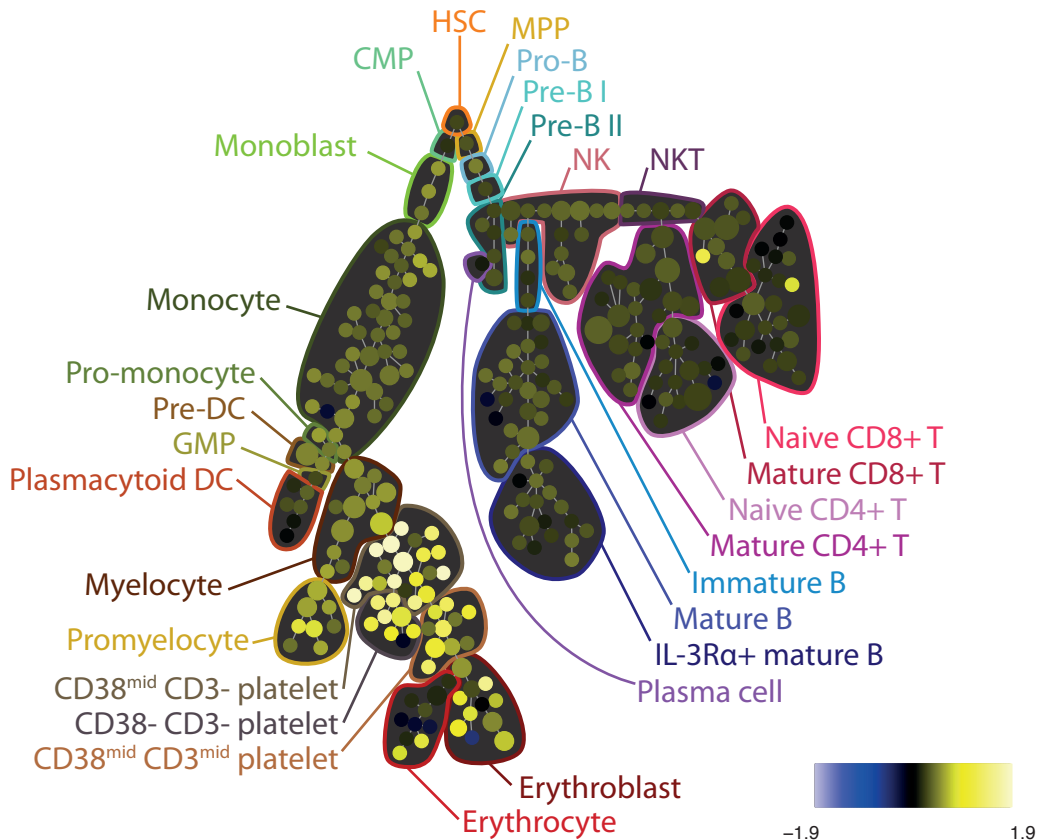


Figure S8A

171-pBtk/Itk ---- TNFa vs Ref Ratio

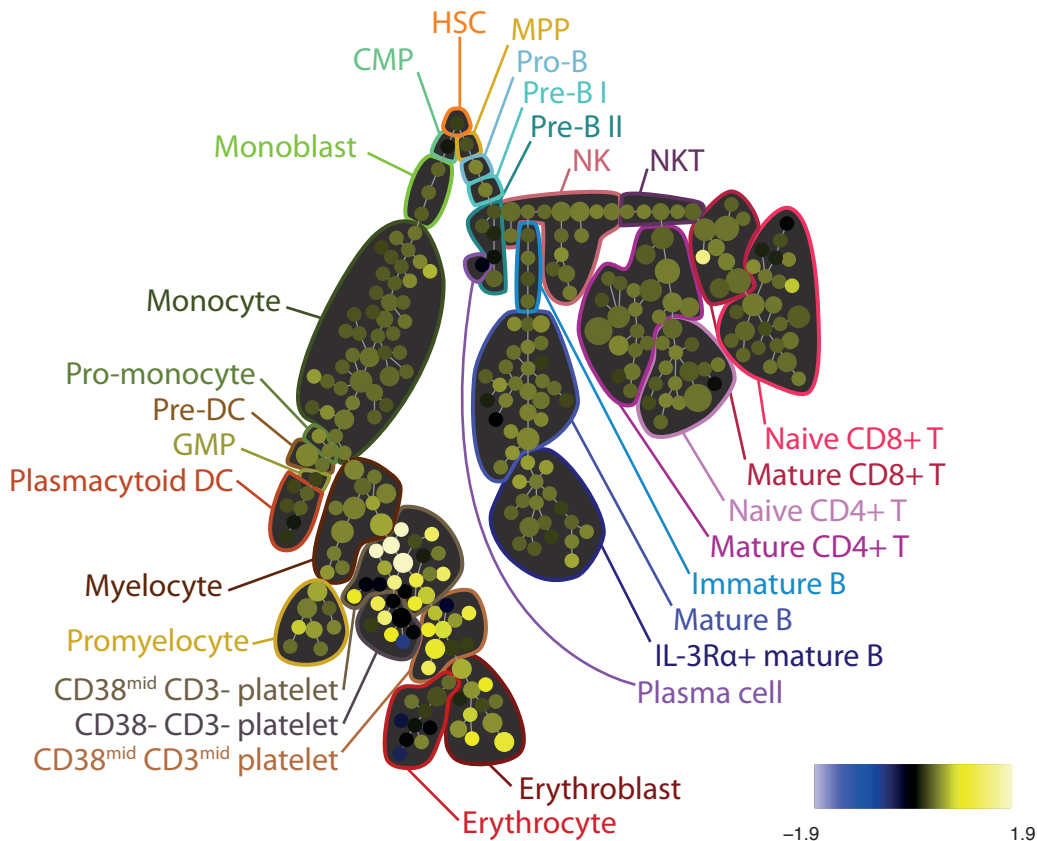


Figure S8A

171-pBtk/Itk ---- TPO vs Ref Ratio

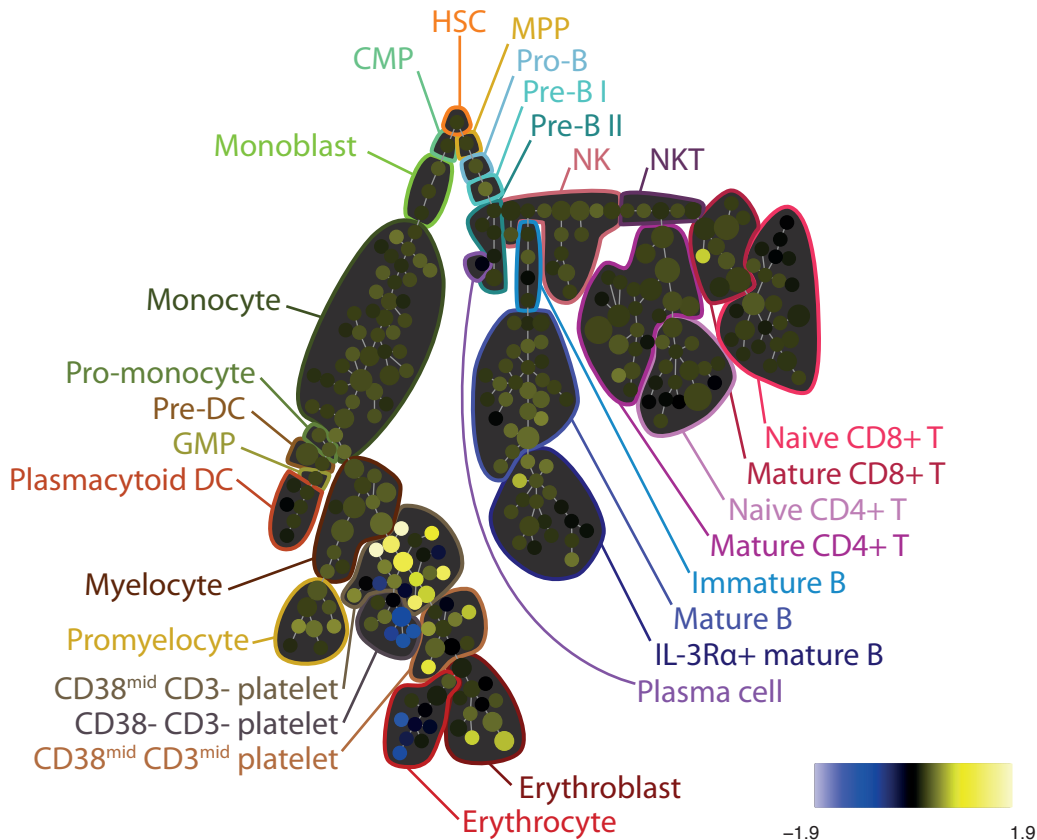


Figure S8A

172-pS6 ---- BCR vs Ref Ratio

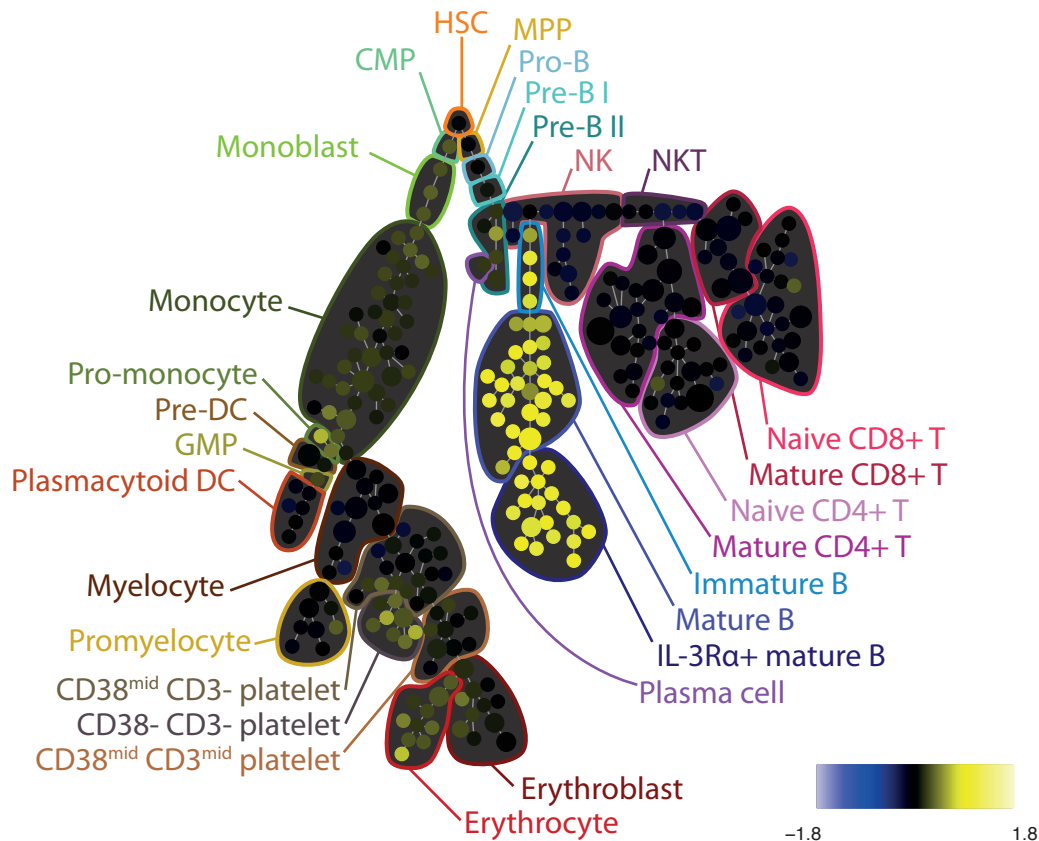


Figure S8A

172-pS6 --- DMSO vs Ref Ratio

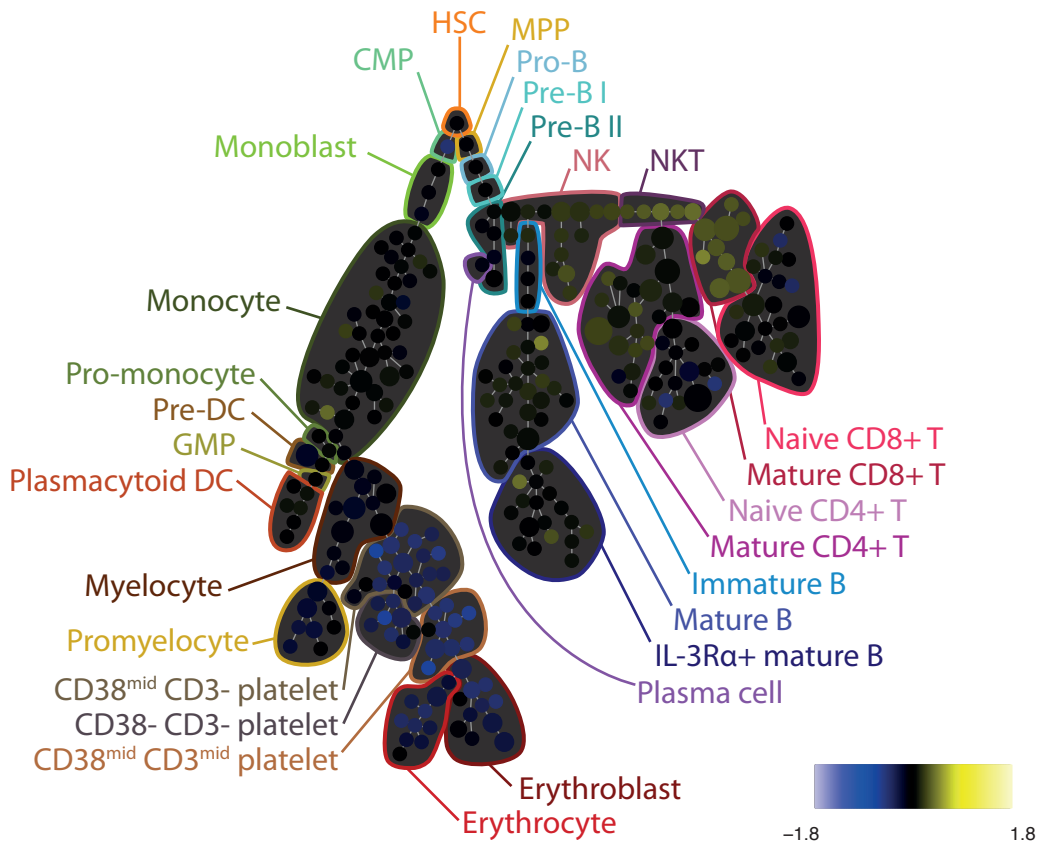


Figure S8A

172-pS6 ---- Flt3L vs Ref Ratio

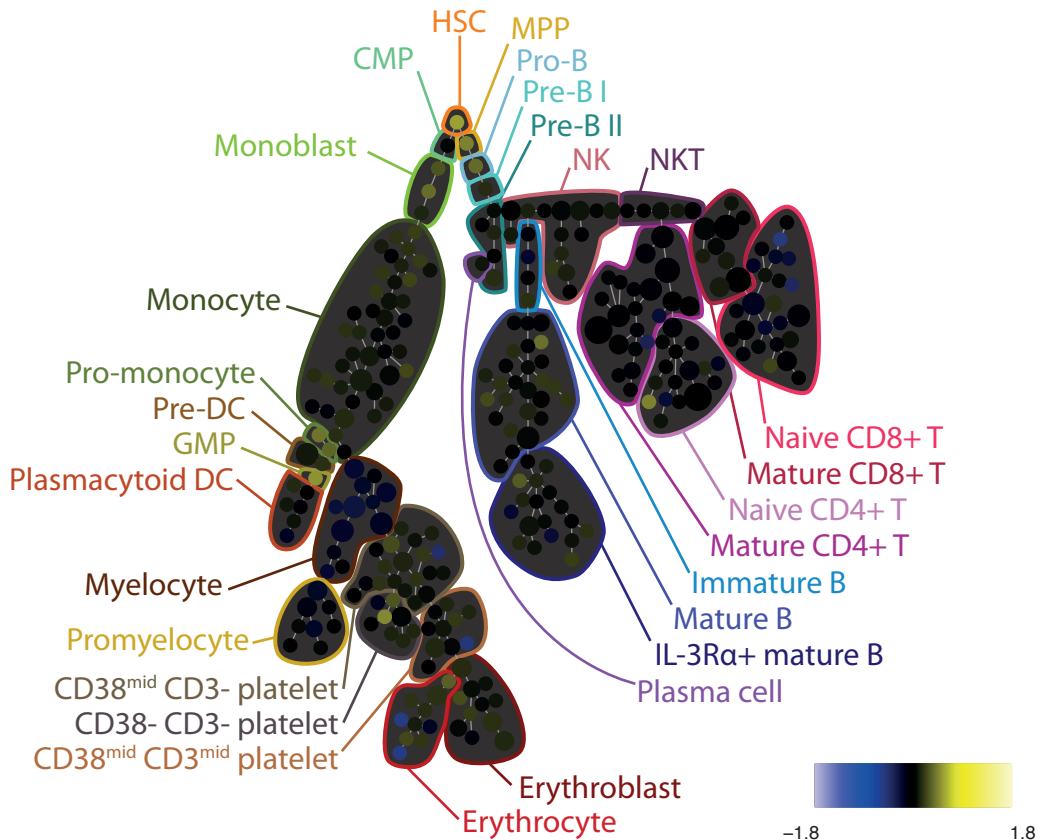


Figure S8A

172-pS6 ---- GCSF vs Ref Ratio

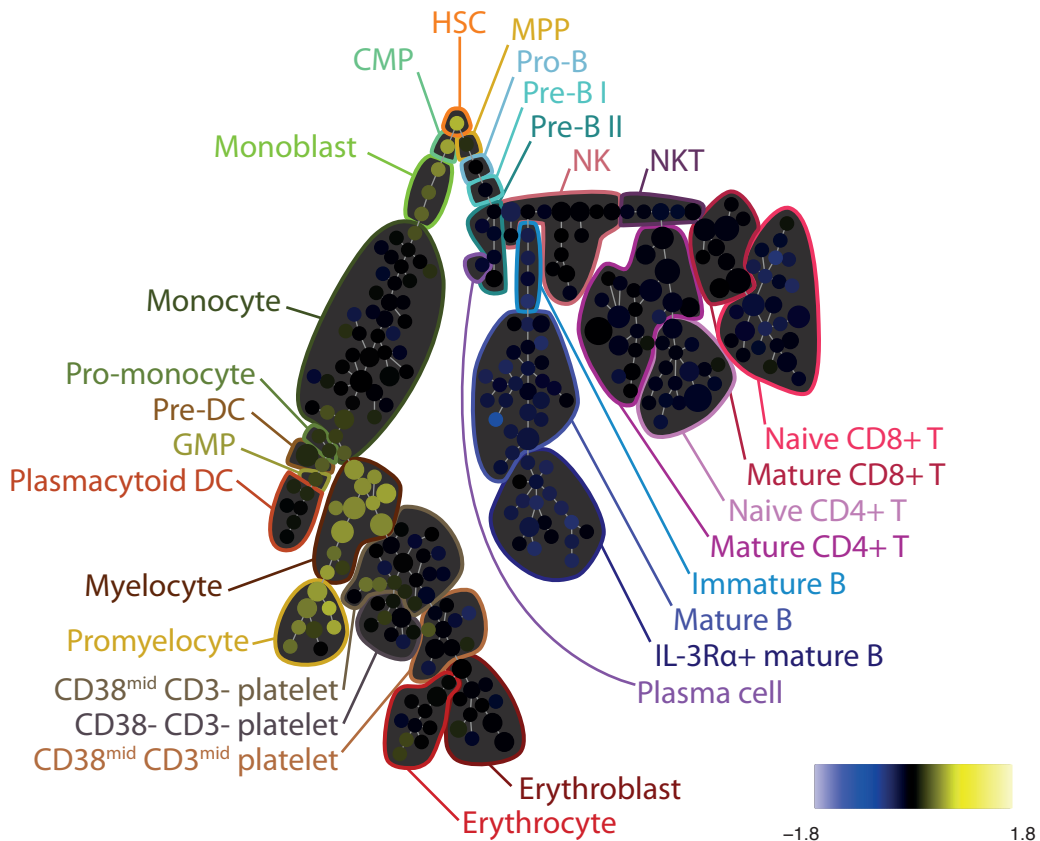


Figure S8A

172-pS6 ---- GMCSF vs Ref Ratio

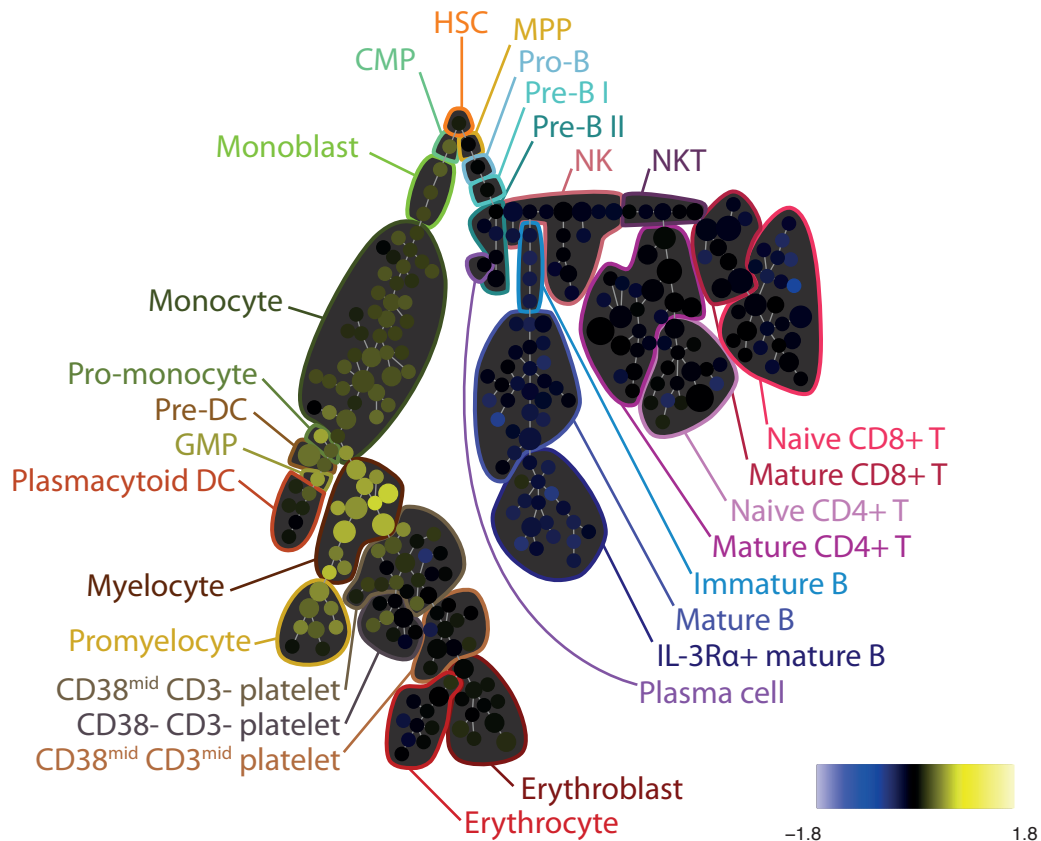


Figure S8A

172-pS6 ---- IFNad vs Ref Ratio

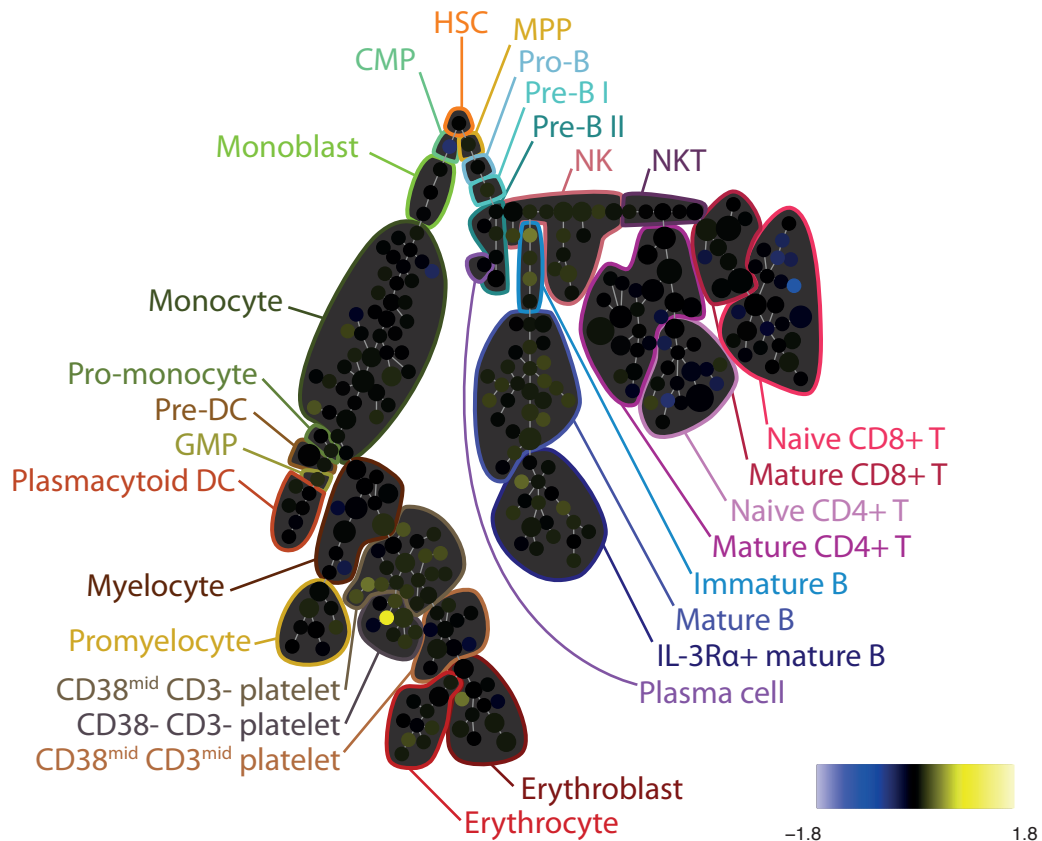


Figure S8A

172-pS6 ---- IL3 vs Ref Ratio

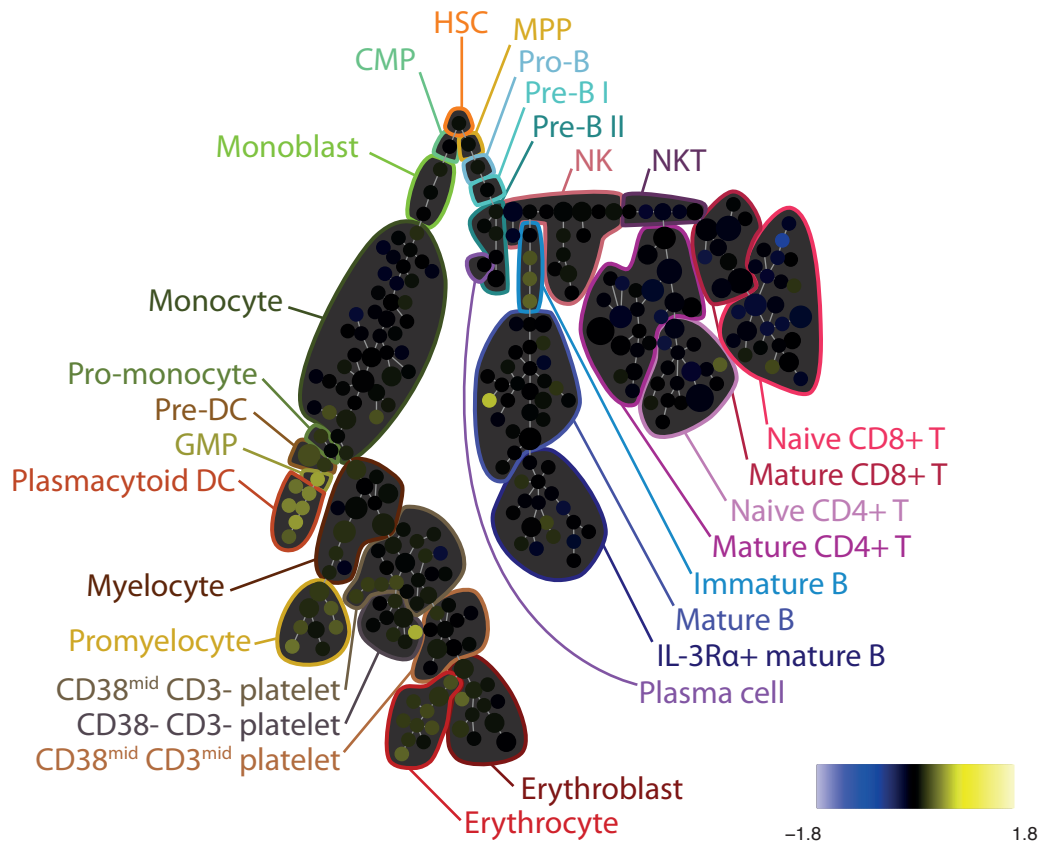


Figure S8A

172-pS6 ---- IL7 vs Ref Ratio

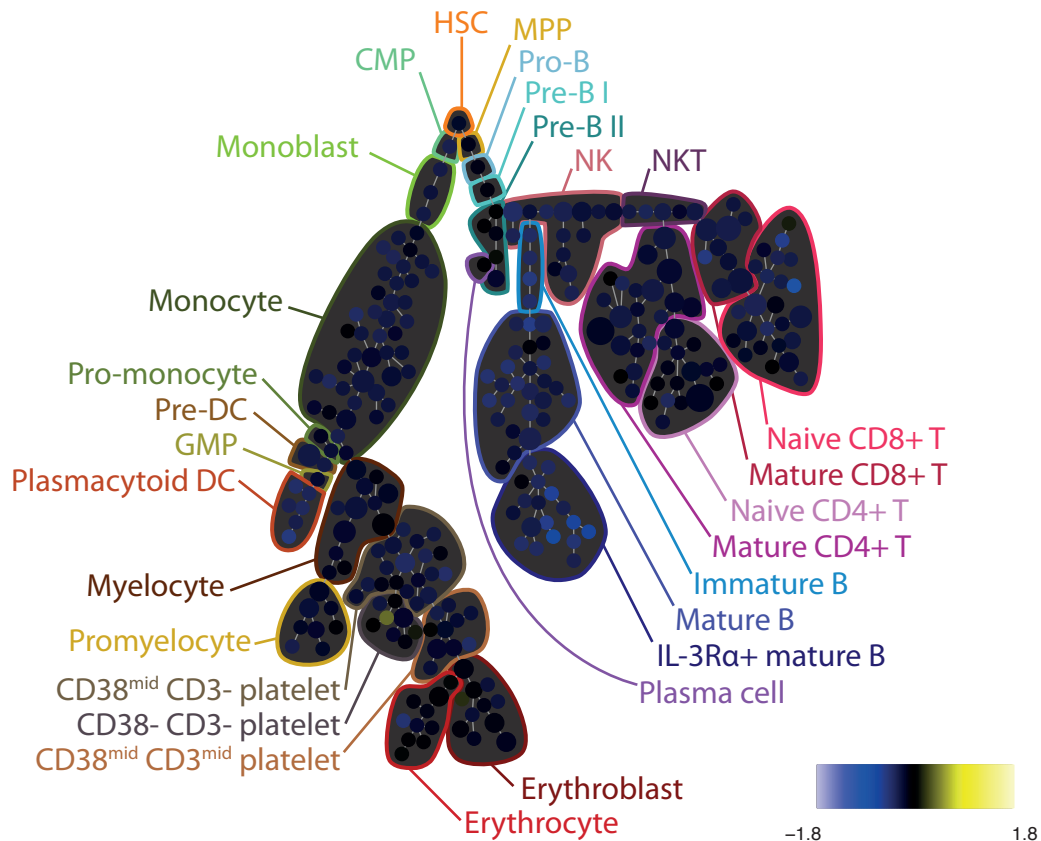


Figure S8A

172-pS6 --- LPS vs Ref Ratio

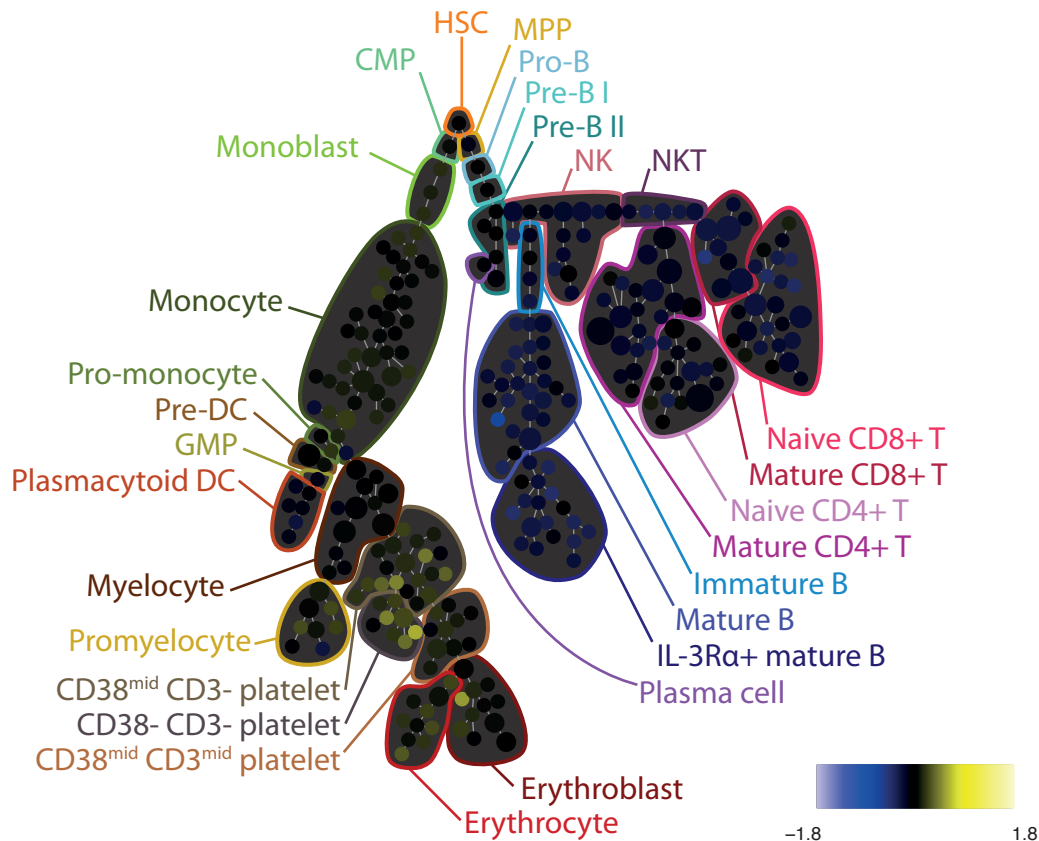


Figure S8A

172-pS6 ---- PMAiono vs Ref Ratio

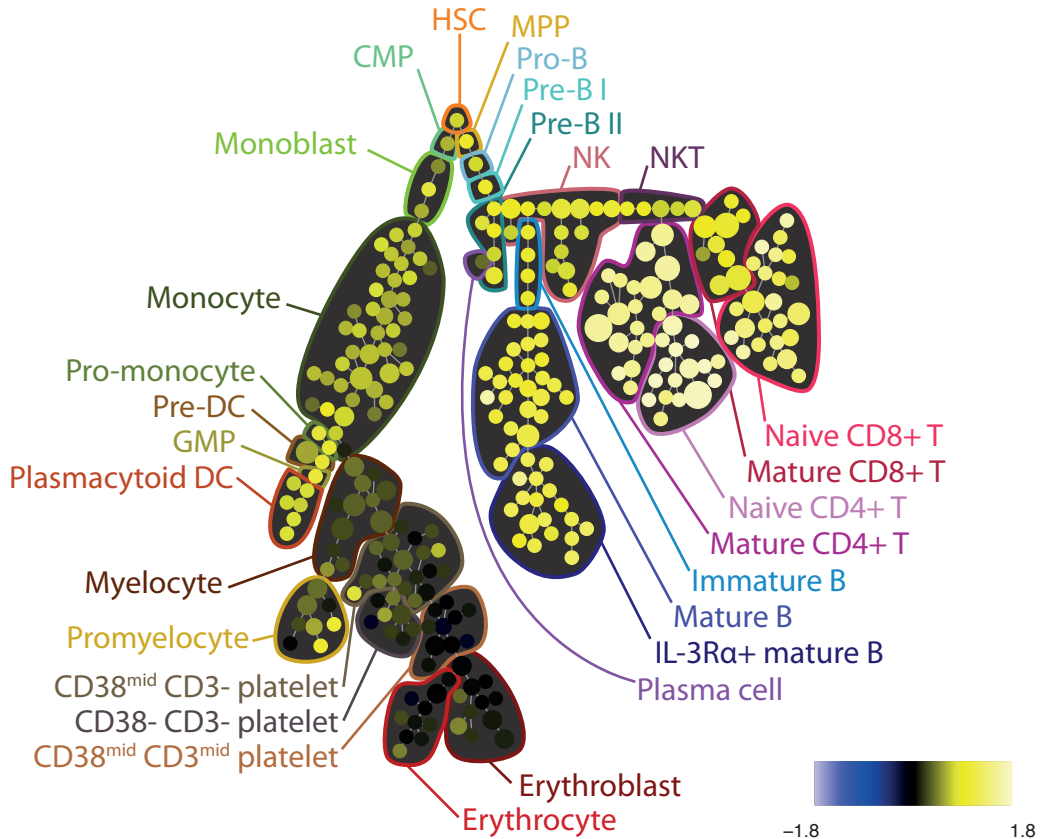


Figure S8A

172-pS6 ---- PVO4 vs Ref Ratio

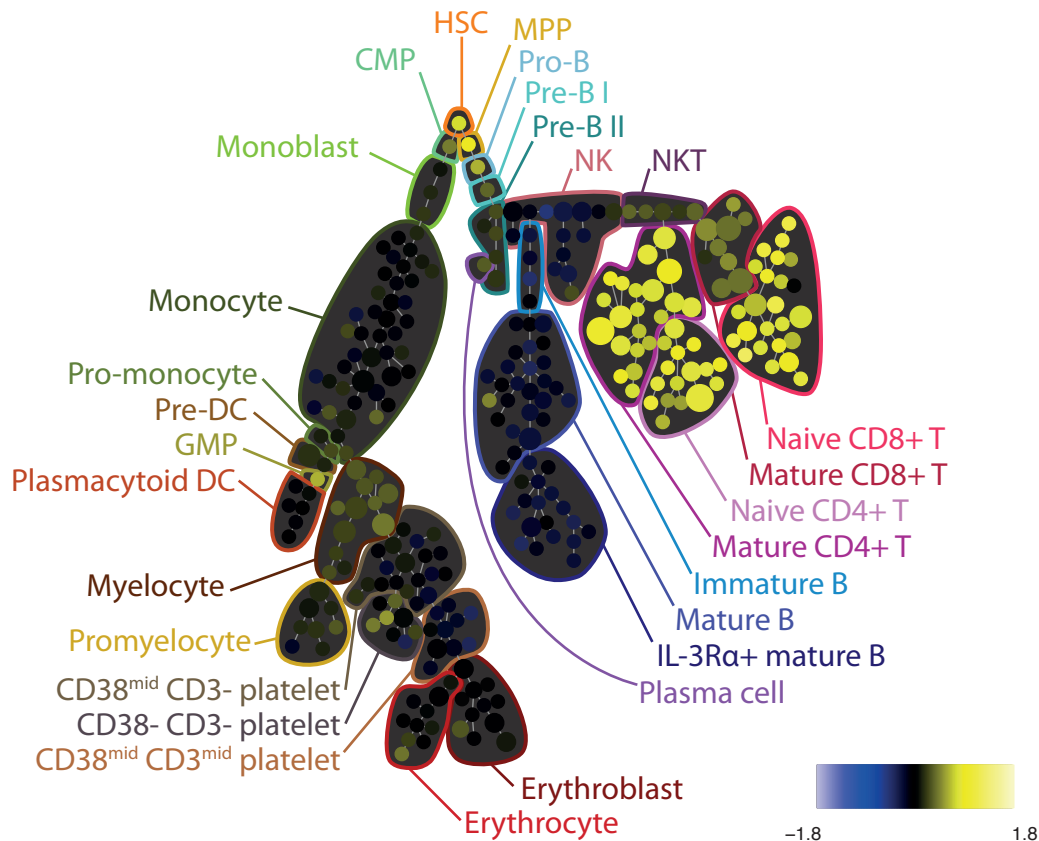


Figure S8A

172-pS6 ---- SCF vs Ref Ratio

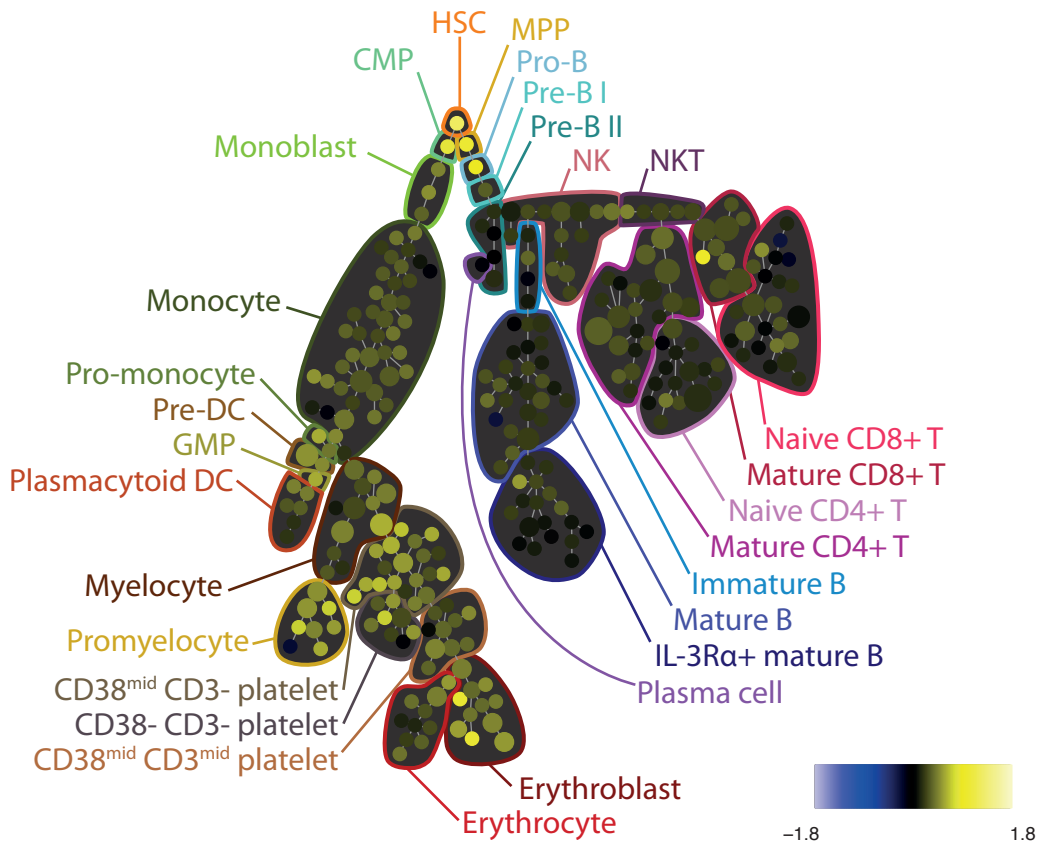


Figure S8A

172-pS6 ---- TNFa vs Ref Ratio

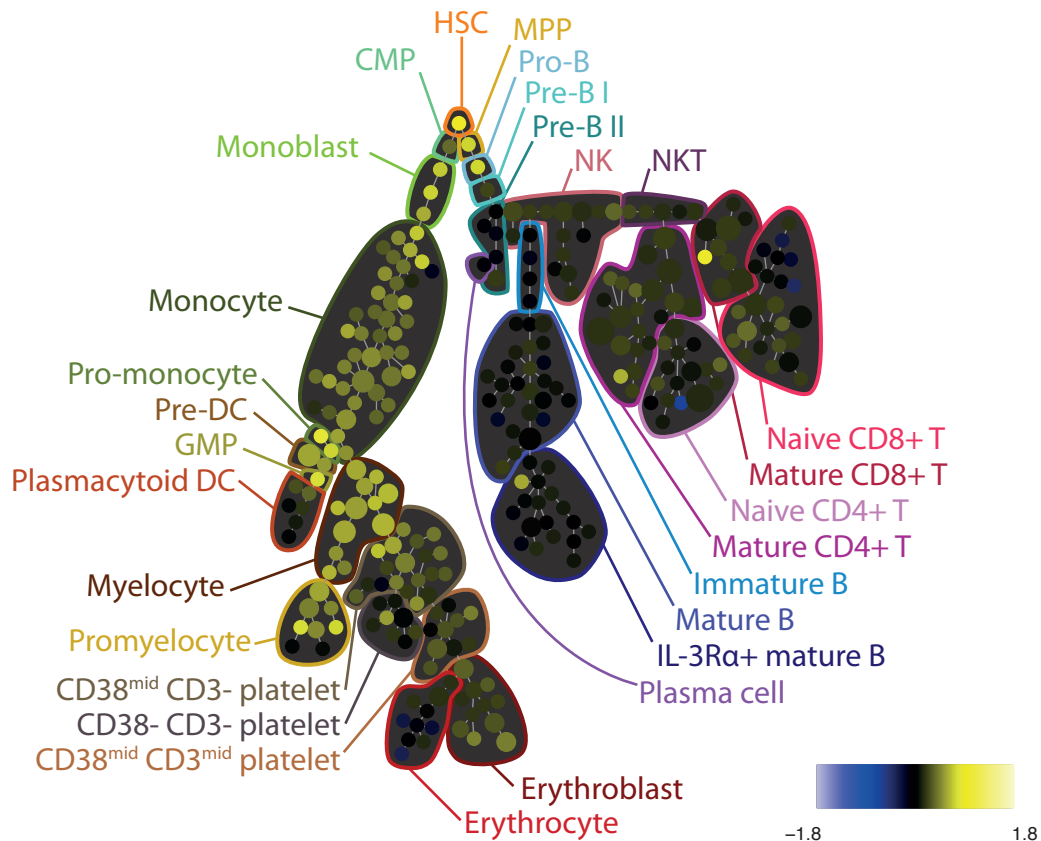


Figure S8A

172-pS6 --- TPO vs Ref Ratio

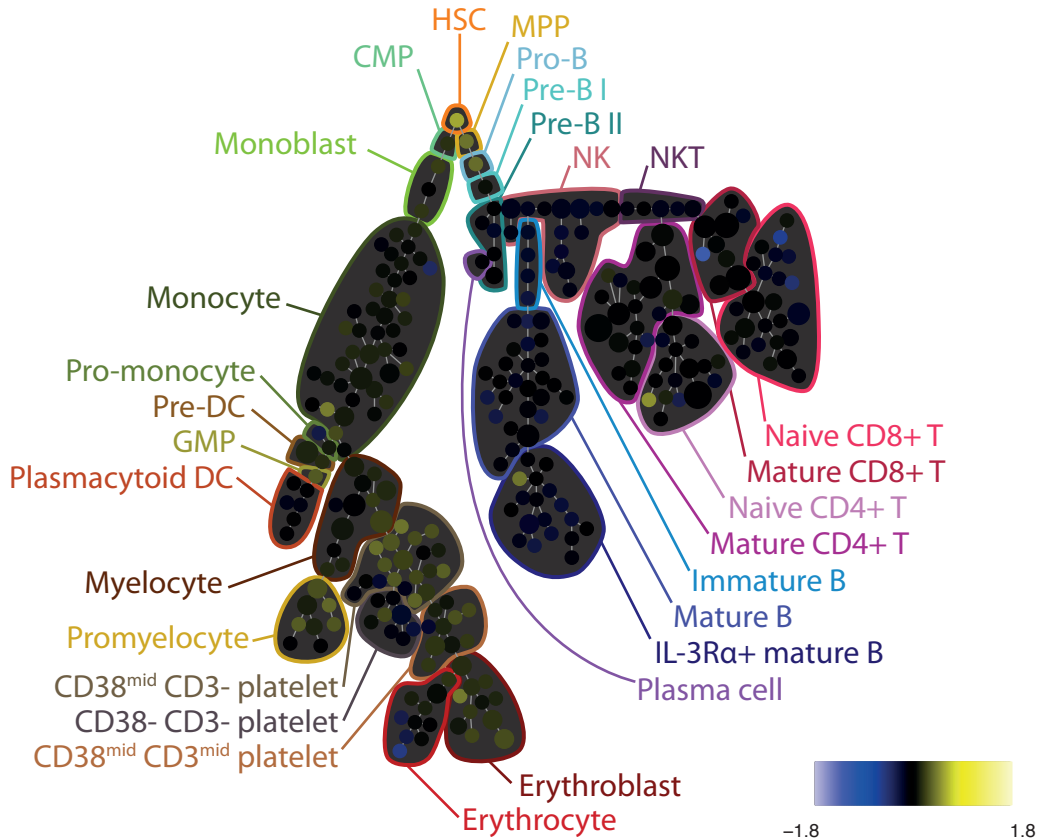


Figure S8A

174-pSrcFK ---- BCR vs Ref Ratio

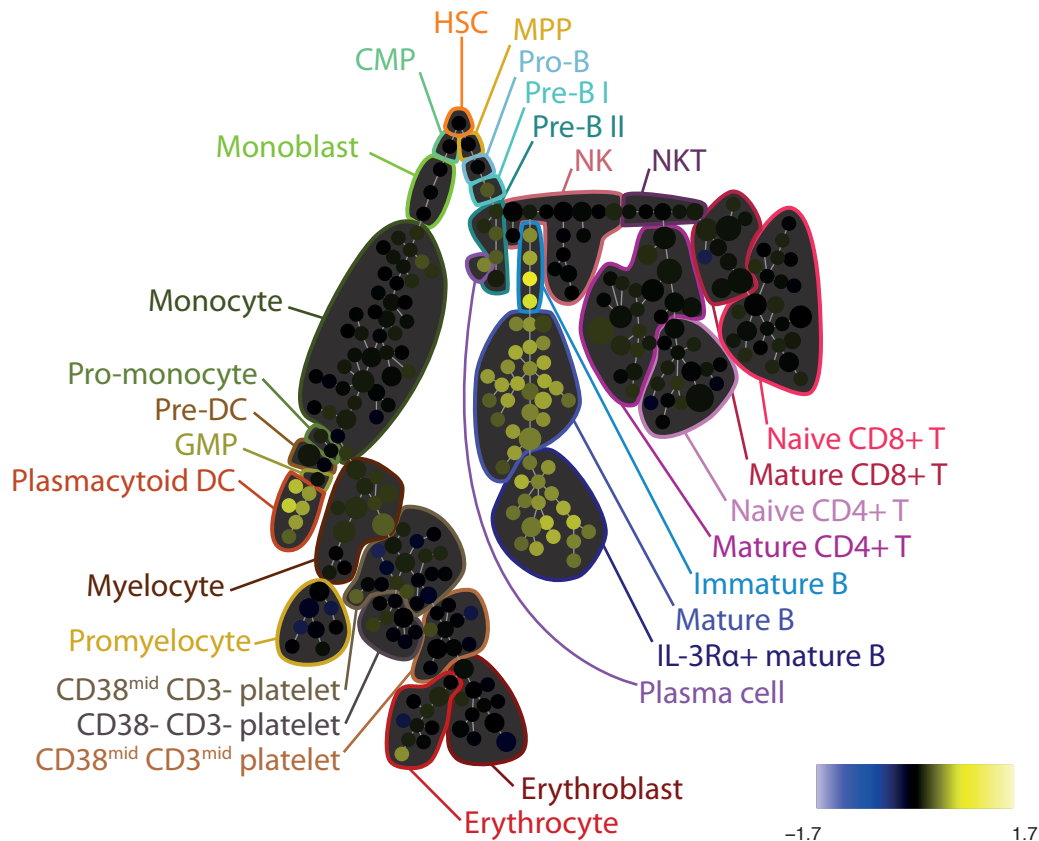


Figure S8A

174-pSrcFK ---- DMSO vs Ref Ratio

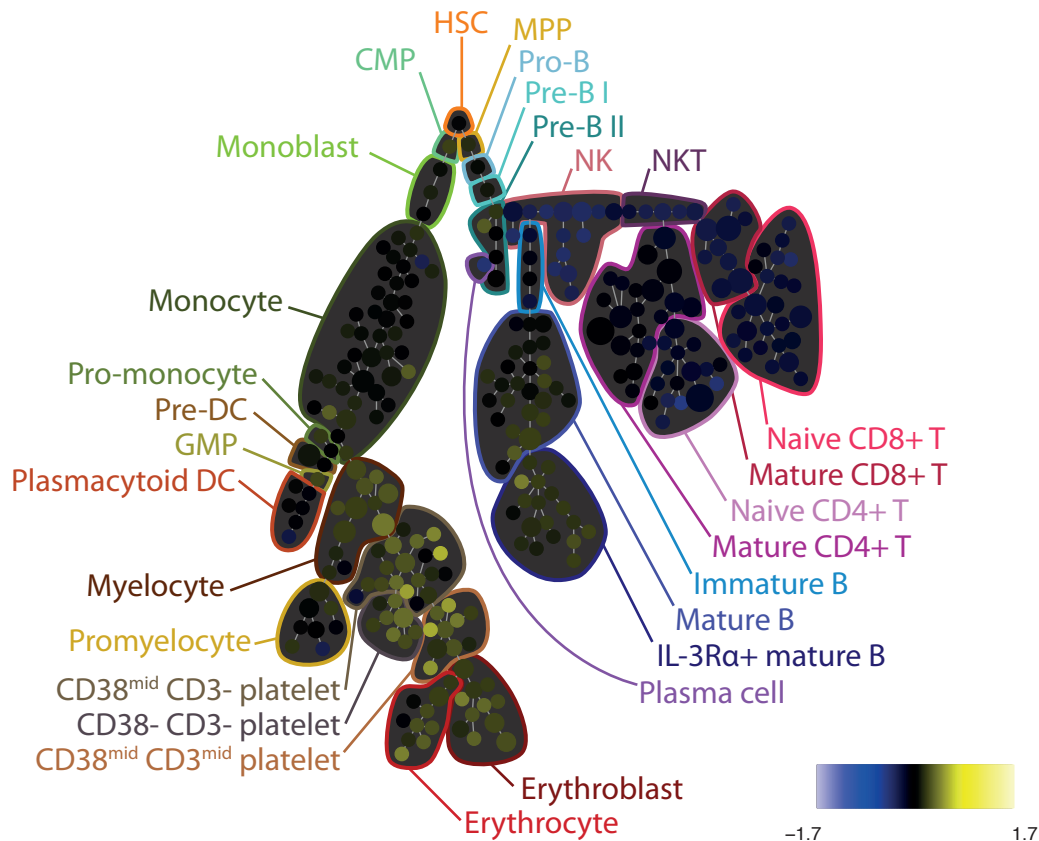


Figure S8A

174-pSrcFK ---- Flt3L vs Ref Ratio

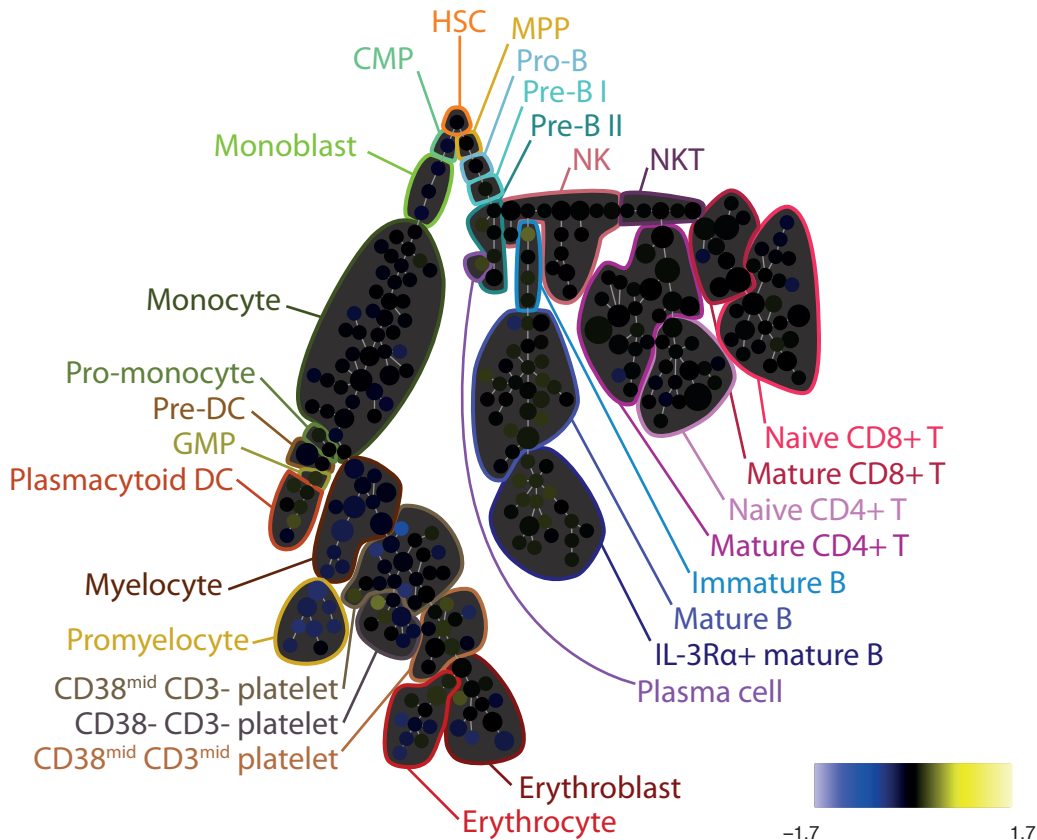


Figure S8A

174-pSrcFK ---- GCSF vs Ref Ratio

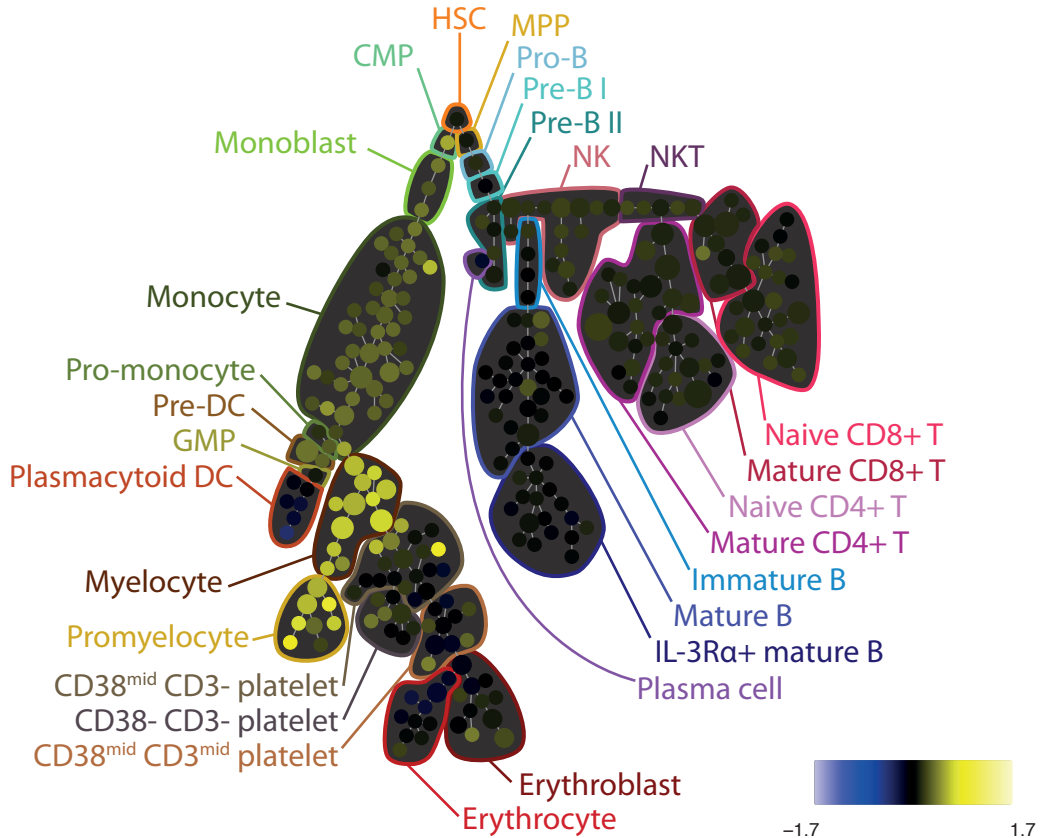


Figure S8A

174-pSrcFK ---- GMCSF vs Ref Ratio

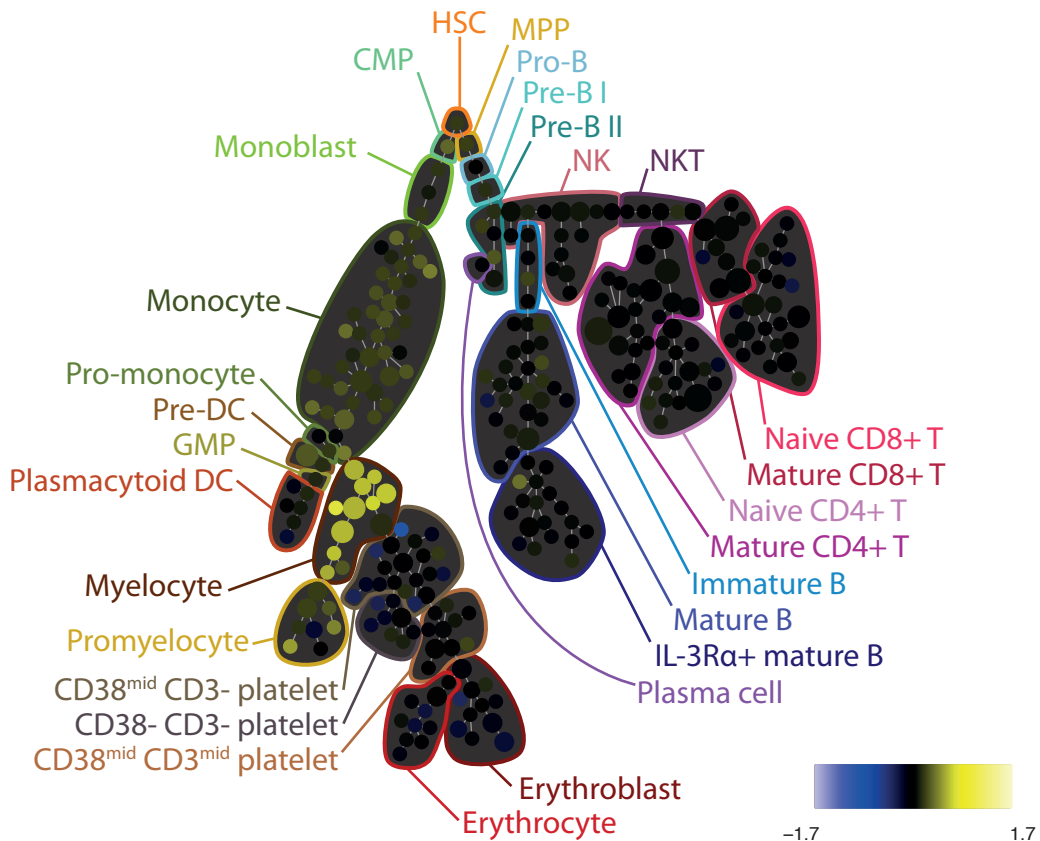


Figure S8A

174-pSrcFK ---- IFNad vs Ref Ratio

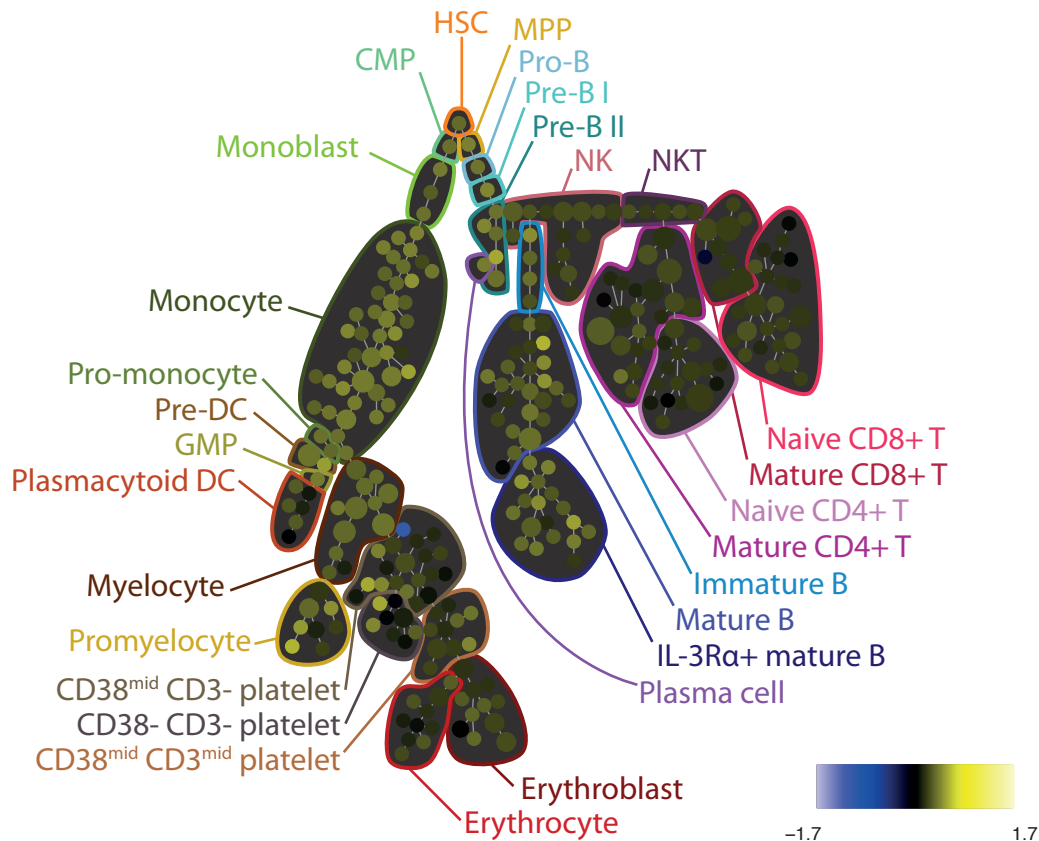


Figure S8A

174-pSrcFK — IL3 vs Ref Ratio

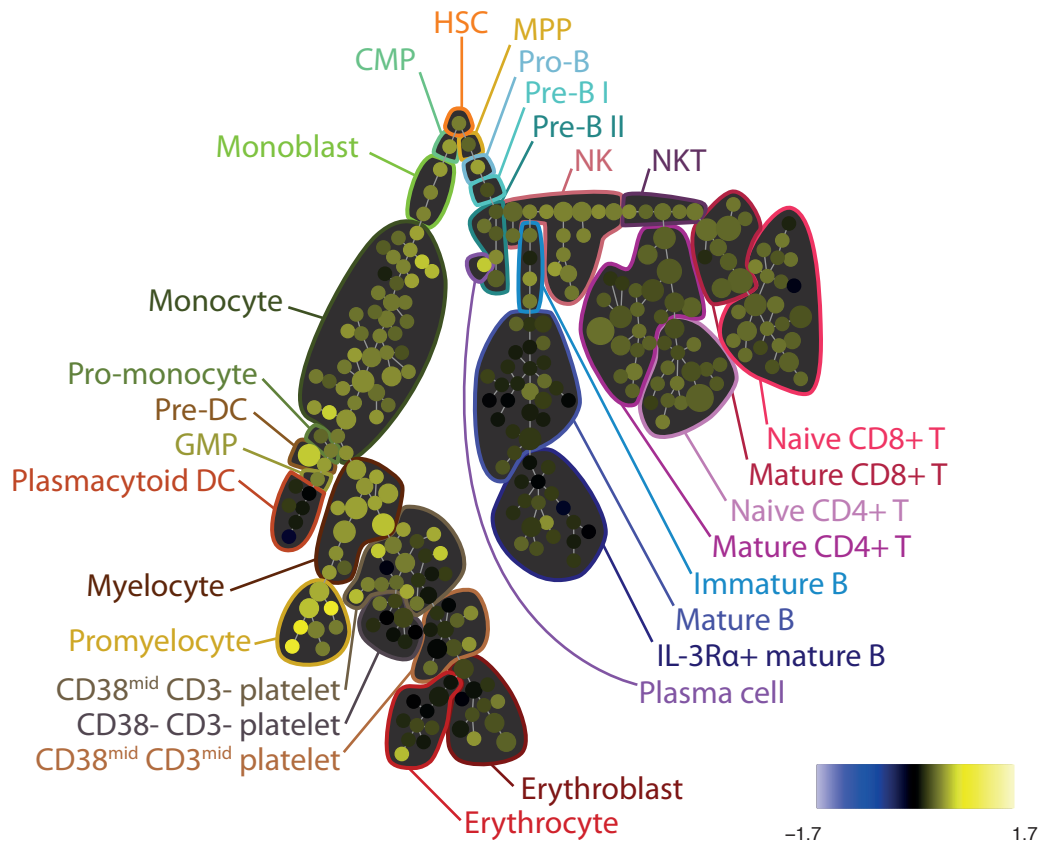


Figure S8A

174-pSrcFK — IL7 vs Ref Ratio

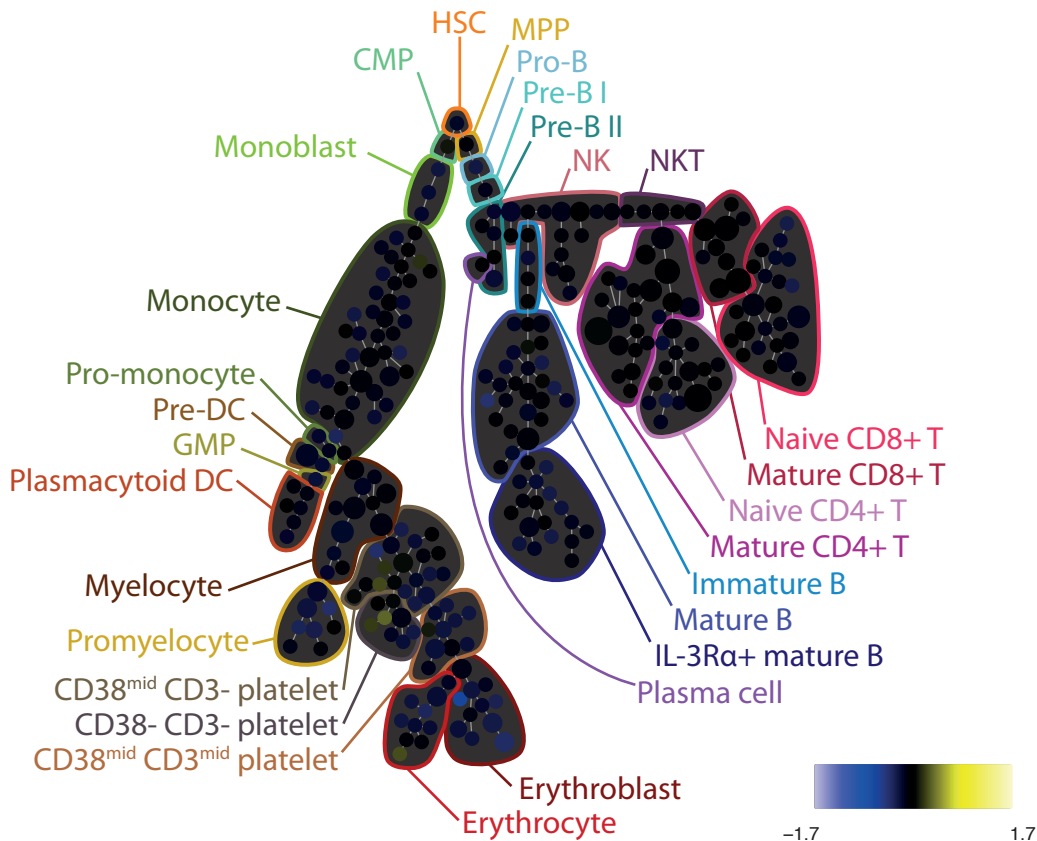


Figure S8A

174-pSrcFK ---- LPS vs Ref Ratio

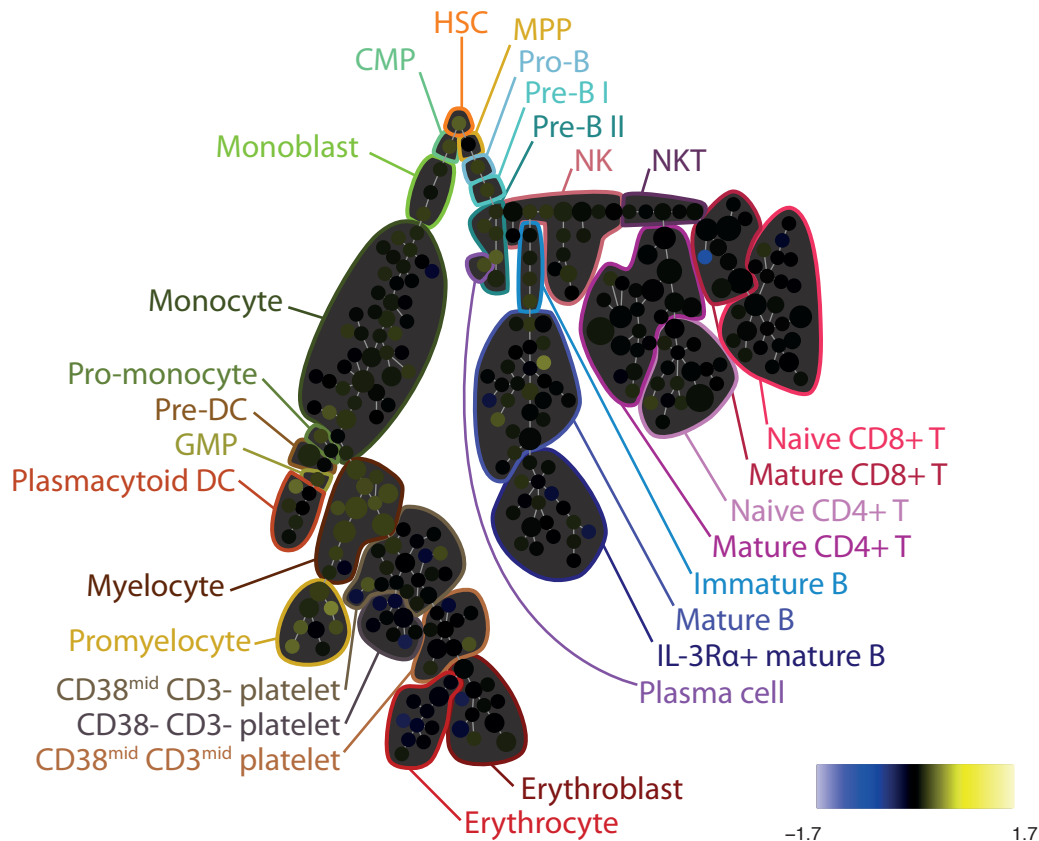


Figure S8A

174-pSrcFK ---- PMAiono vs Ref Ratio

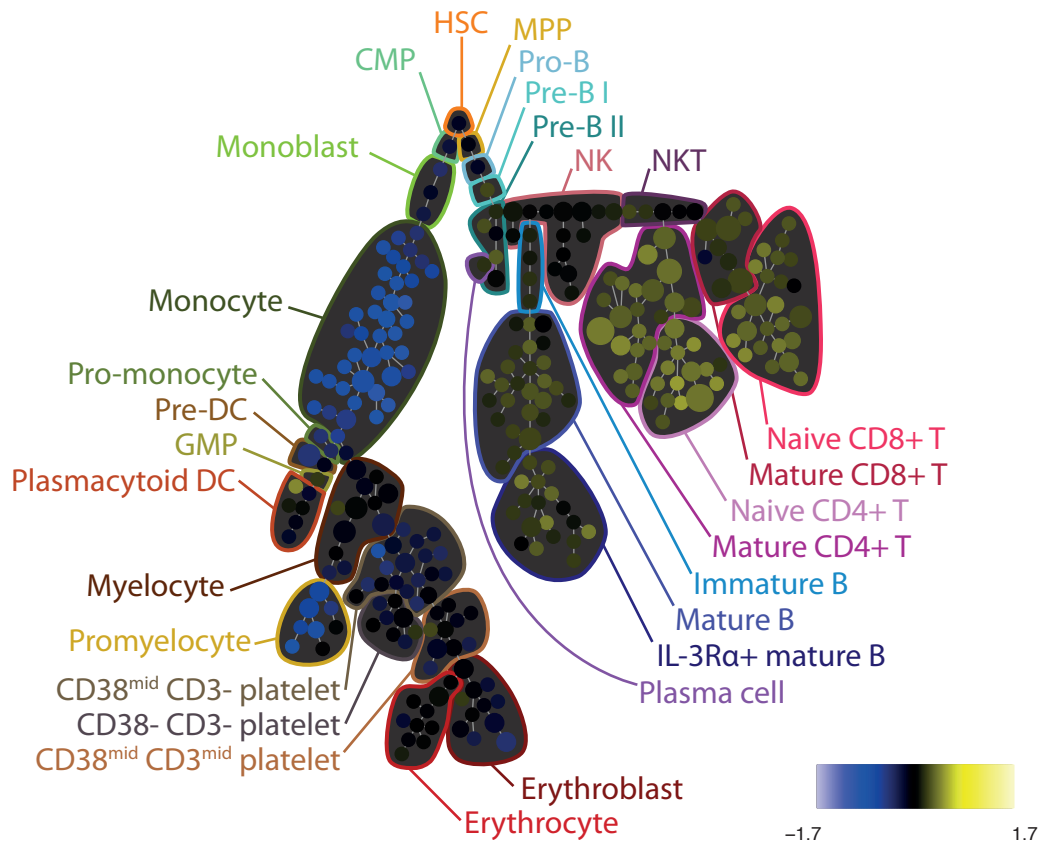


Figure S8A

174-pSrcFK — PVO4 vs Ref Ratio

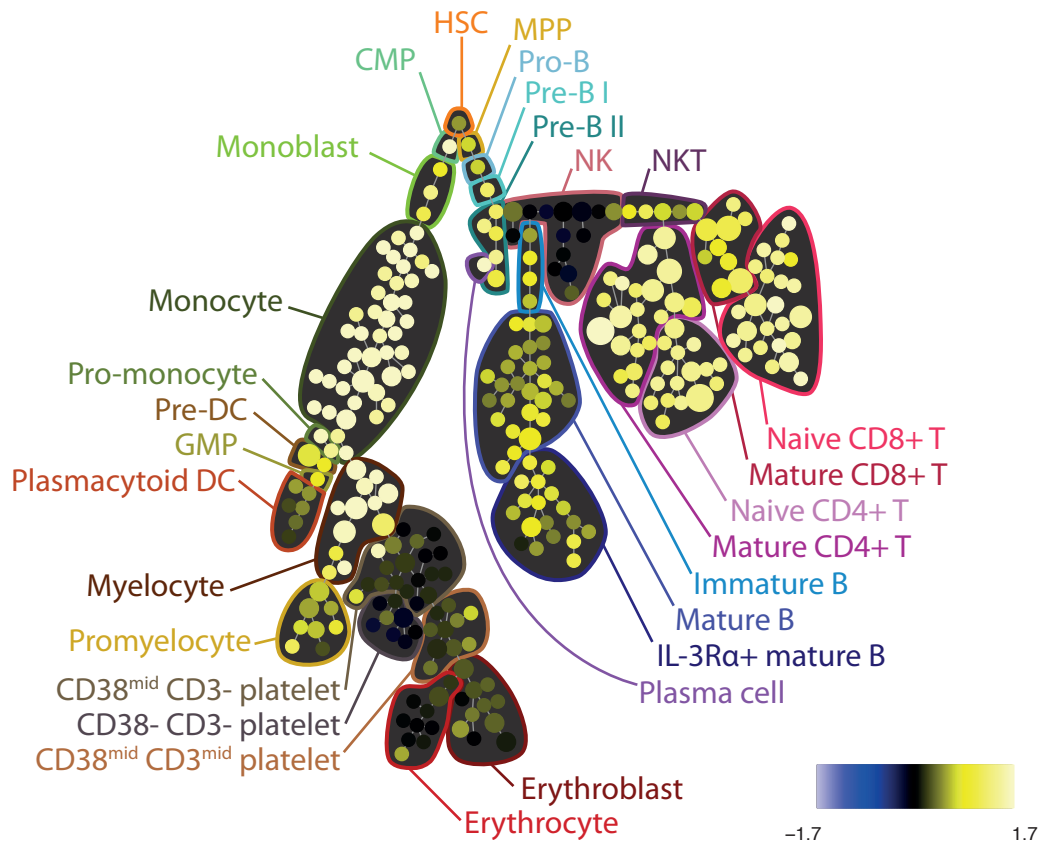


Figure S8A

174-pSrcFK ---- SCF vs Ref Ratio

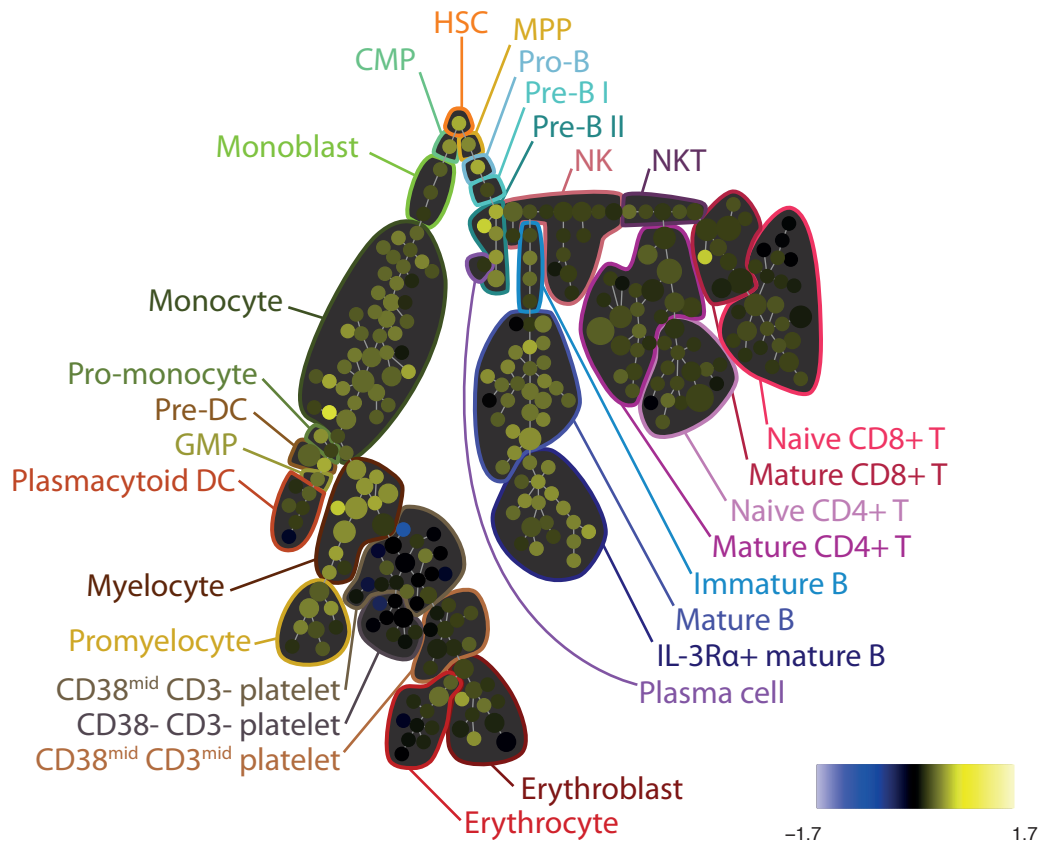


Figure S8A

174-pSrcFK ---- TNFa vs Ref Ratio

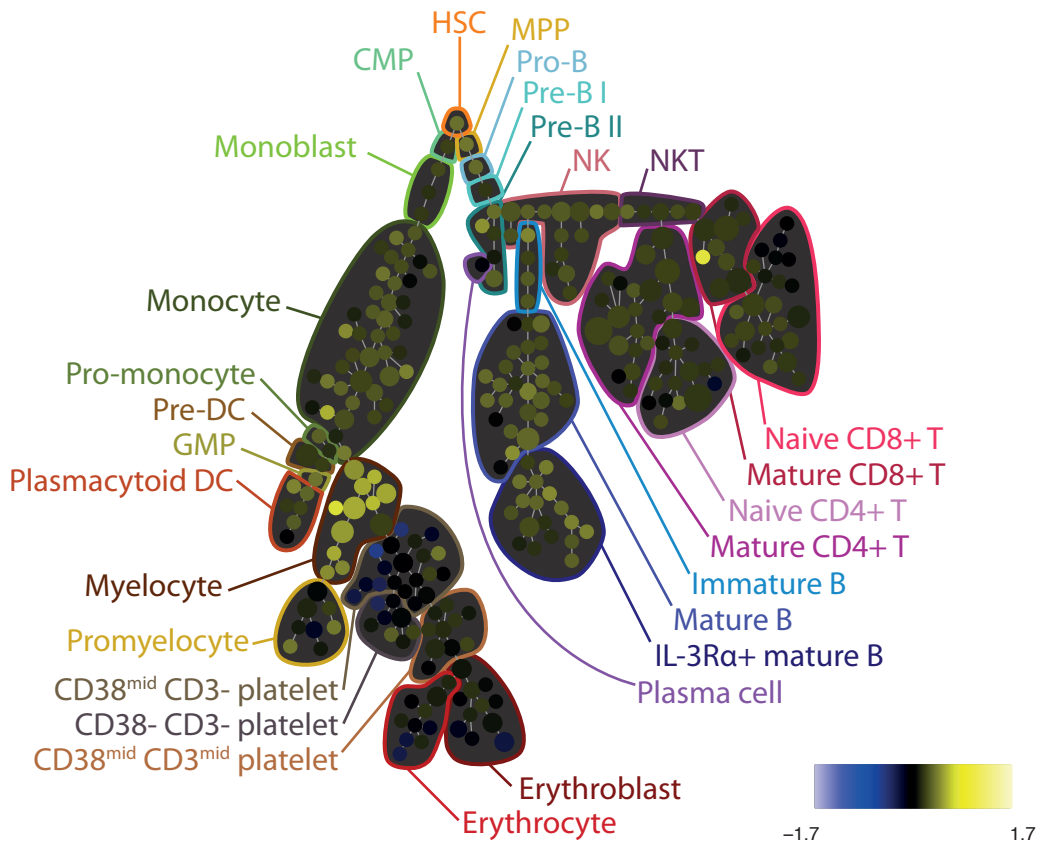


Figure S8A

174-pSrcFK ---- TPO vs Ref Ratio

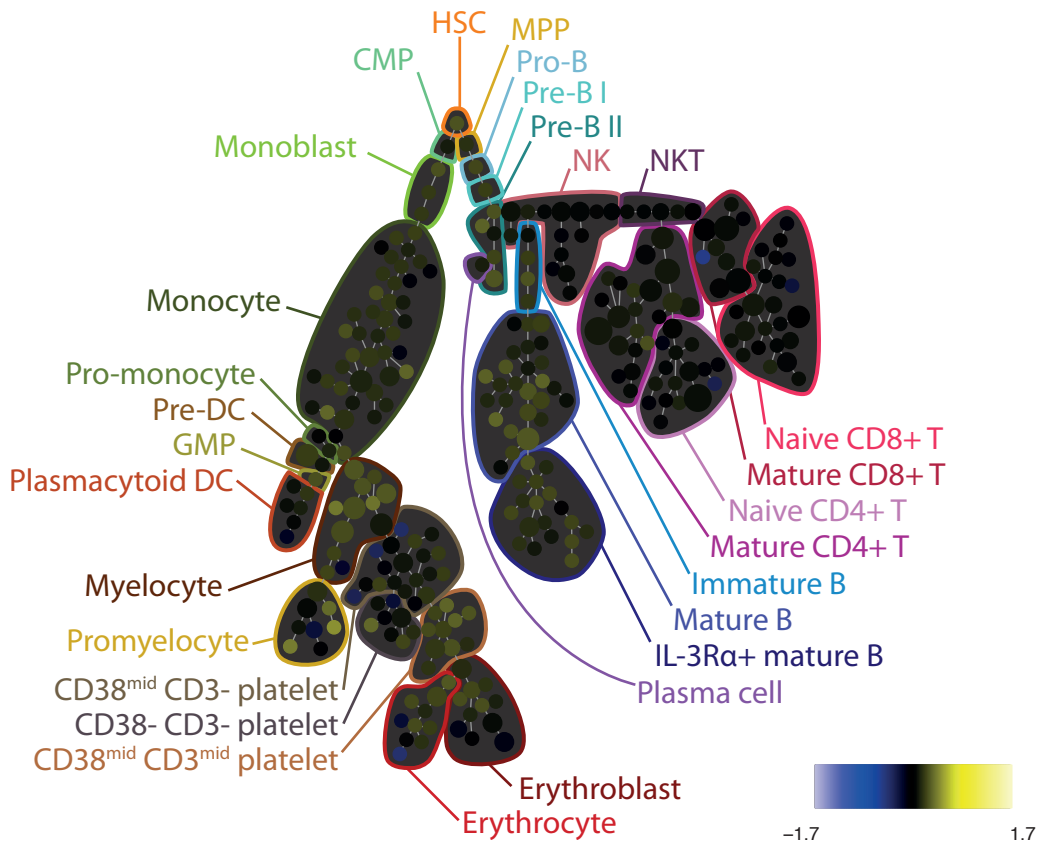


Figure S8A

175-pCrkL ---- BCR vs Ref Ratio

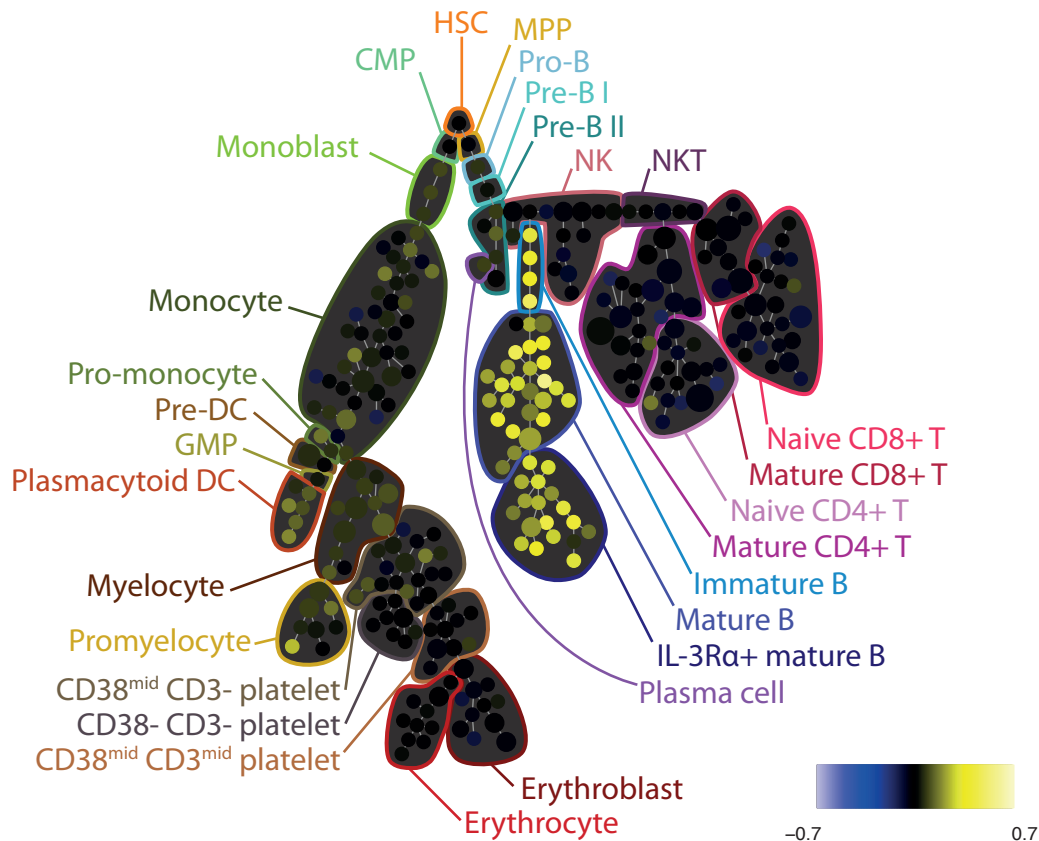


Figure S8A

175-pCrkL ---- DMSO vs Ref Ratio

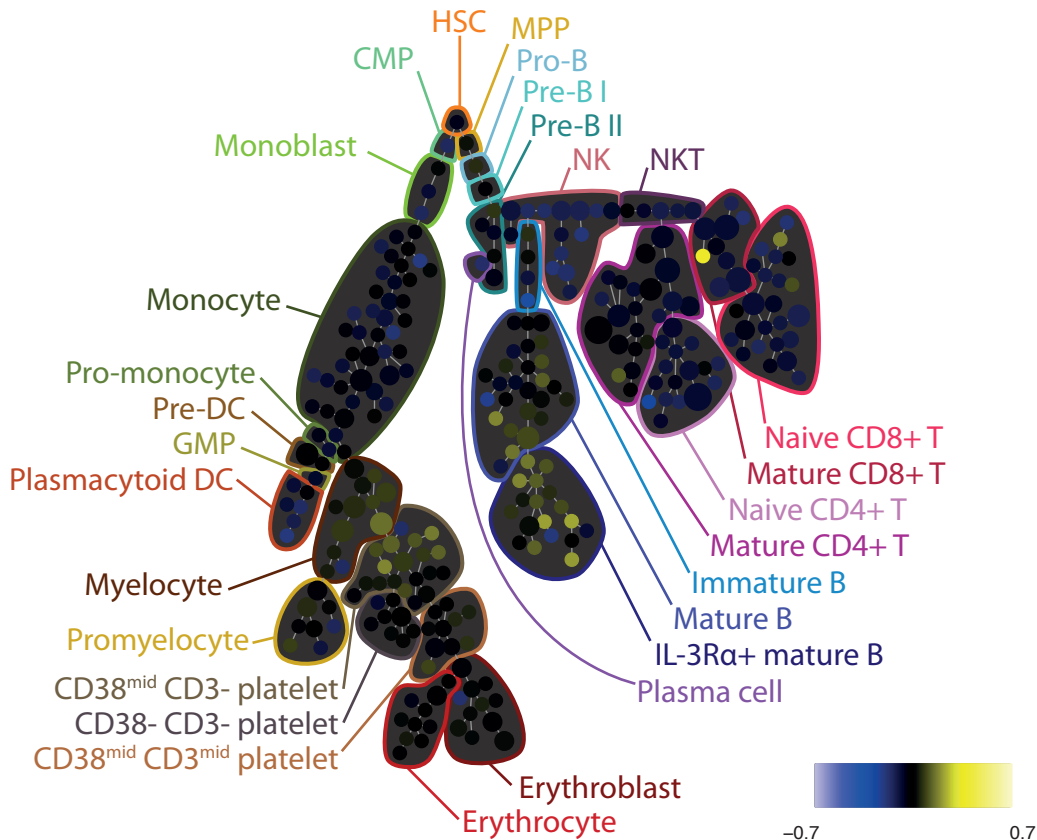


Figure S8A

175-pCrkL ---- Flt3L vs Ref Ratio

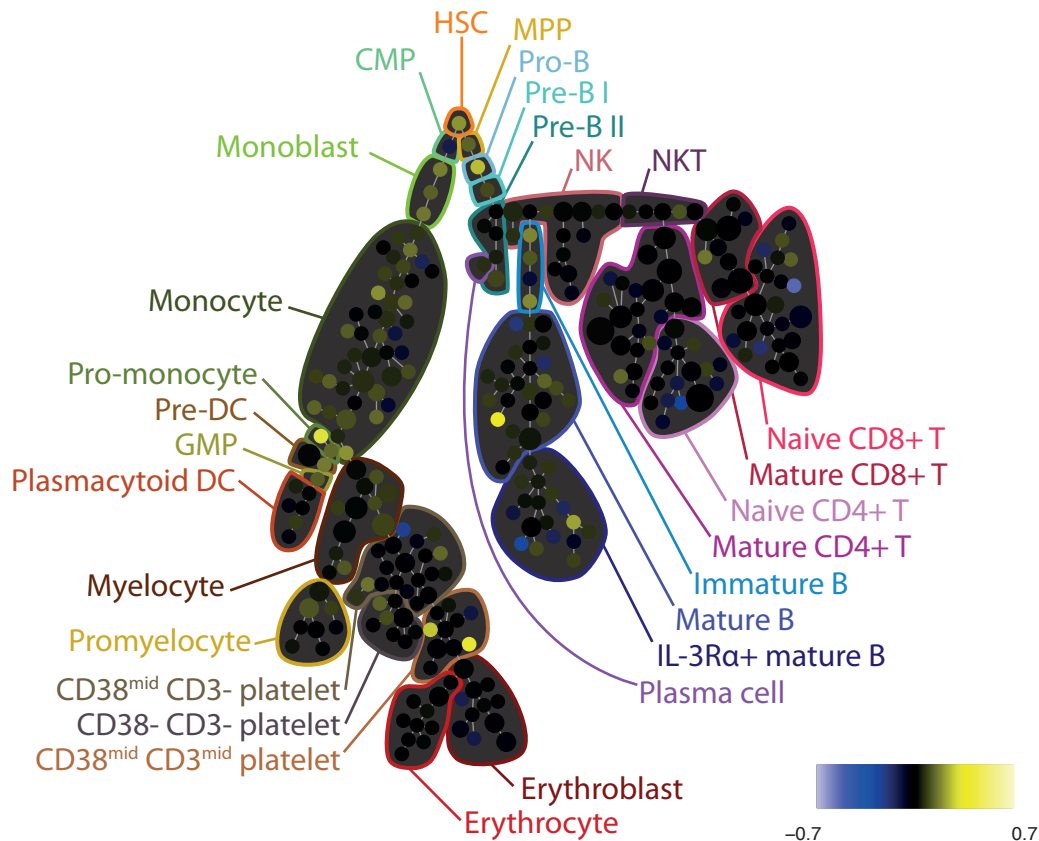


Figure S8A

175-pCrkL --- GCSF vs Ref Ratio

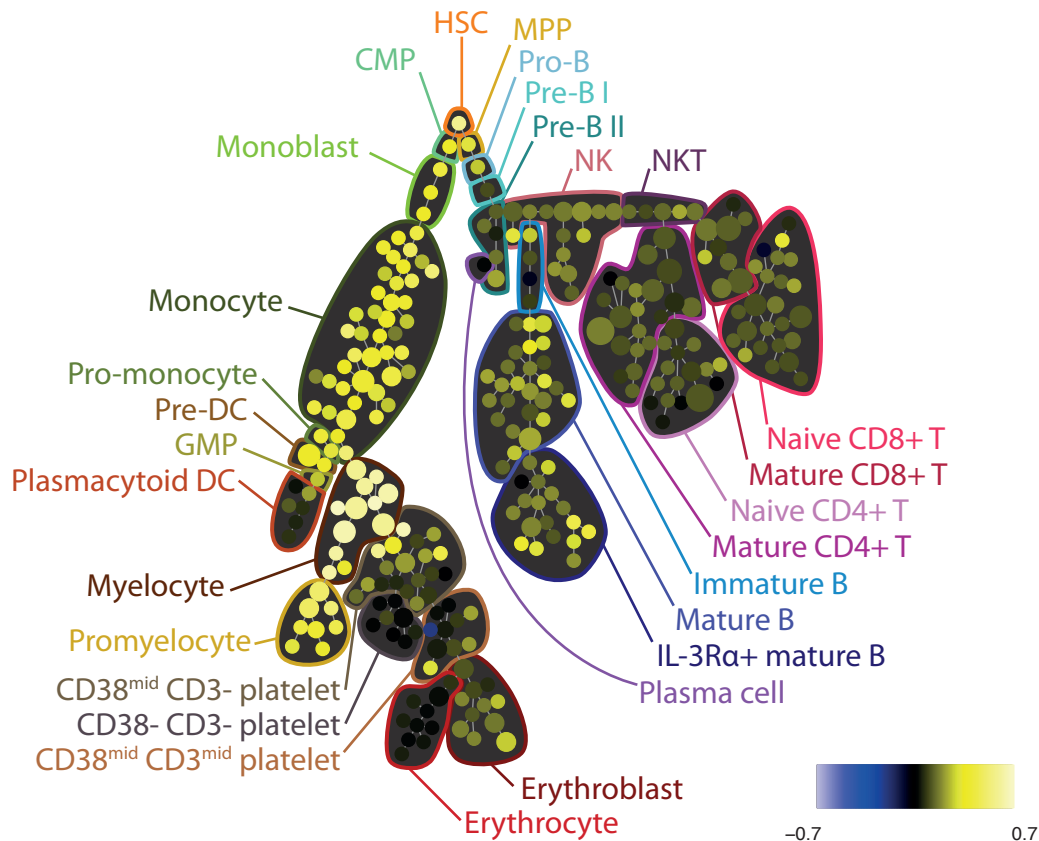


Figure S8A

175-pCrkL ---- GMCSF vs Ref Ratio

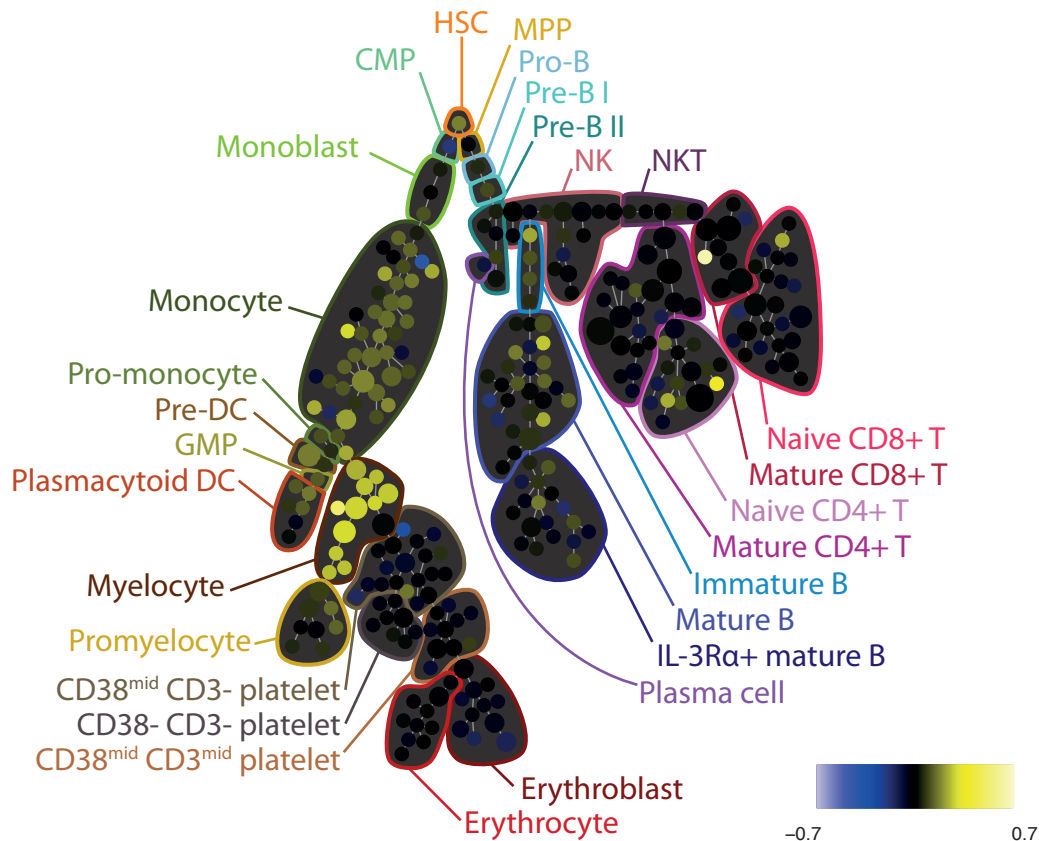


Figure S8A

175-pCrkL ---- IFNad vs Ref Ratio

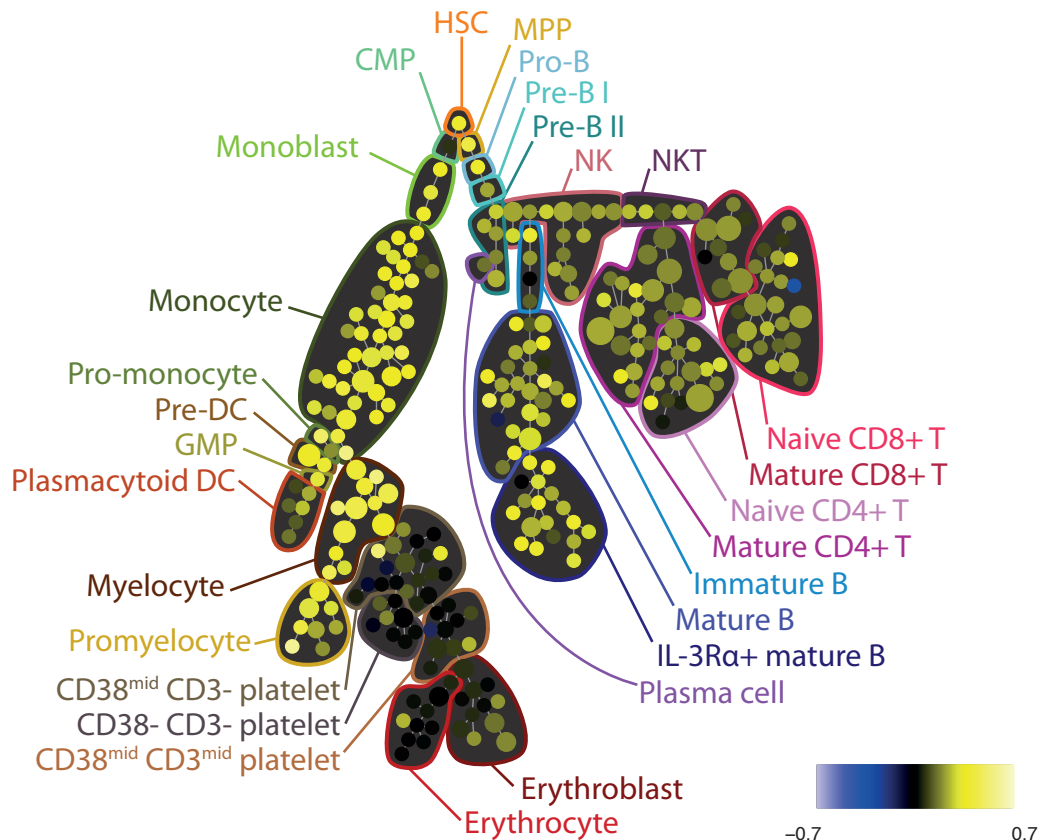


Figure S8A

175-pCrkL ---- IL3 vs Ref Ratio

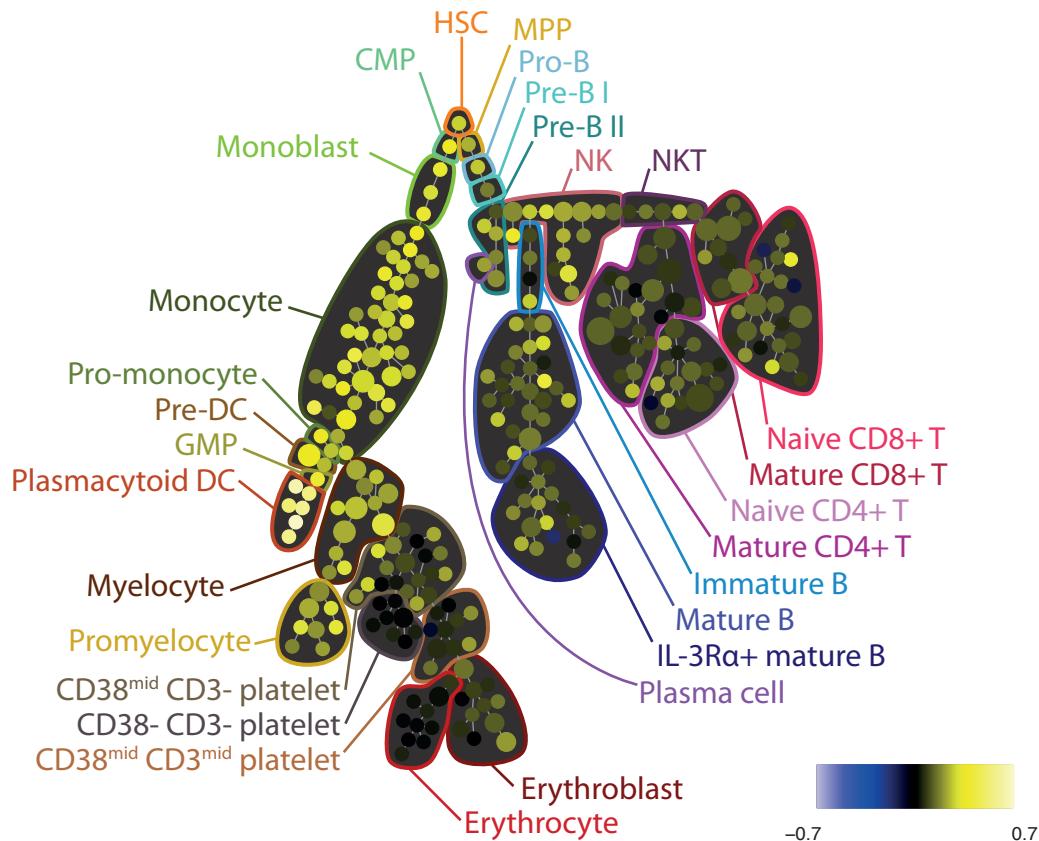


Figure S8A

175-pCrkL ---- IL7 vs Ref Ratio

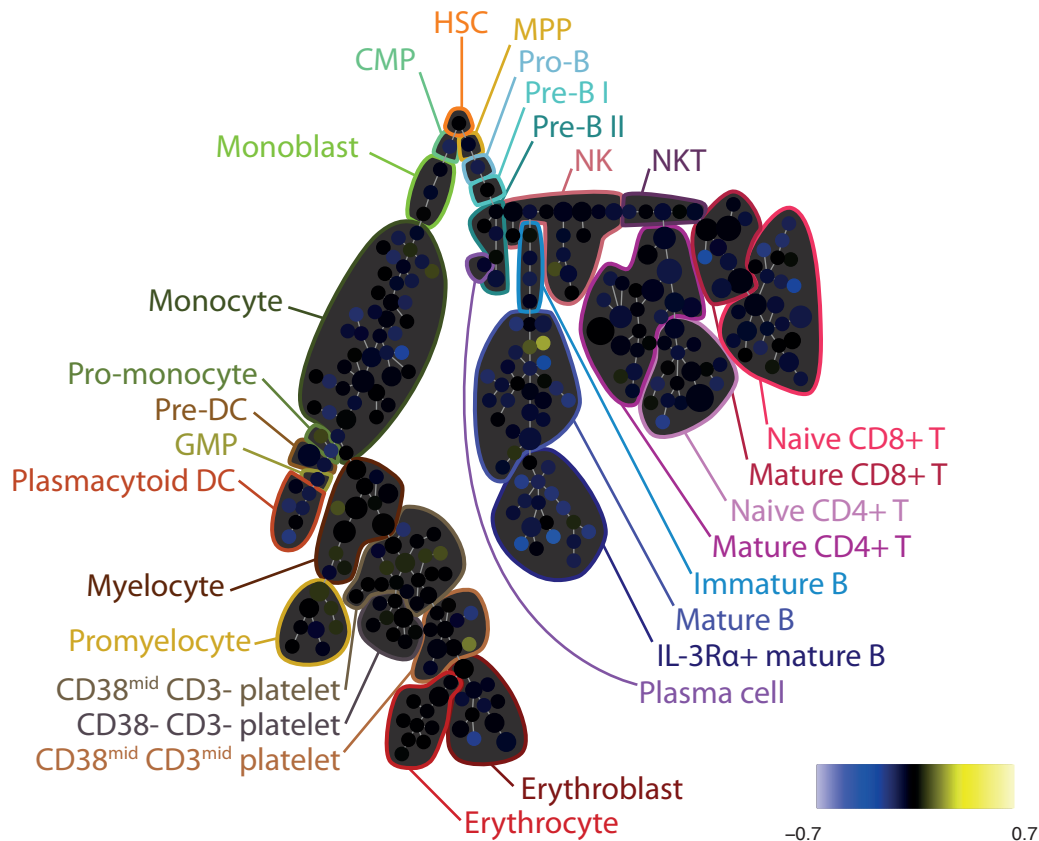


Figure S8A

175-pCrkL ---- LPS vs Ref Ratio

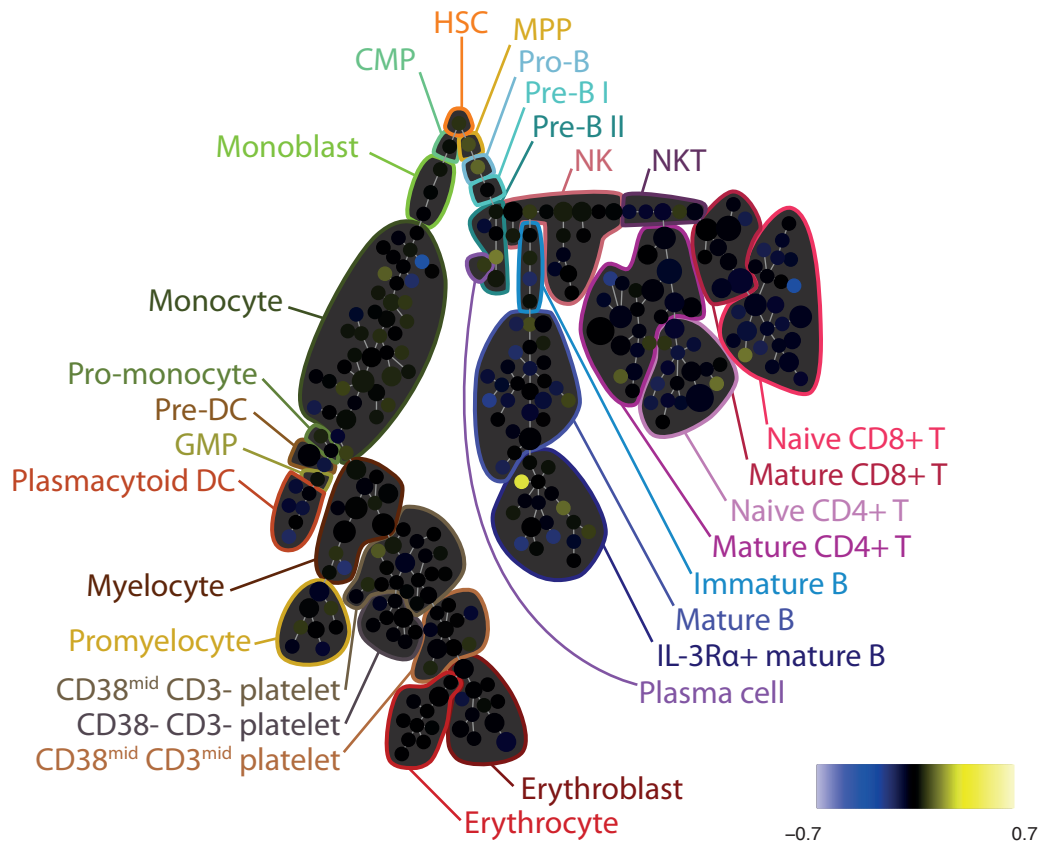


Figure S8A

175-pCrkL ---- PMAiono vs Ref Ratio

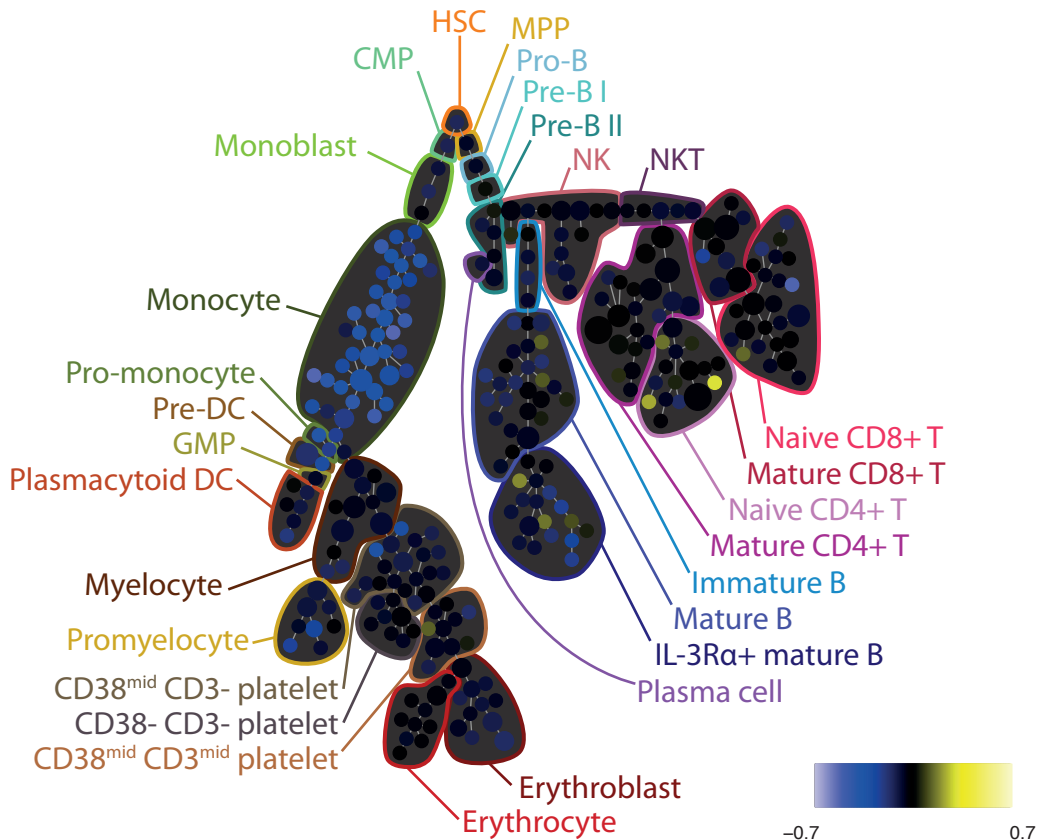


Figure S8A

175-pCrkL ---- PVO4 vs Ref Ratio

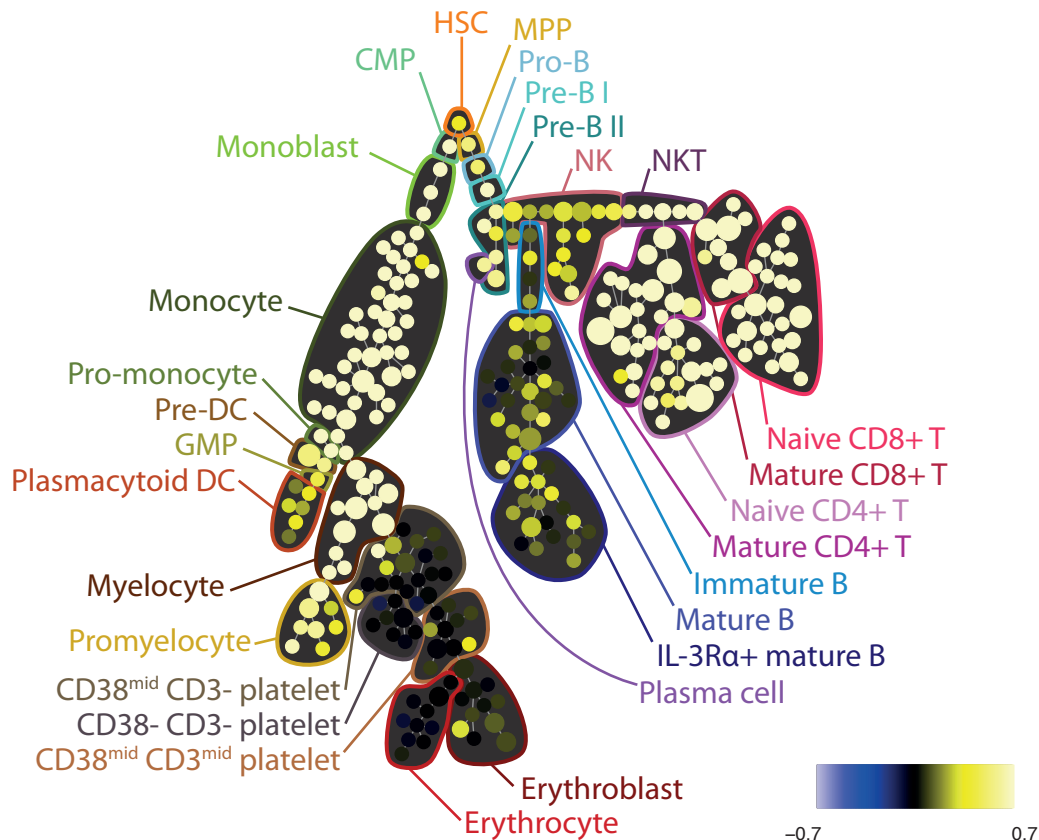


Figure S8A

175-pCrkL ---- SCF vs Ref Ratio

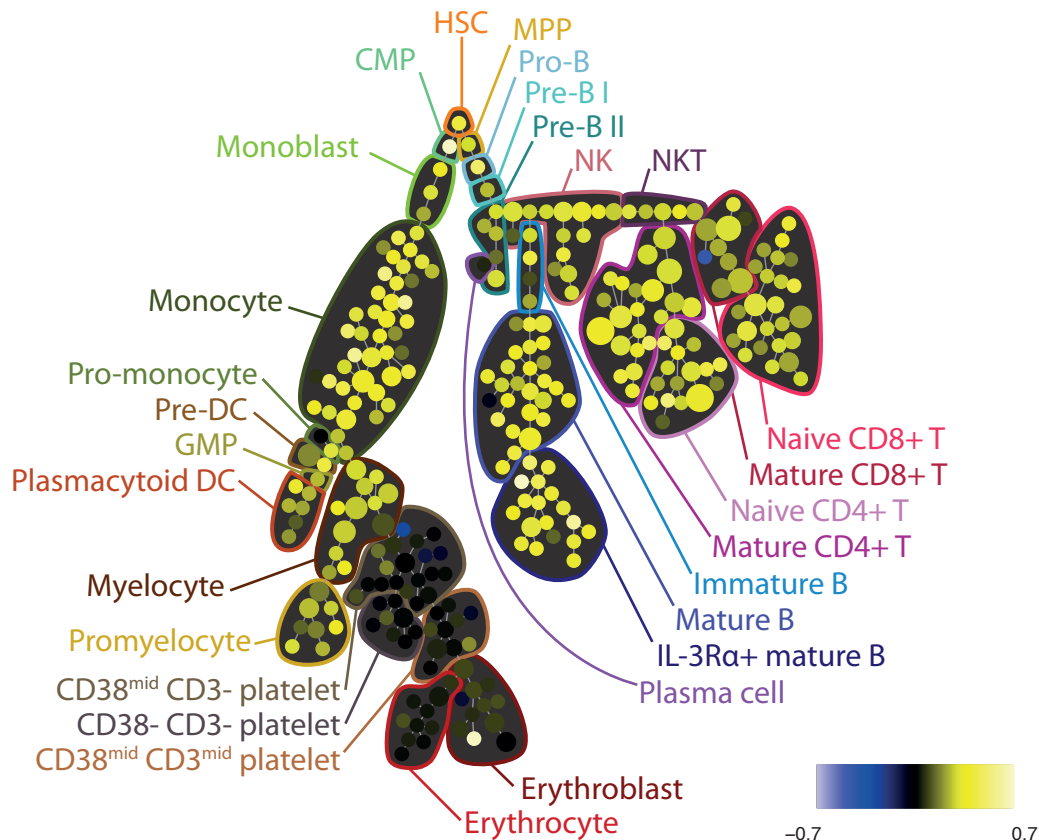


Figure S8A

175-pCrkL --- TNFa vs Ref Ratio

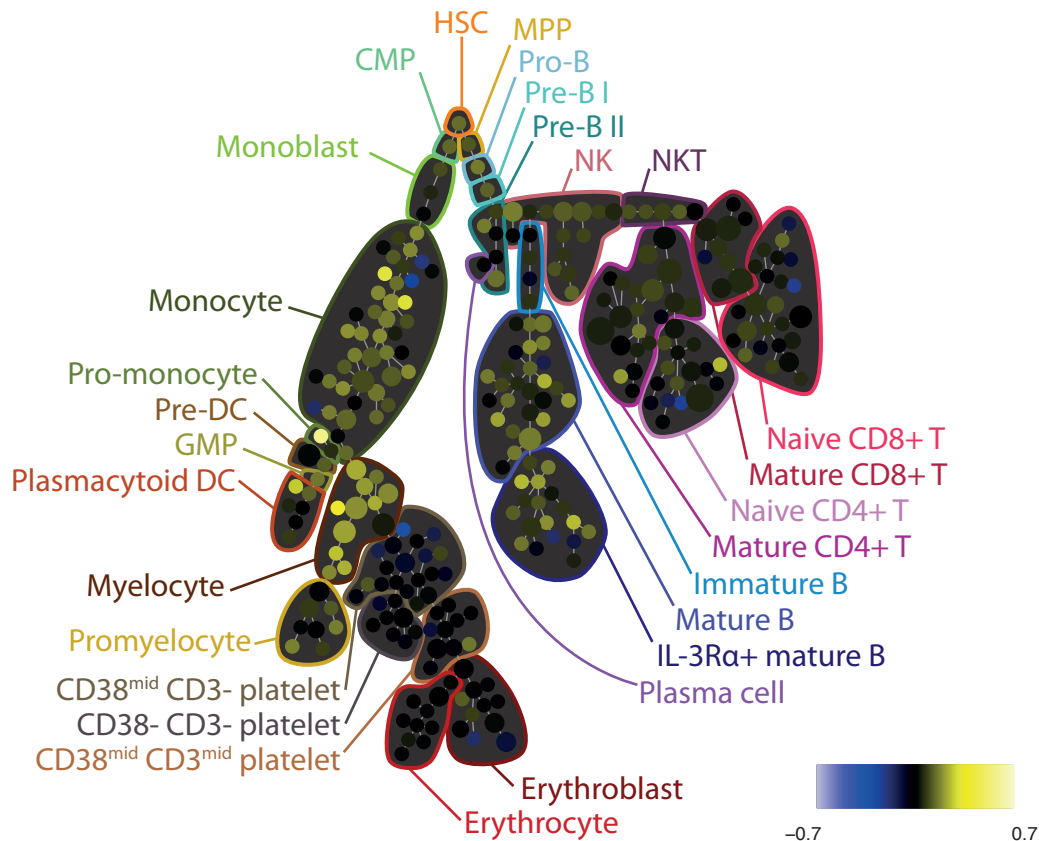


Figure S8A

175-pCrkL ---- TPO vs Ref Ratio

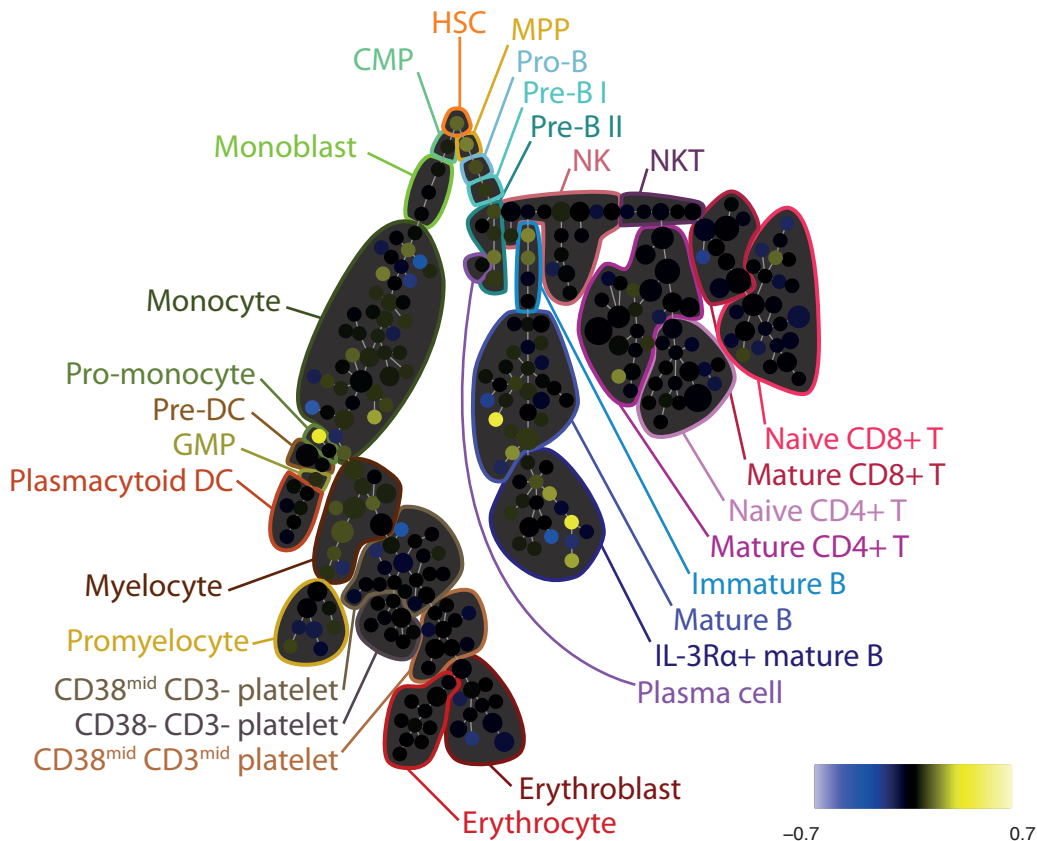


Figure S8A

176-pCREB ---- BCR vs Ref Ratio

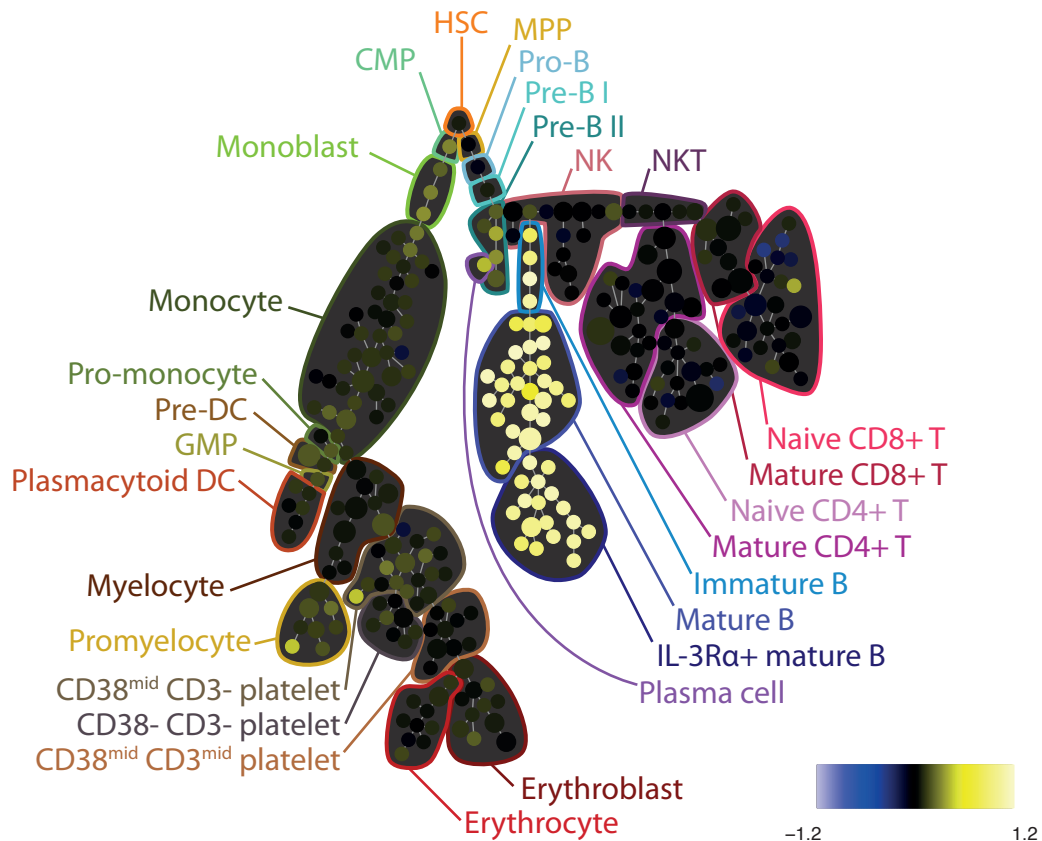


Figure S8A

176-pCREB ---- DMSO vs Ref Ratio

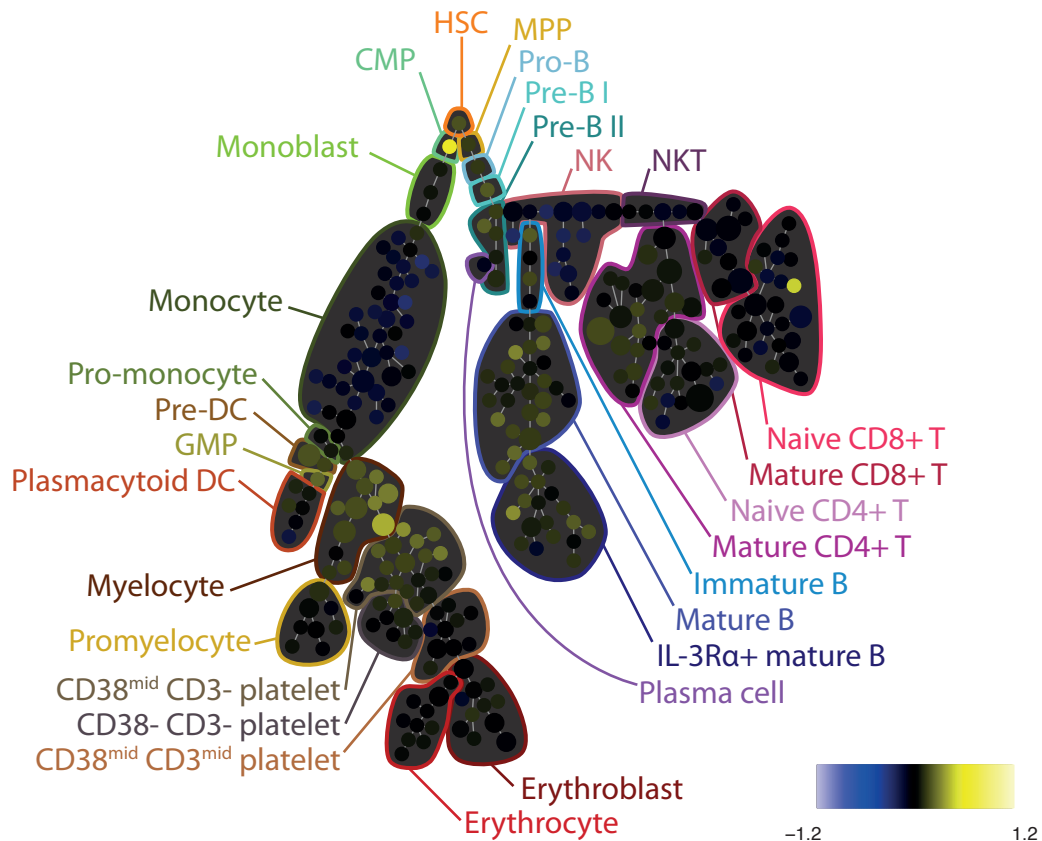


Figure S8A

176-pCREB ---- Flt3L vs Ref Ratio

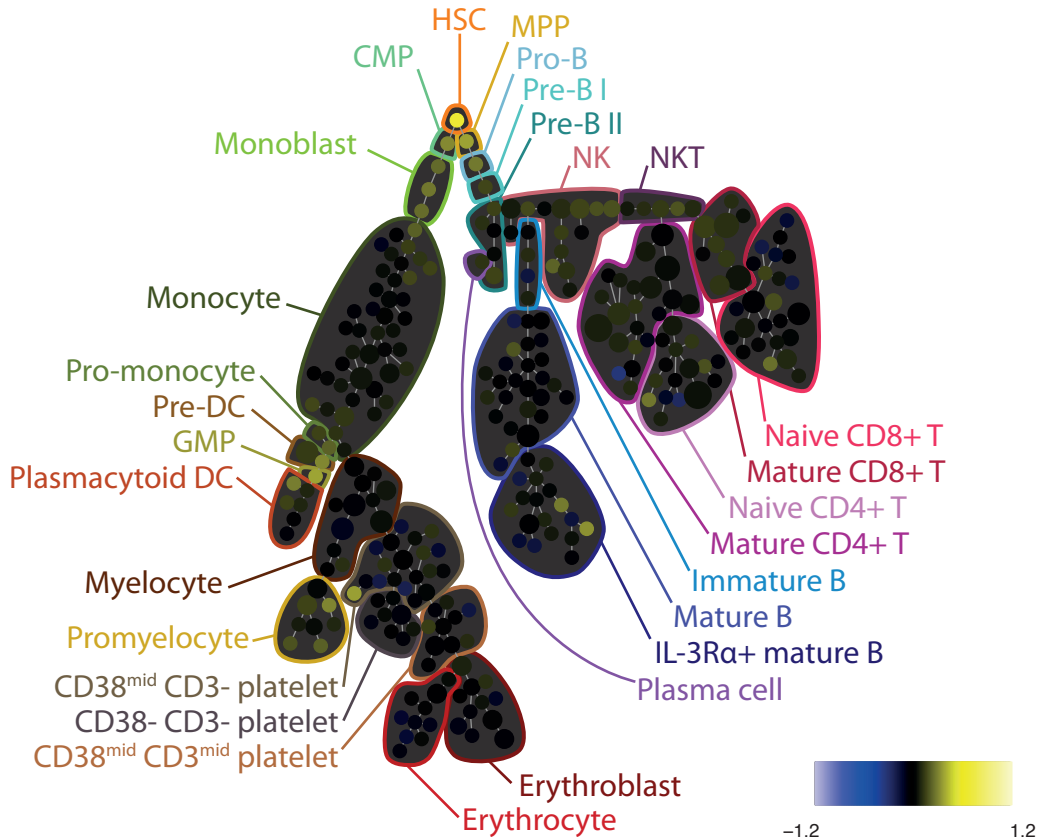


Figure S8A

176-pCREB ---- GCSF vs Ref Ratio

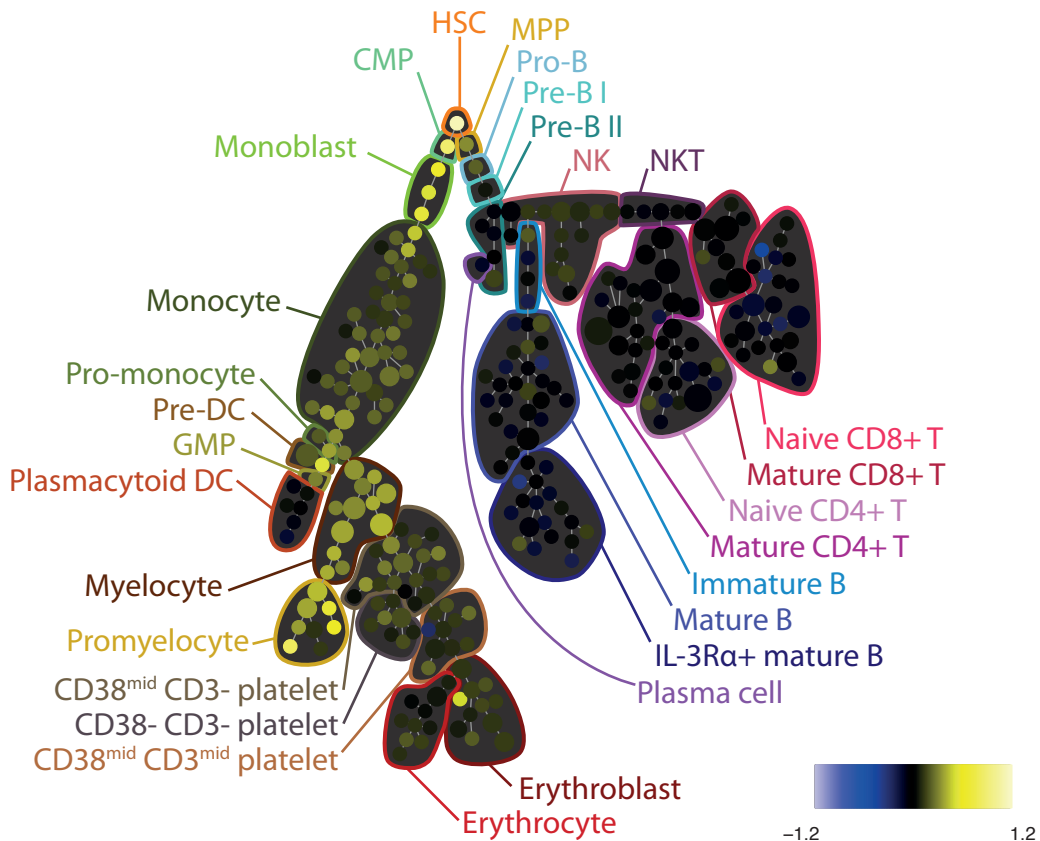


Figure S8A

176-pCREB ---- GMCSF vs Ref Ratio

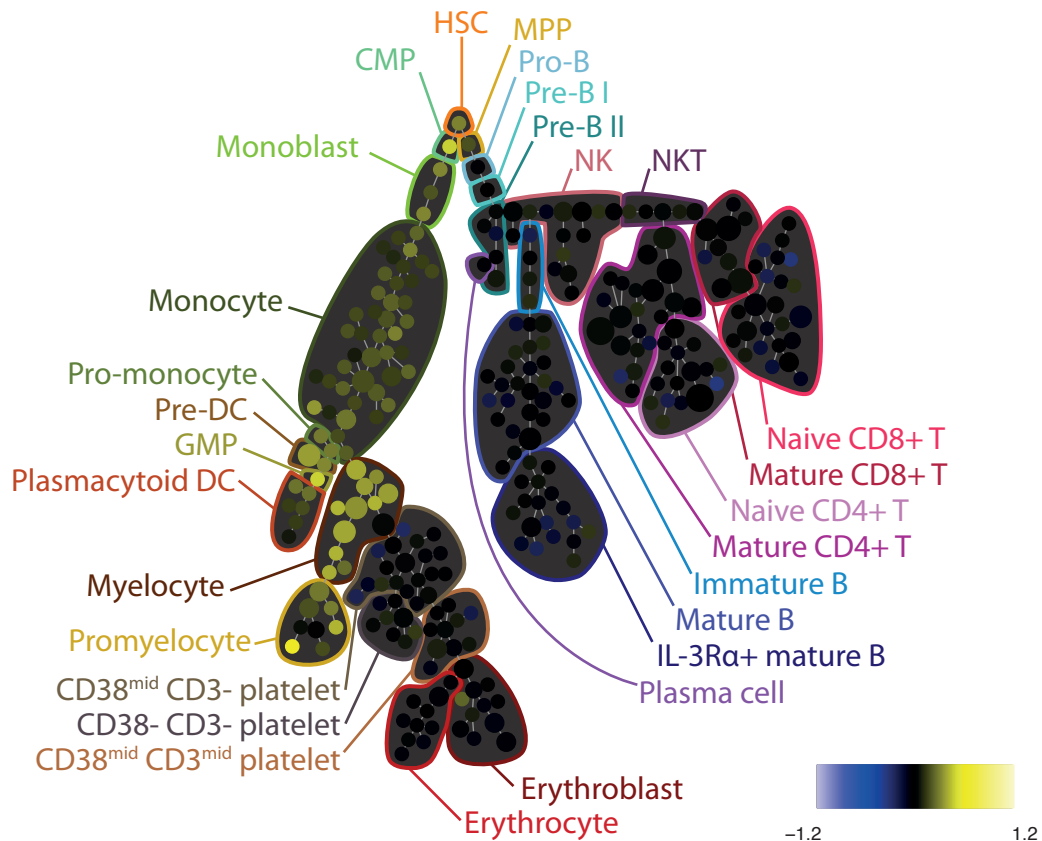


Figure S8A

176-pCREB ---- IFNad vs Ref Ratio

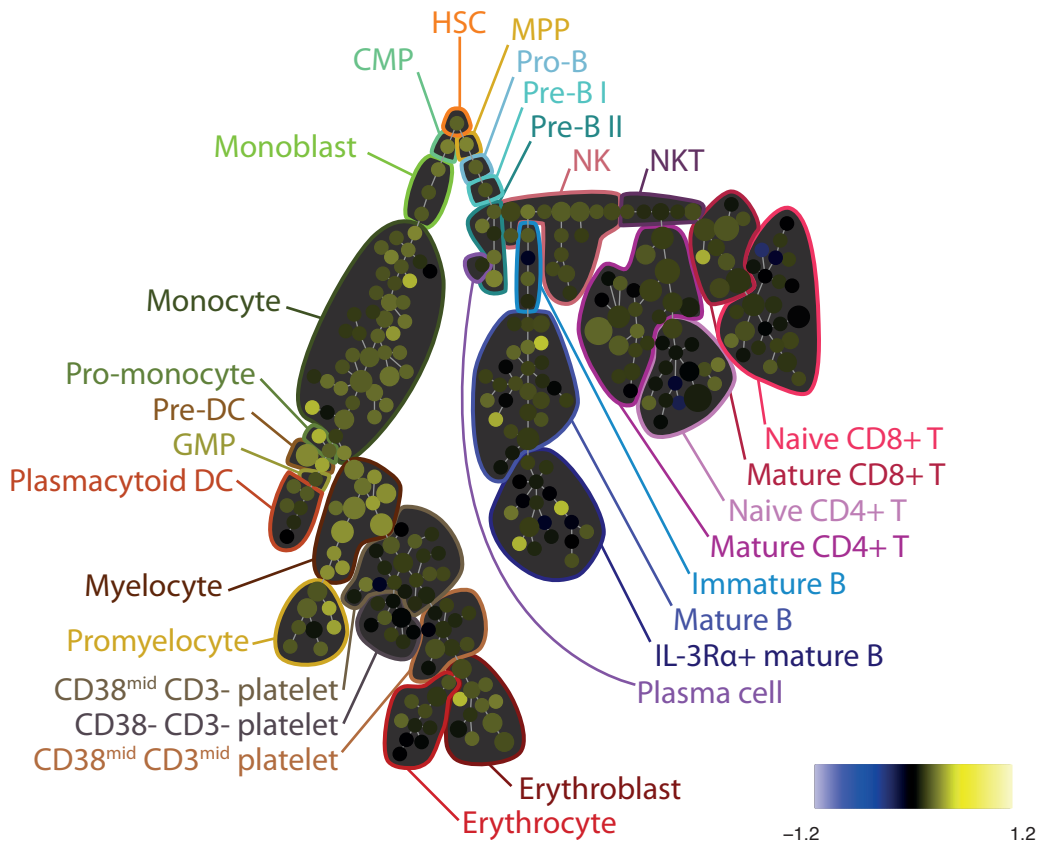


Figure S8A

176-pCREB — IL3 vs Ref Ratio

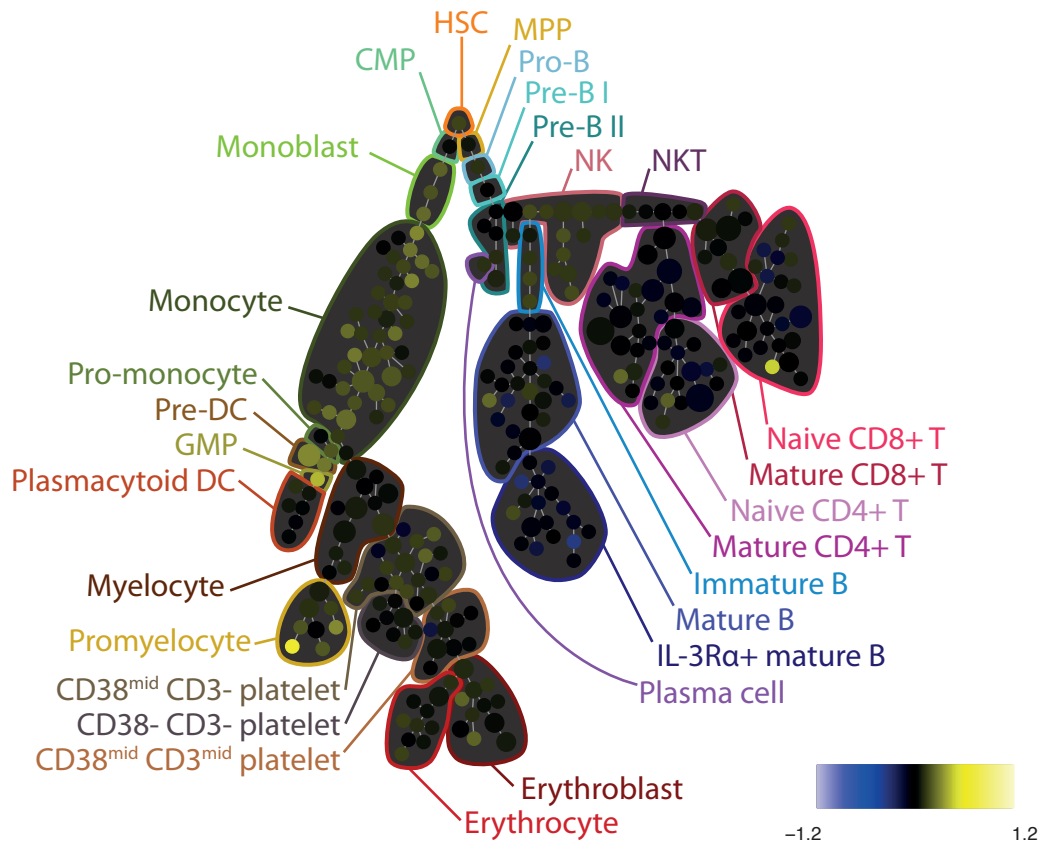


Figure S8A

176-pCREB — IL7 vs Ref Ratio

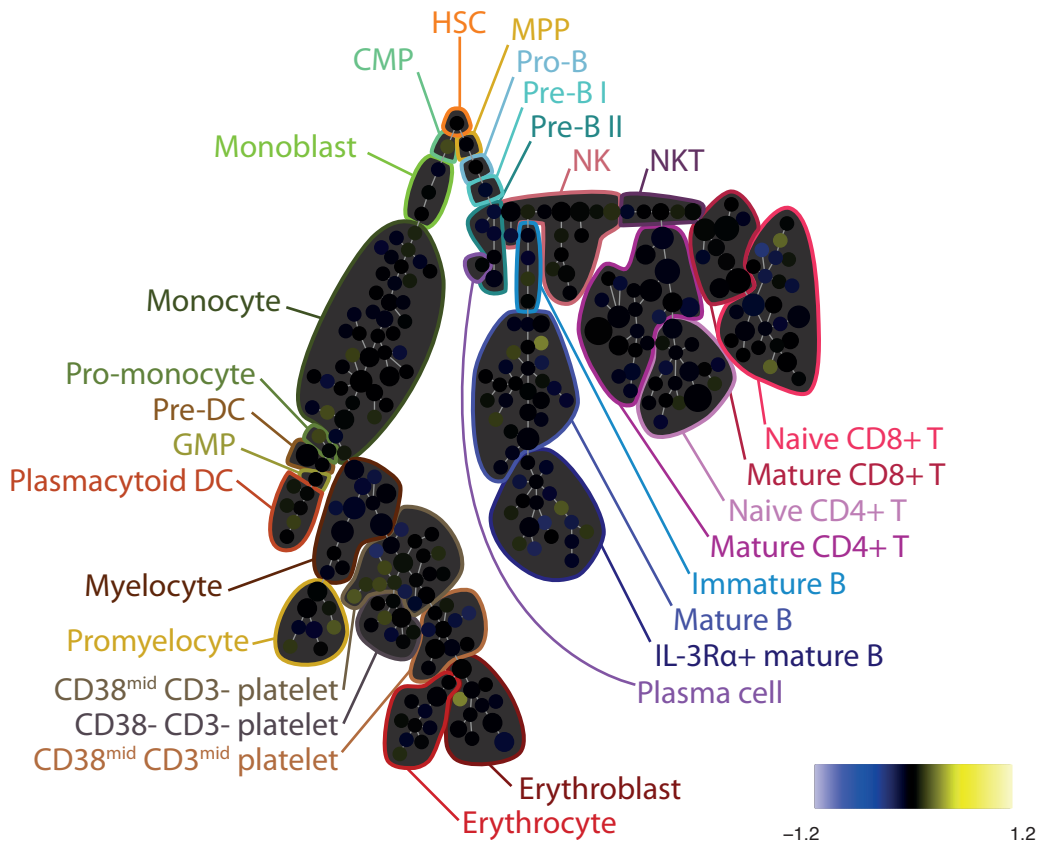


Figure S8A

176-pCREB ---- LPS vs Ref Ratio

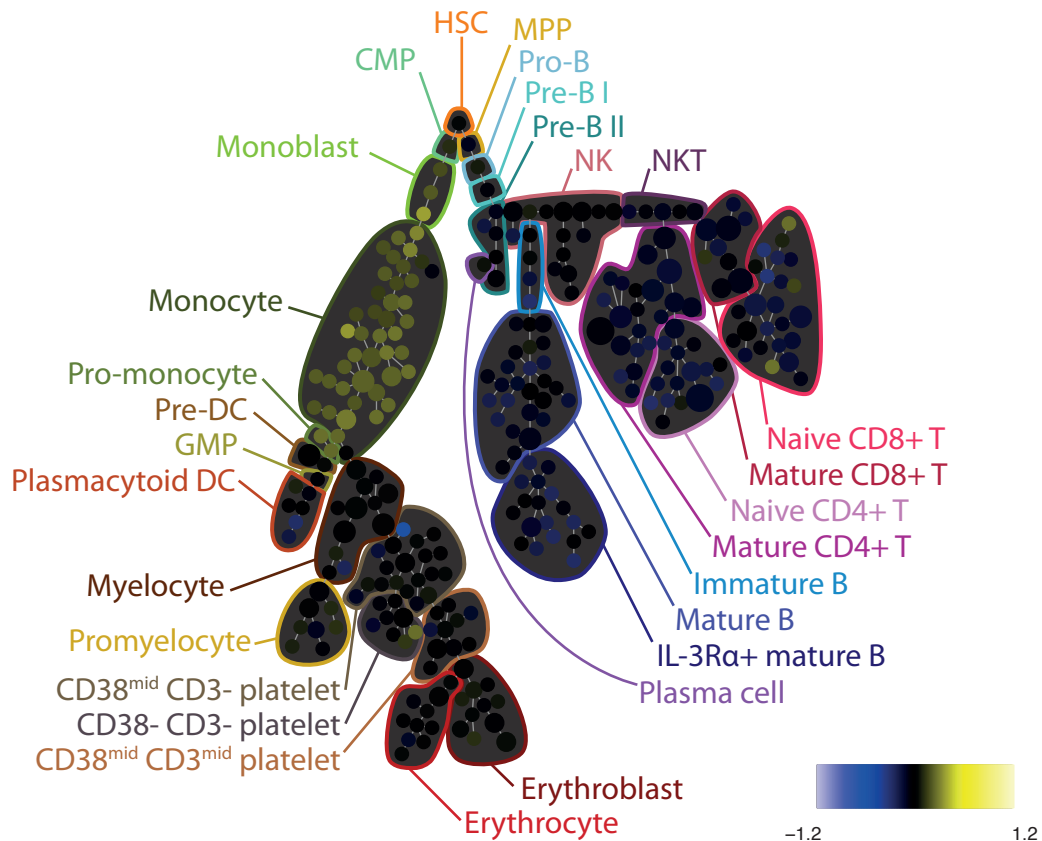


Figure S8A

176-pCREB ---- PMAiono vs Ref Ratio

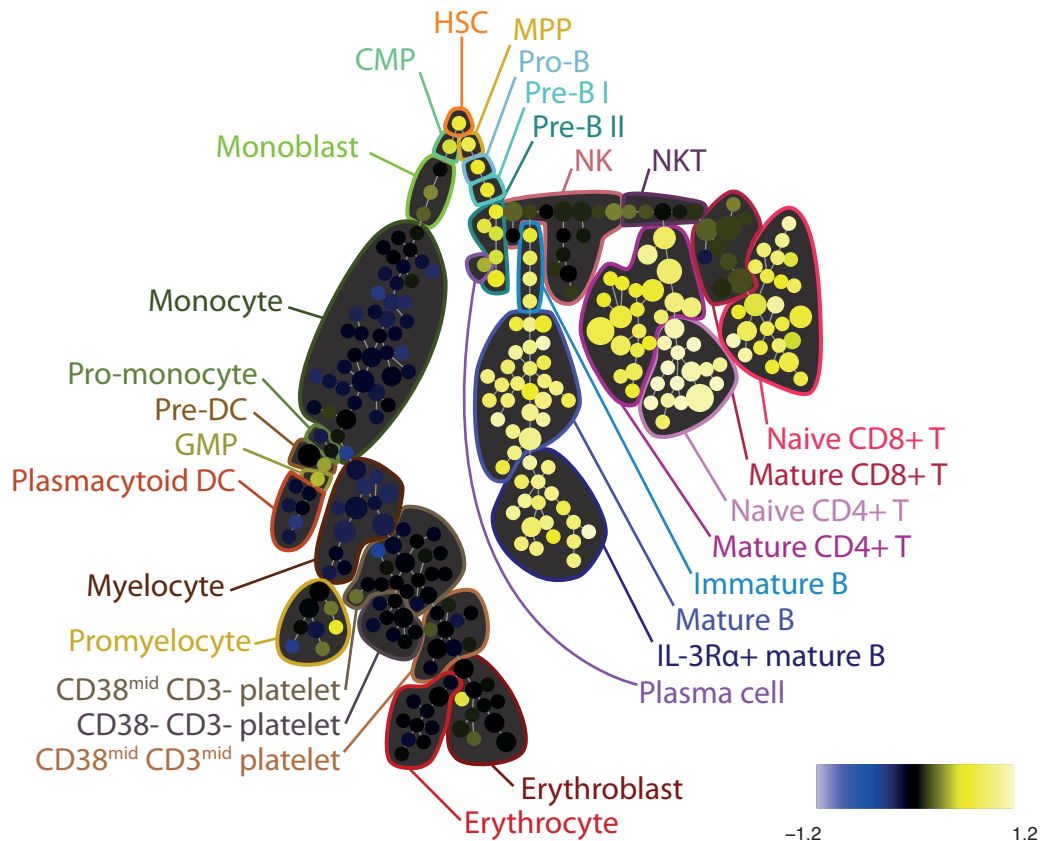


Figure S8A

176-pCREB — PVO4 vs Ref Ratio

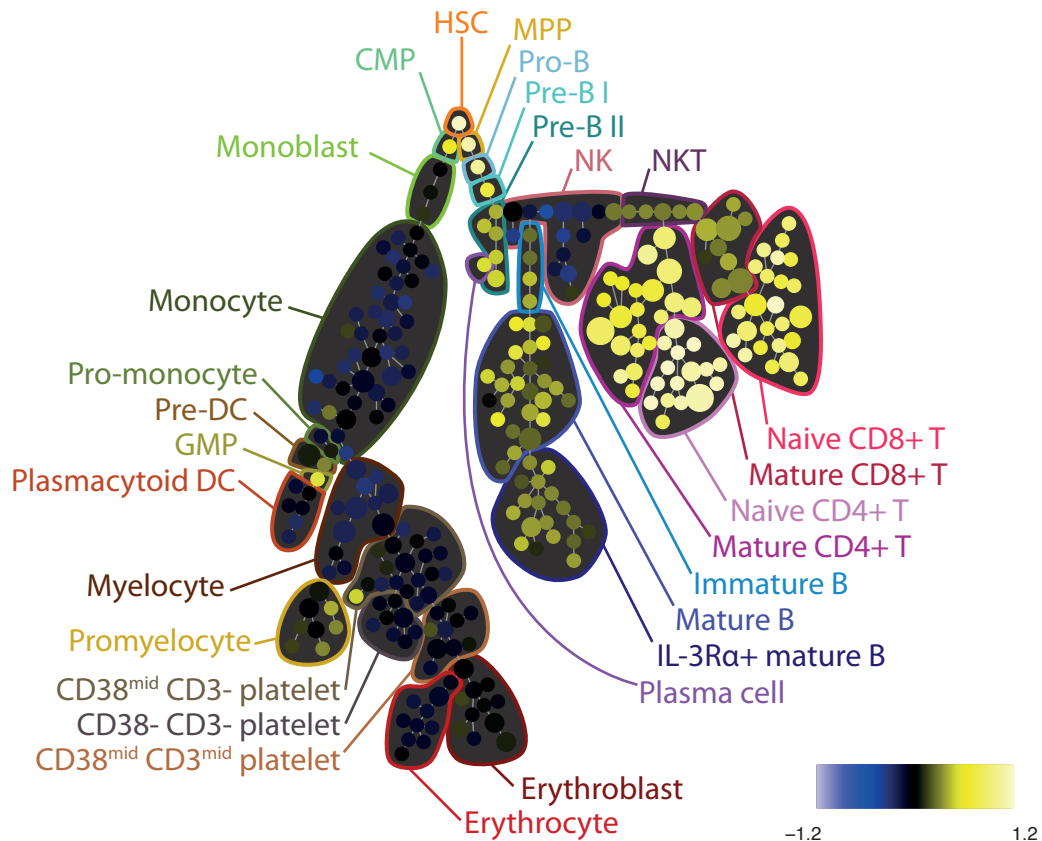


Figure S8A

176-pCREB ---- SCF vs Ref Ratio

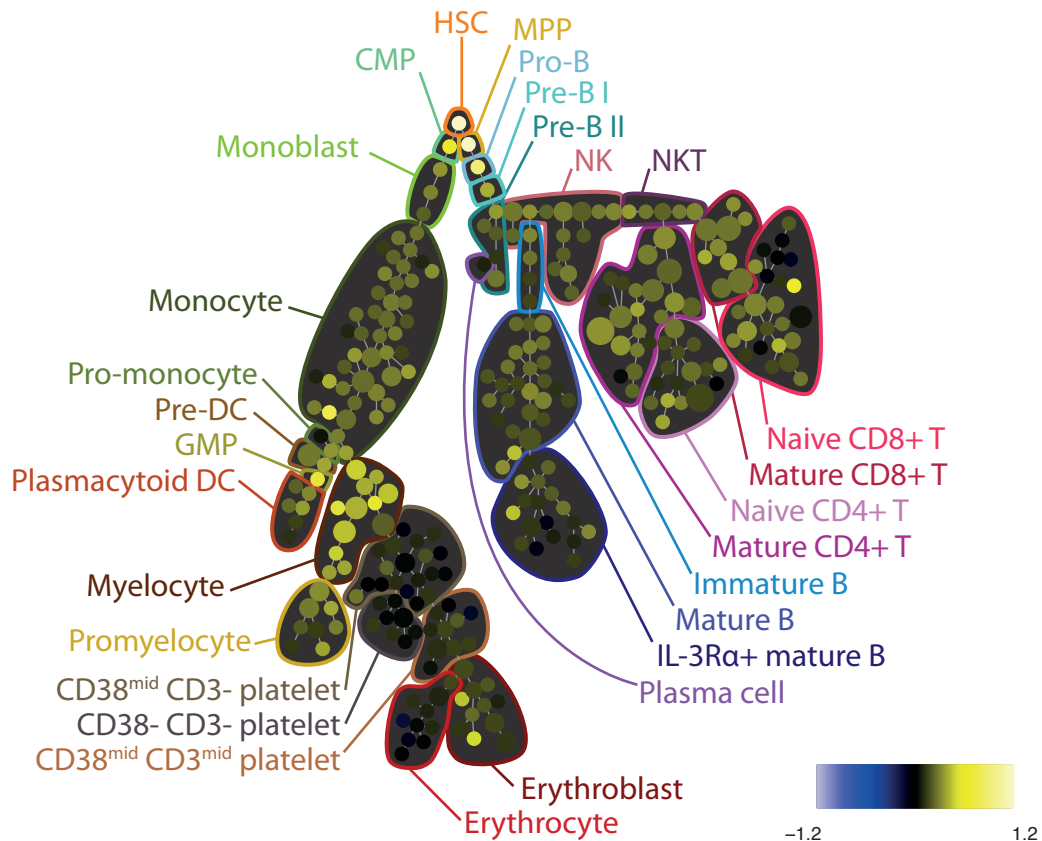


Figure S8A

176-pCREB ---- TNFa vs Ref Ratio

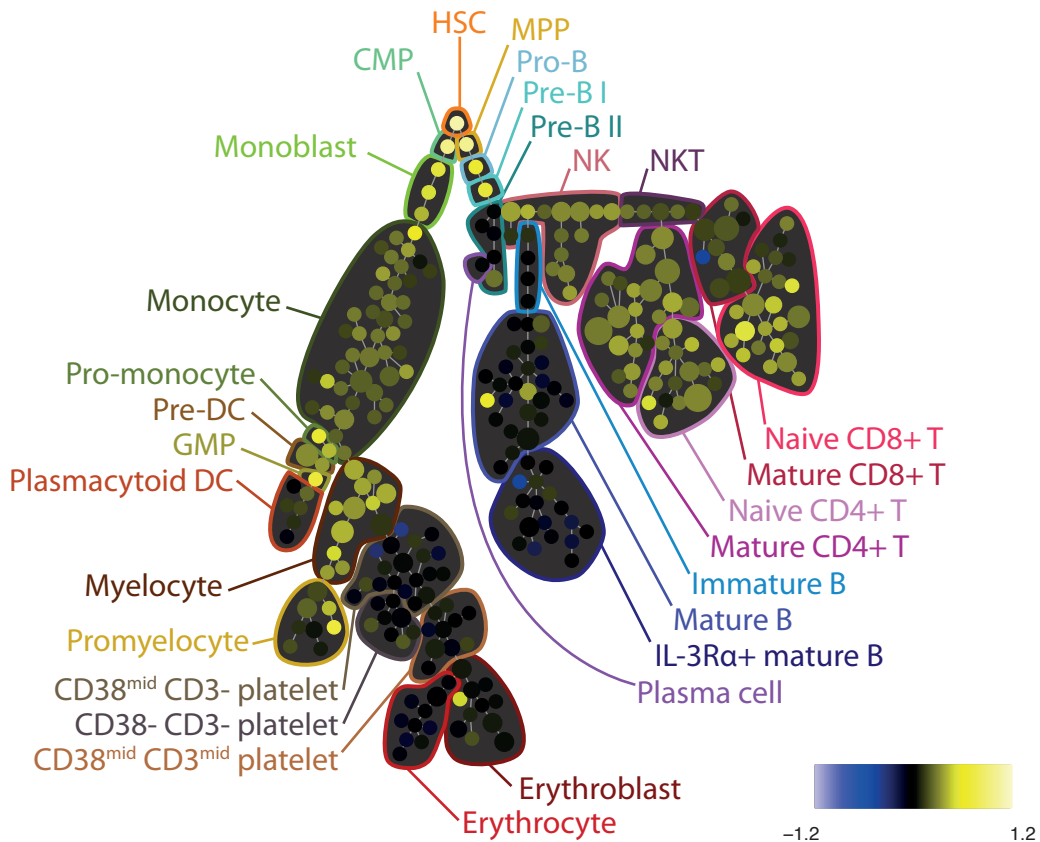


Figure S8A

176-pCREB ---- TPO vs Ref Ratio

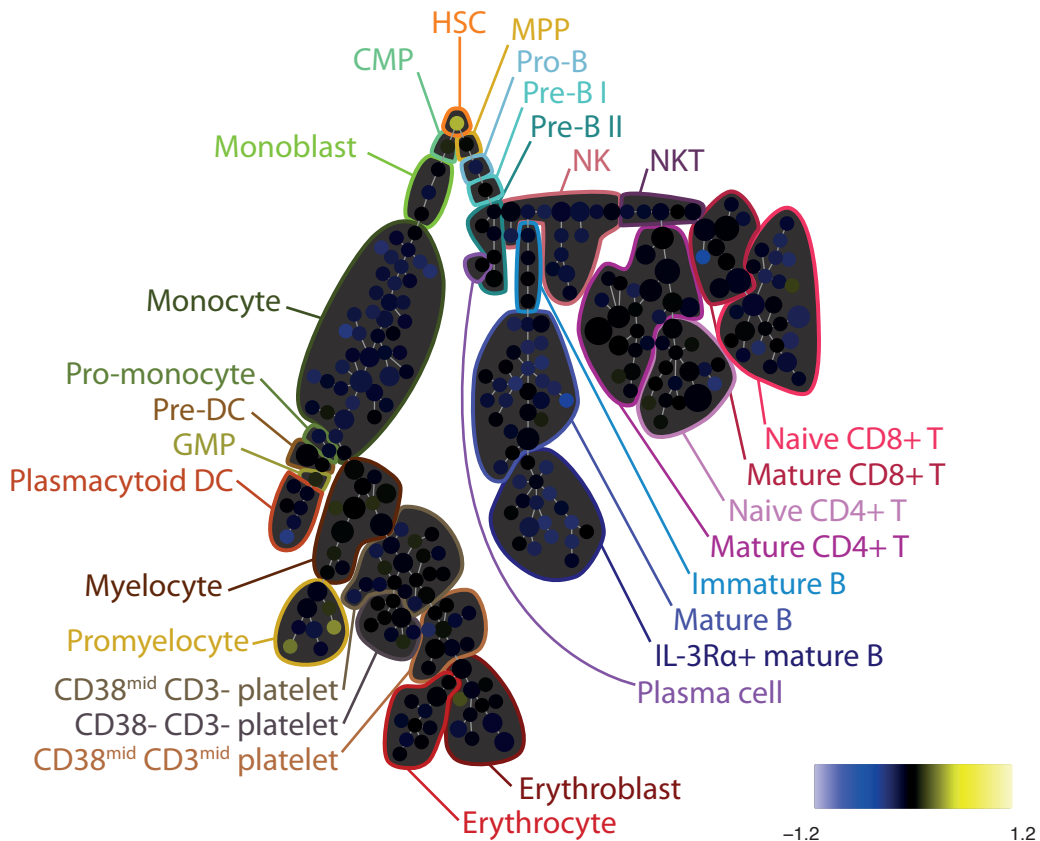


Figure S8B

141-pPLCgamma2 — Dasatinib+BCR vs Ref Ratio

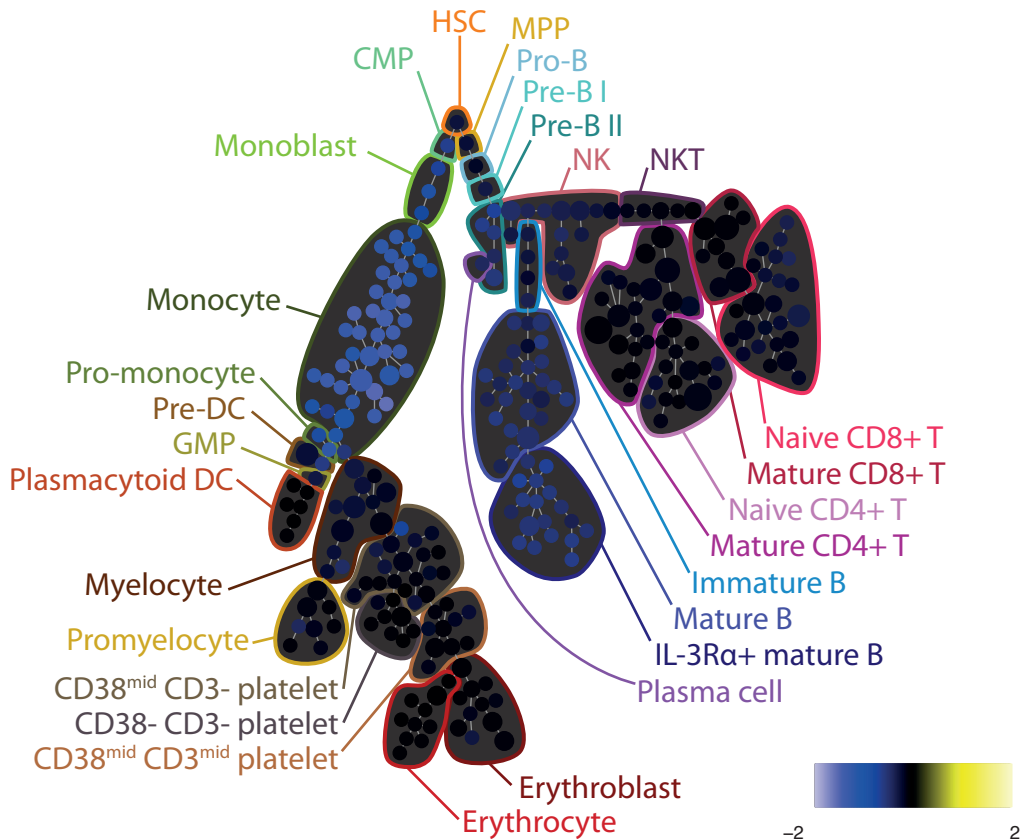


Figure S8B

141-pPLCgamma2 ---- Dasatinib+Flt3L vs Ref Ratio

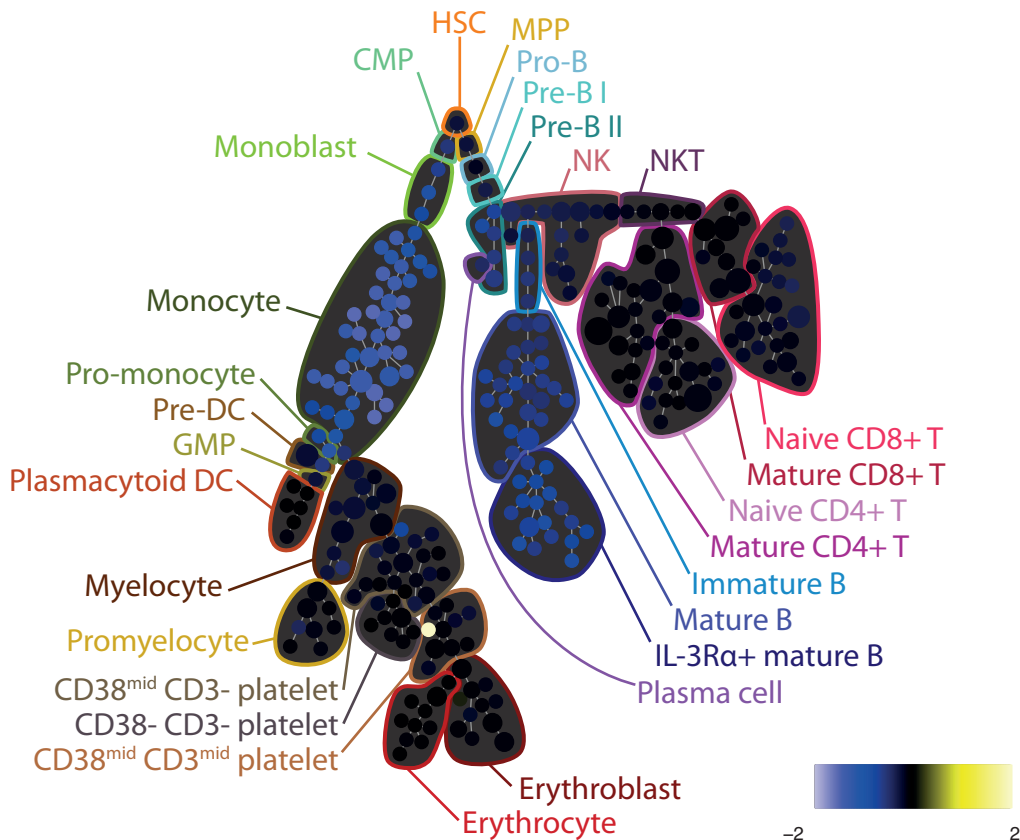


Figure S8B

141-pPLCgamma2 ---- Dasatinib+IL7 vs Ref Ratio

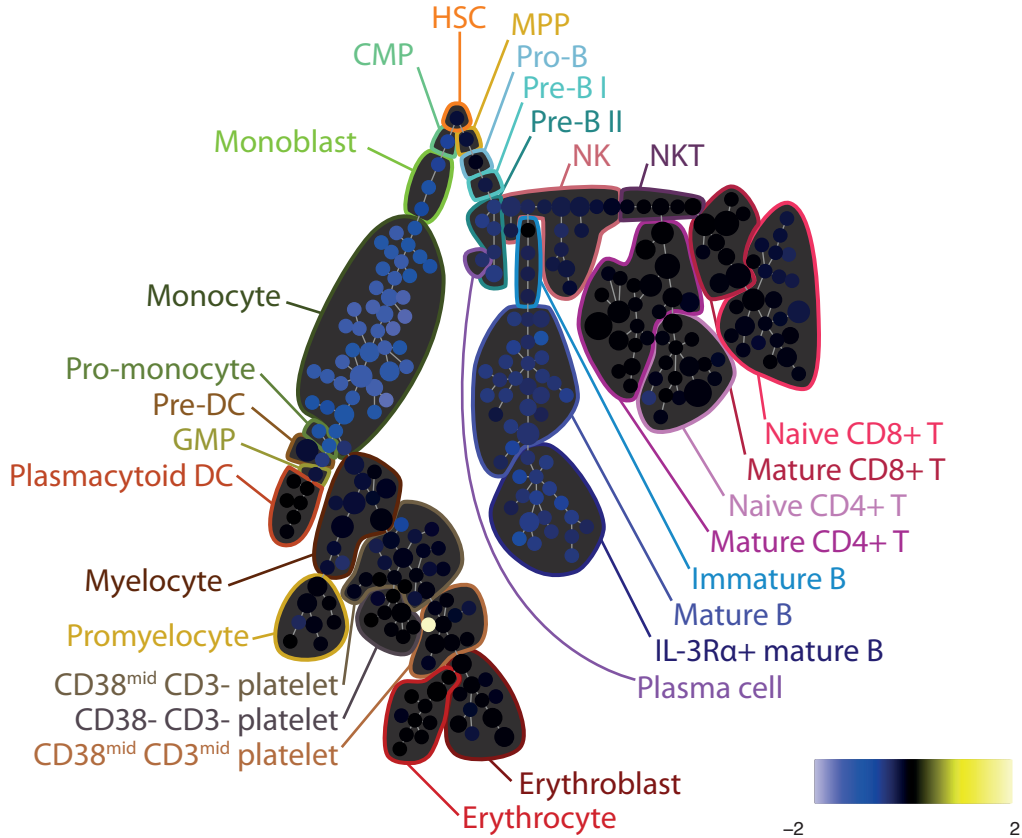


Figure S8B

141-pPLCgamma2 --- Dasatinib+PMAiono vs Ref Ratio

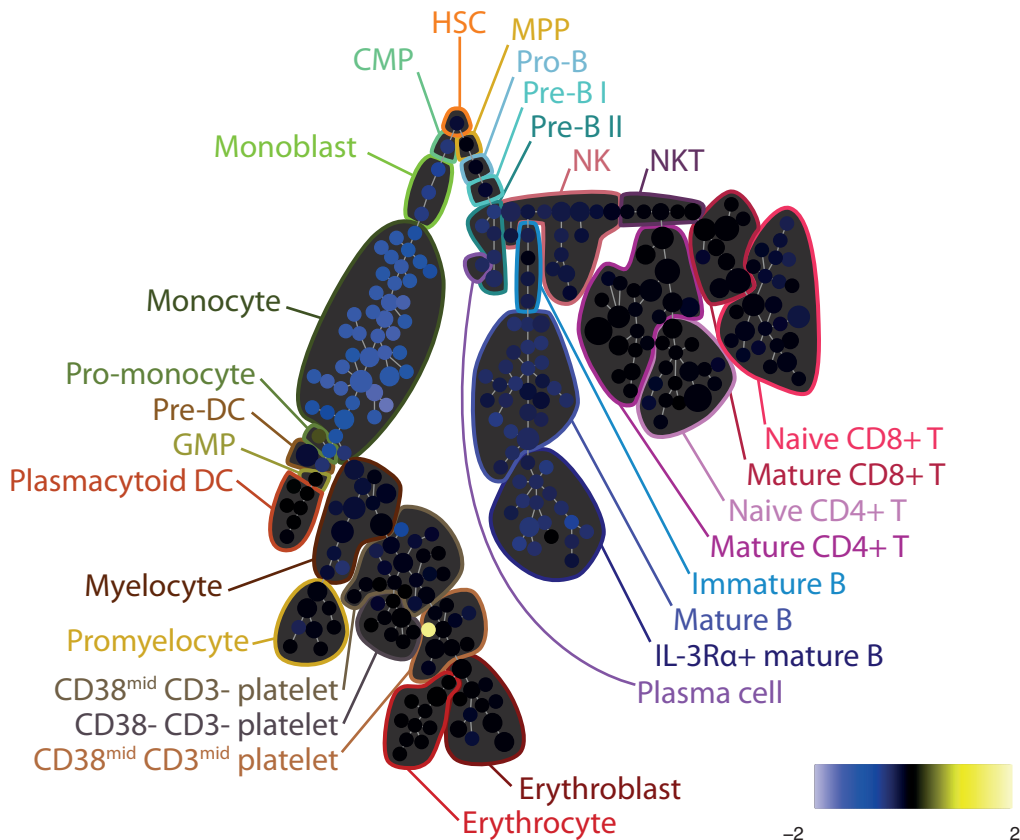


Figure S8B

141-pPLCgamma2 ---- Dasatinib+PVO4 vs Ref Ratio

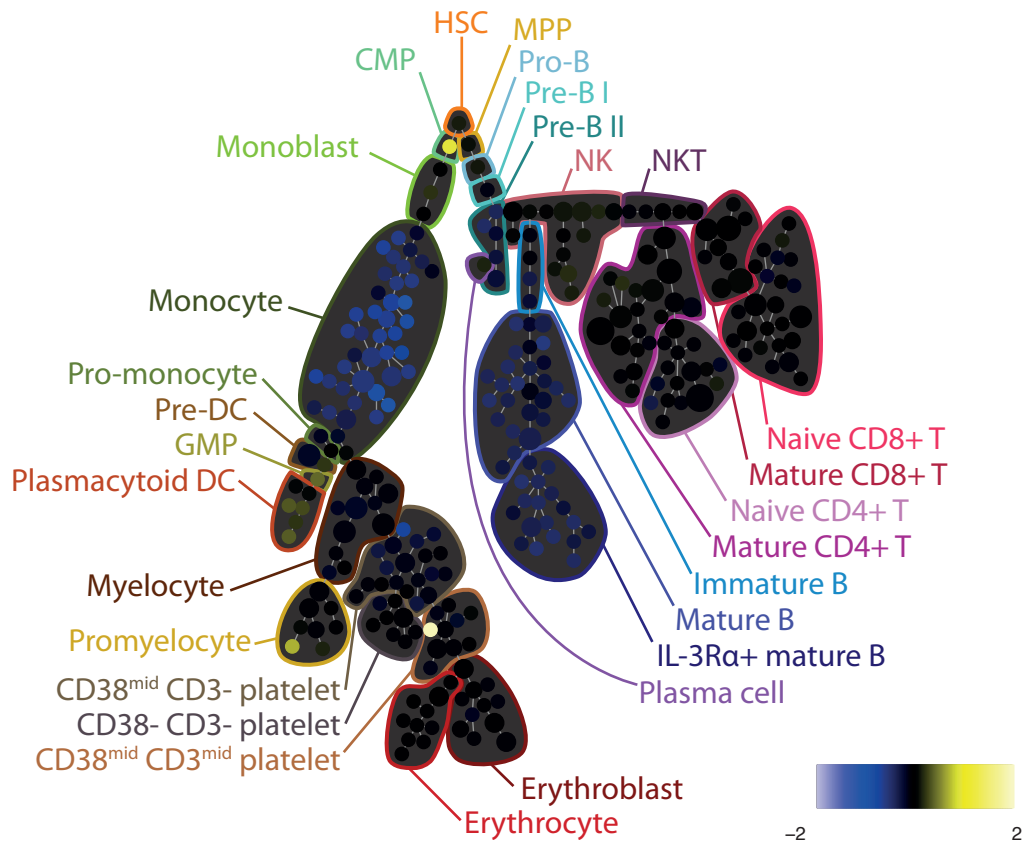


Figure S8B

141-pPLCgamma2 ---- Dasatinib+Unstim vs Ref Ratio

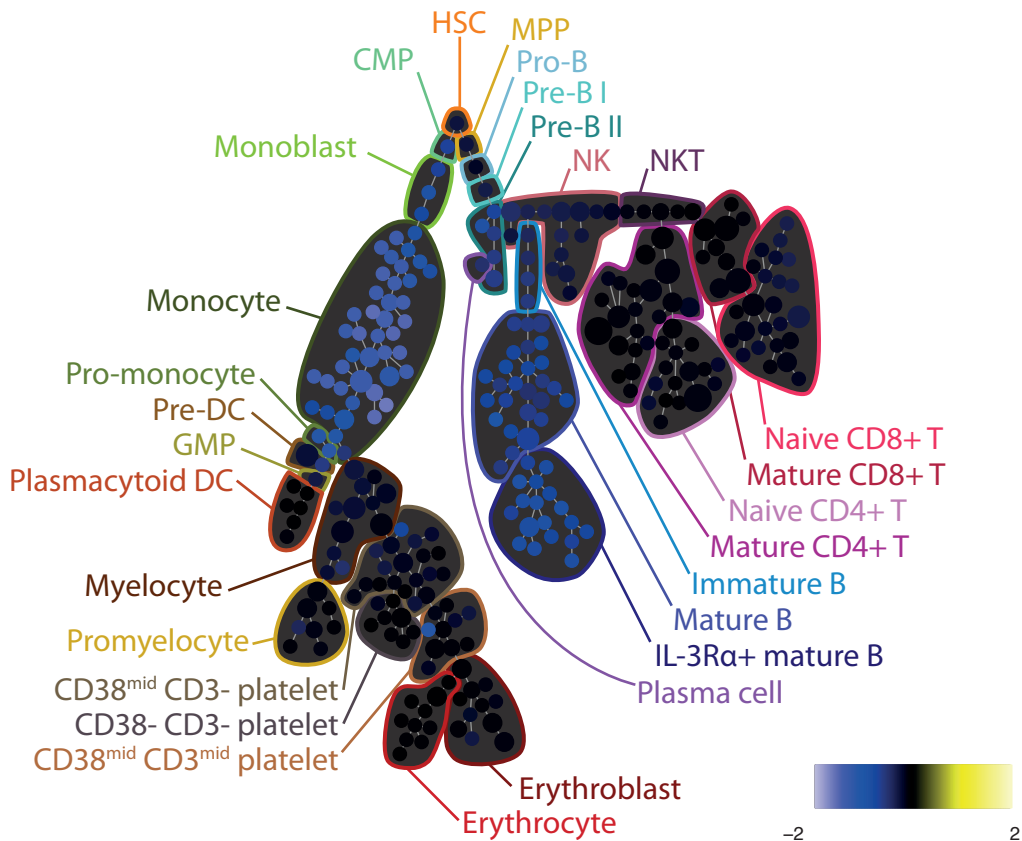


Figure S8B

150-pSTAT5 ---- Dasatinib+BCR vs Ref Ratio

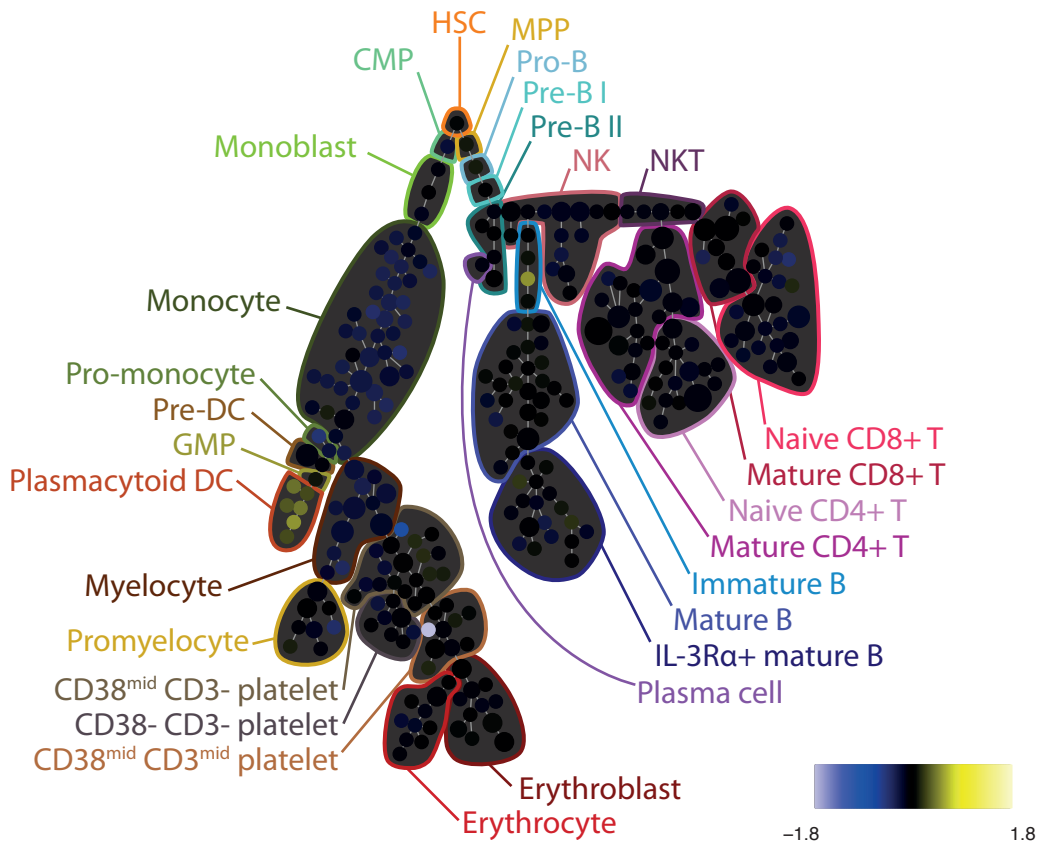


Figure S8B

150-pSTAT5 ---- Dasatinib+Flt3L vs Ref Ratio

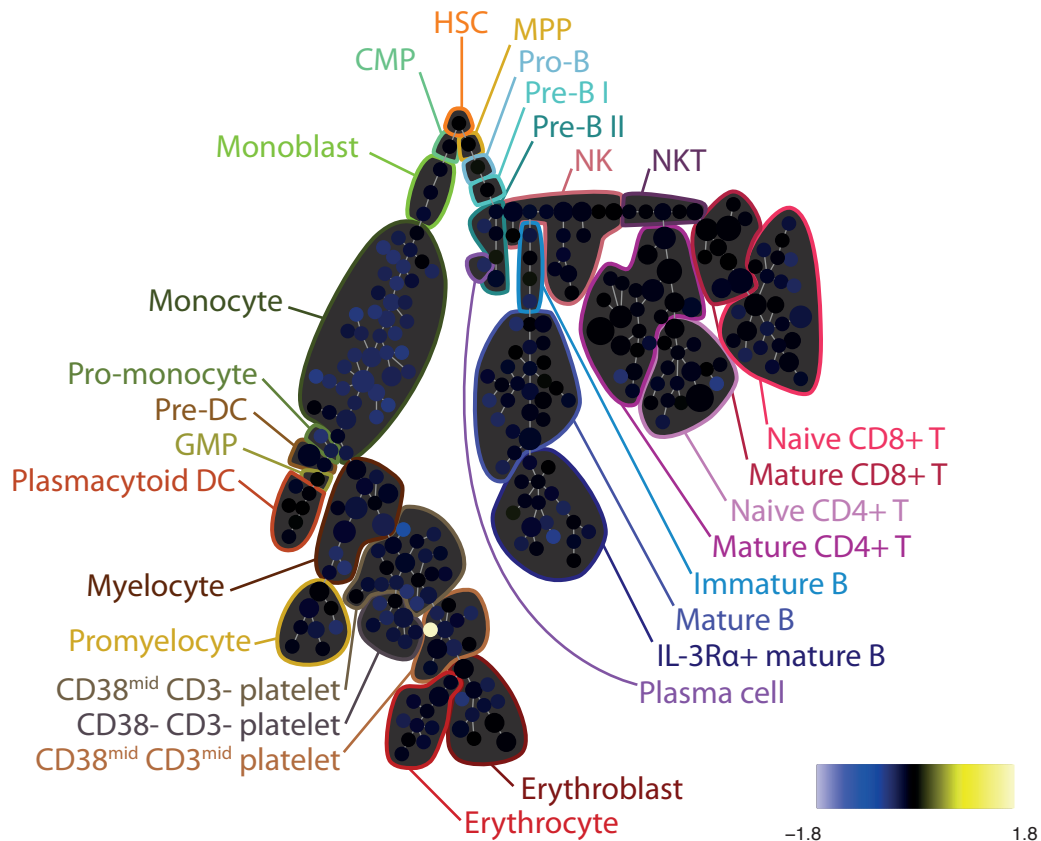


Figure S8B

150-pSTAT5 ---- Dasatinib+IL7 vs Ref Ratio

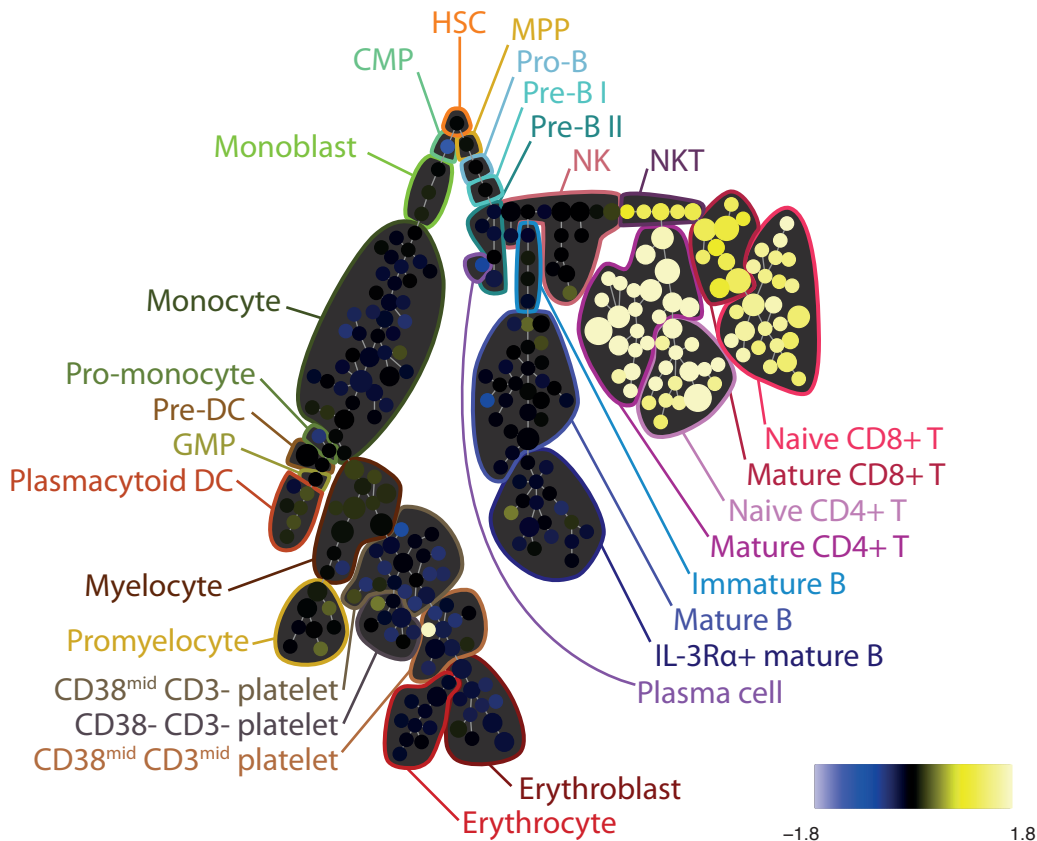


Figure S8B

150-pSTAT5 ---- Dasatinib+PMAiono vs Ref Ratio

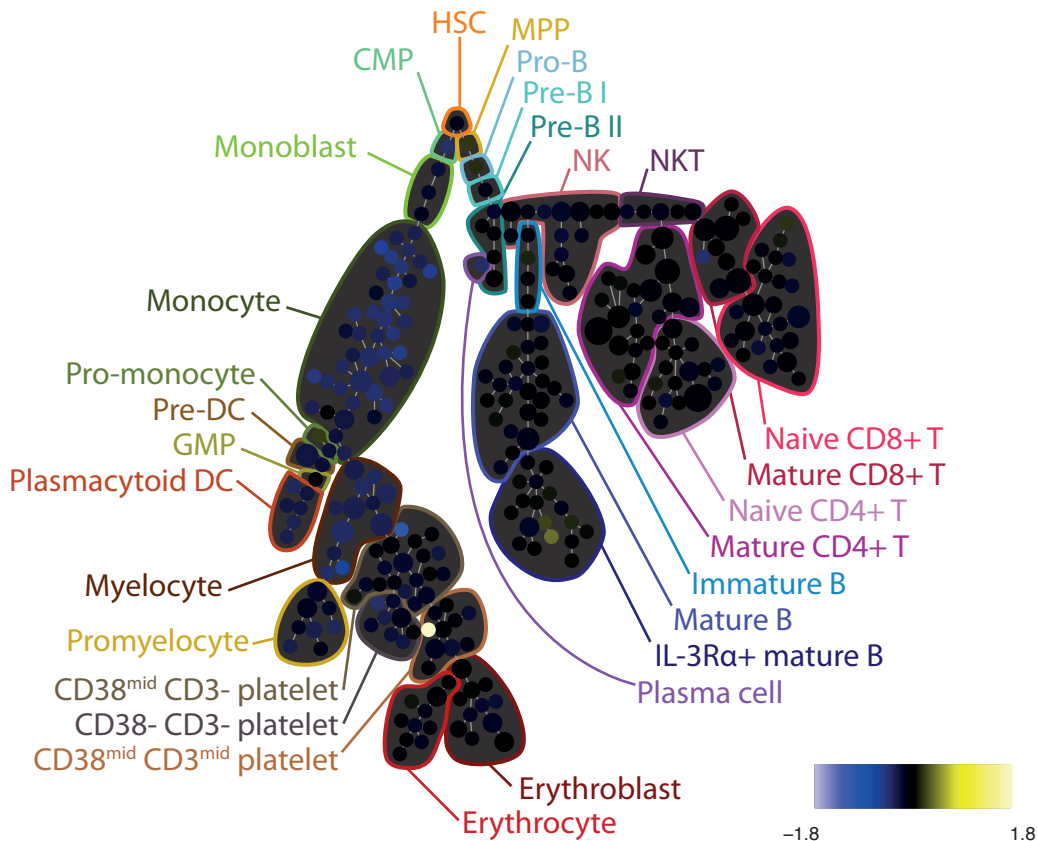


Figure S8B

150-pSTAT5 ---- Dasatinib+PVO4 vs Ref Ratio

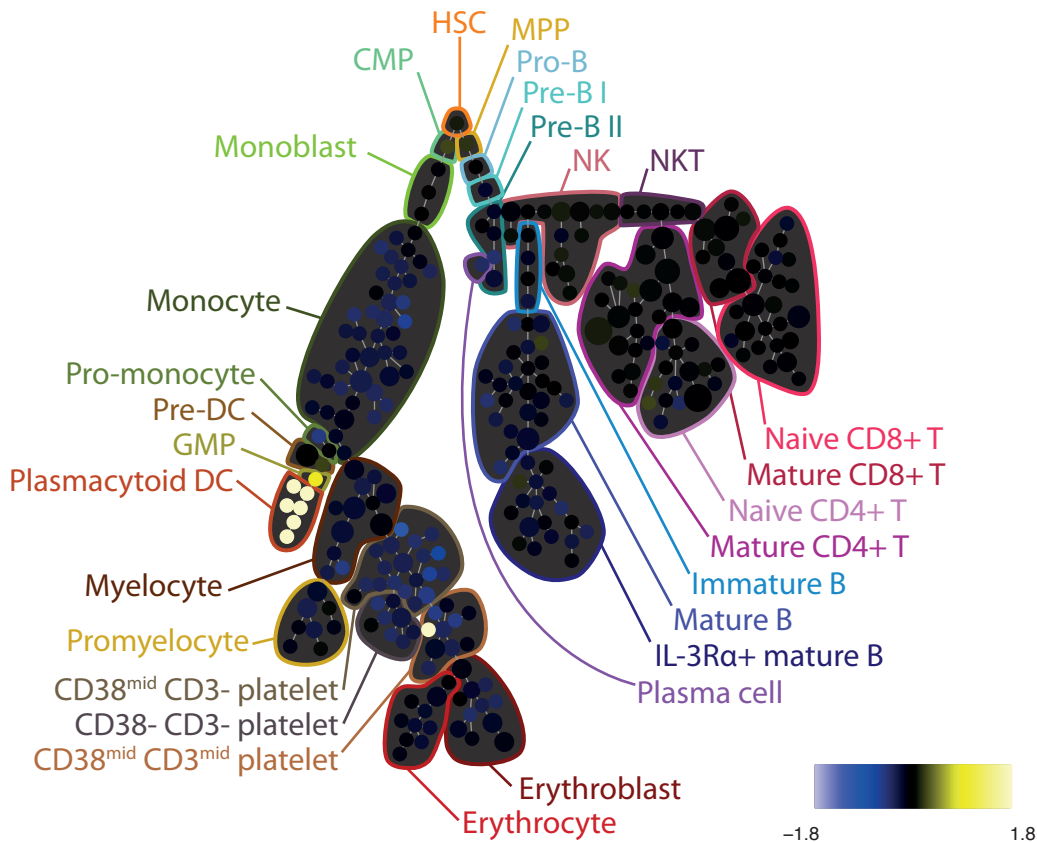


Figure S8B

150-pSTAT5 ---- Dasatinib+Unstim vs Ref Ratio

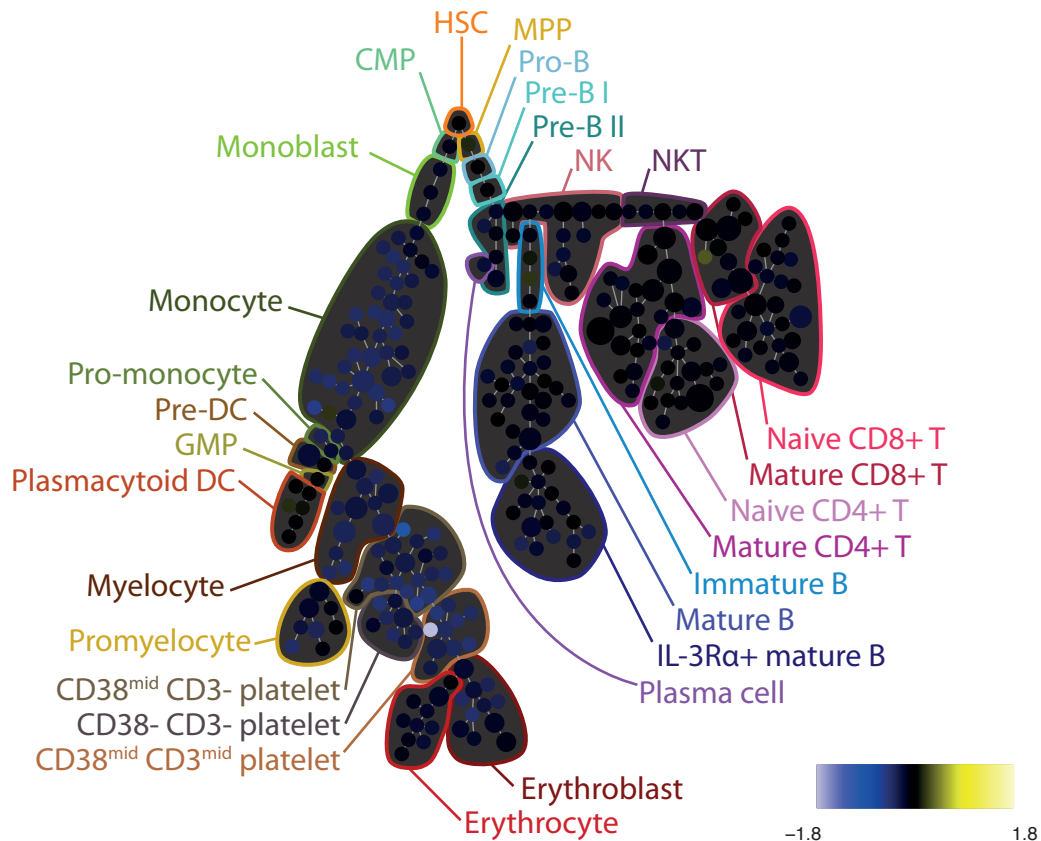


Figure S8B

151-pERK1/2 ---- Dasatinib+BCR vs Ref Ratio

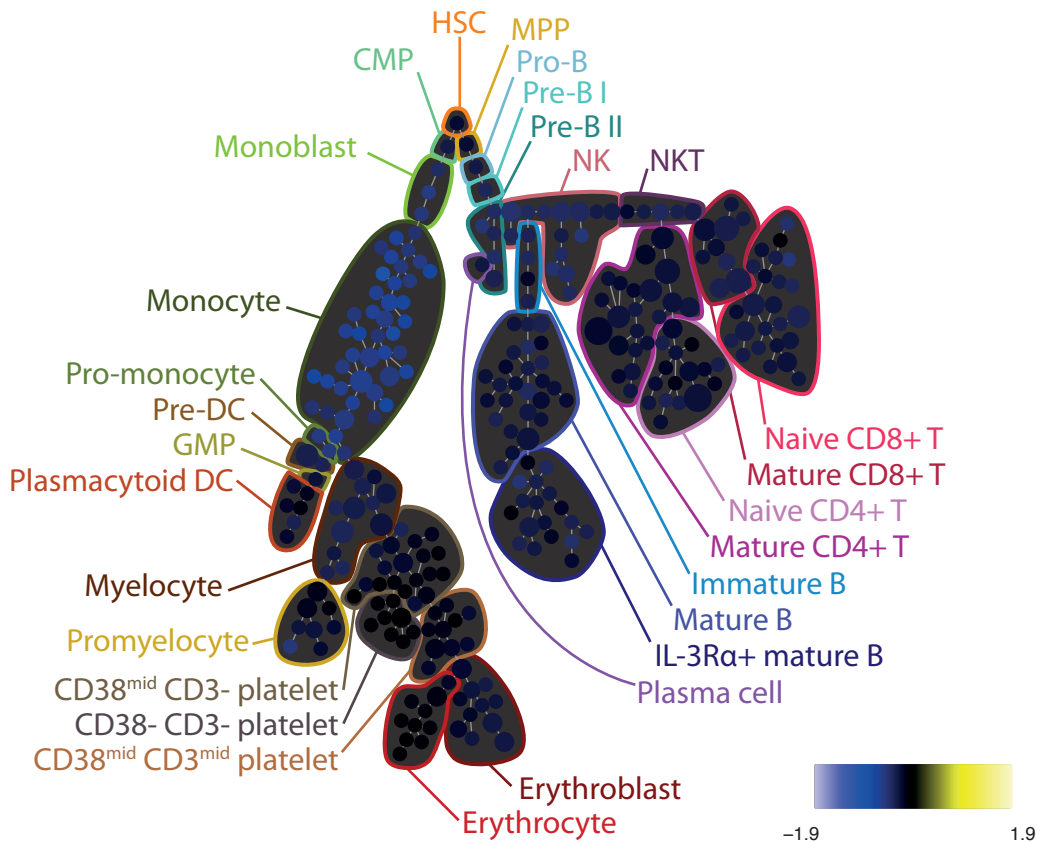


Figure S8B

151-pERK1/2 ---- Dasatinib+Flt3L vs Ref Ratio

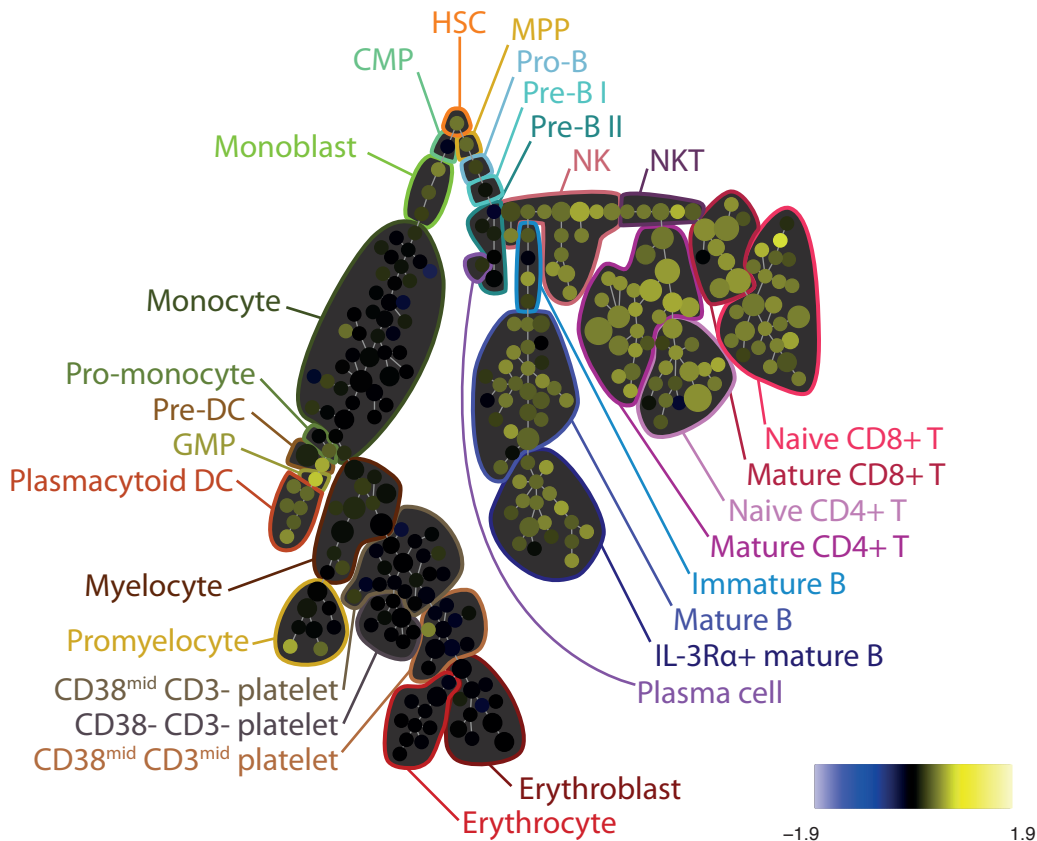


Figure S8B

151-pERK1/2 ---- Dasatinib+IL7 vs Ref Ratio

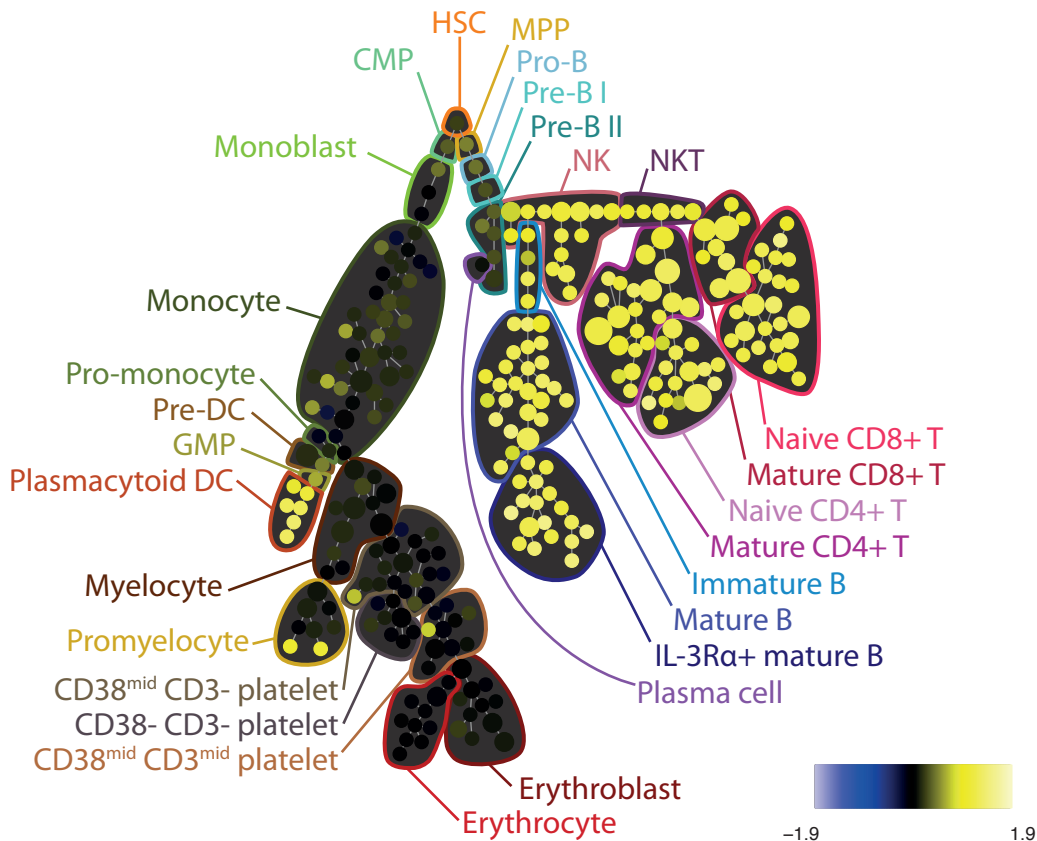


Figure S8B

151-pERK1/2 --- Dasatinib+PMAiono vs Ref Ratio

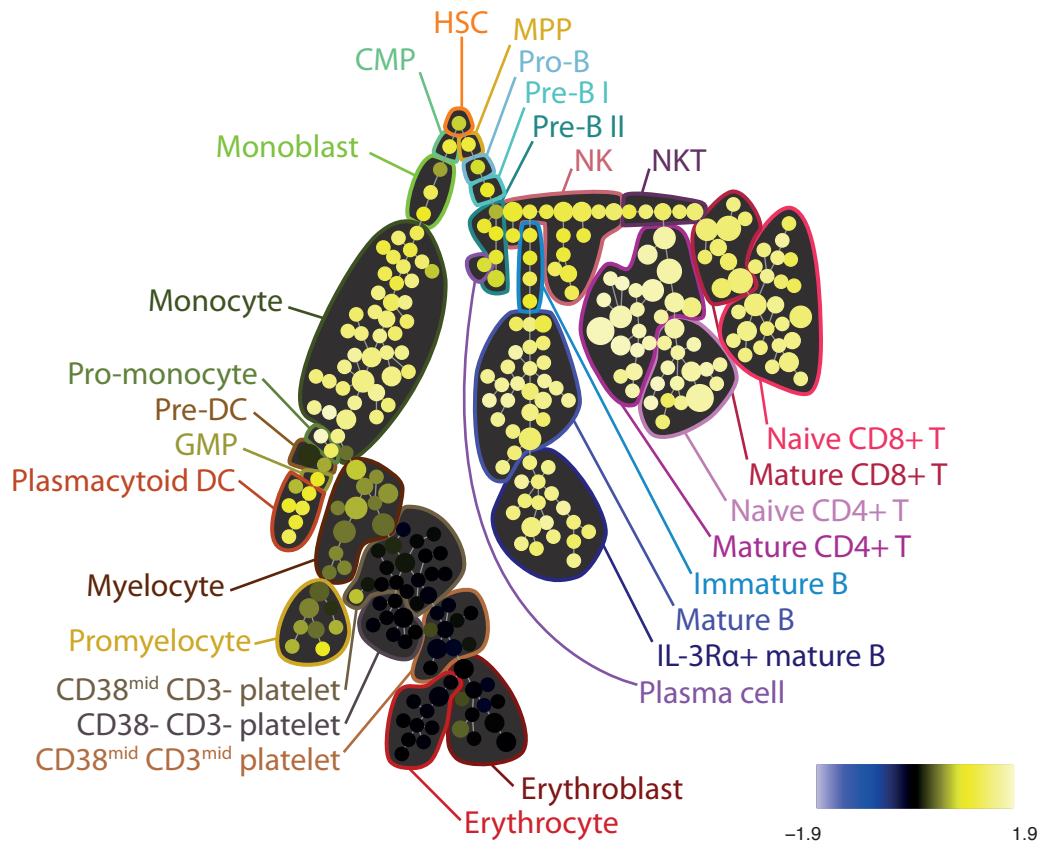


Figure S8B

151-pERK1/2 ---- Dasatinib+PVO4 vs Ref Ratio

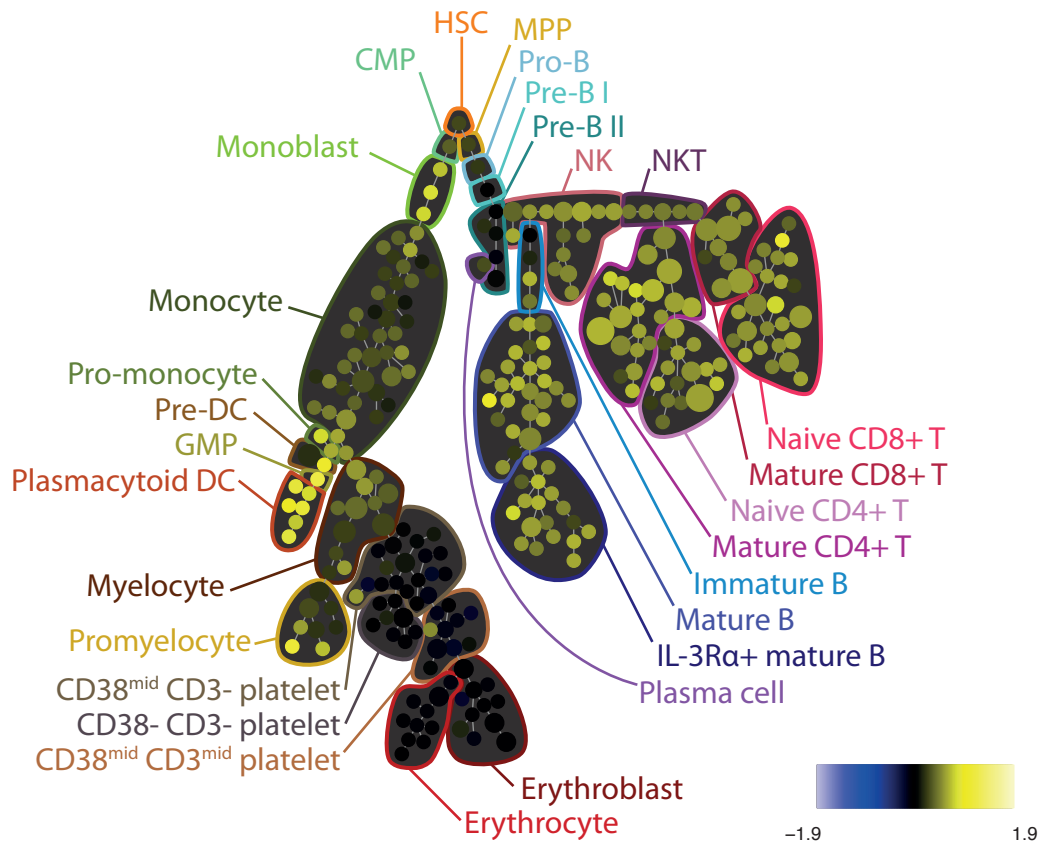


Figure S8B

151-pERK1/2 ---- Dasatinib+Unstim vs Ref Ratio

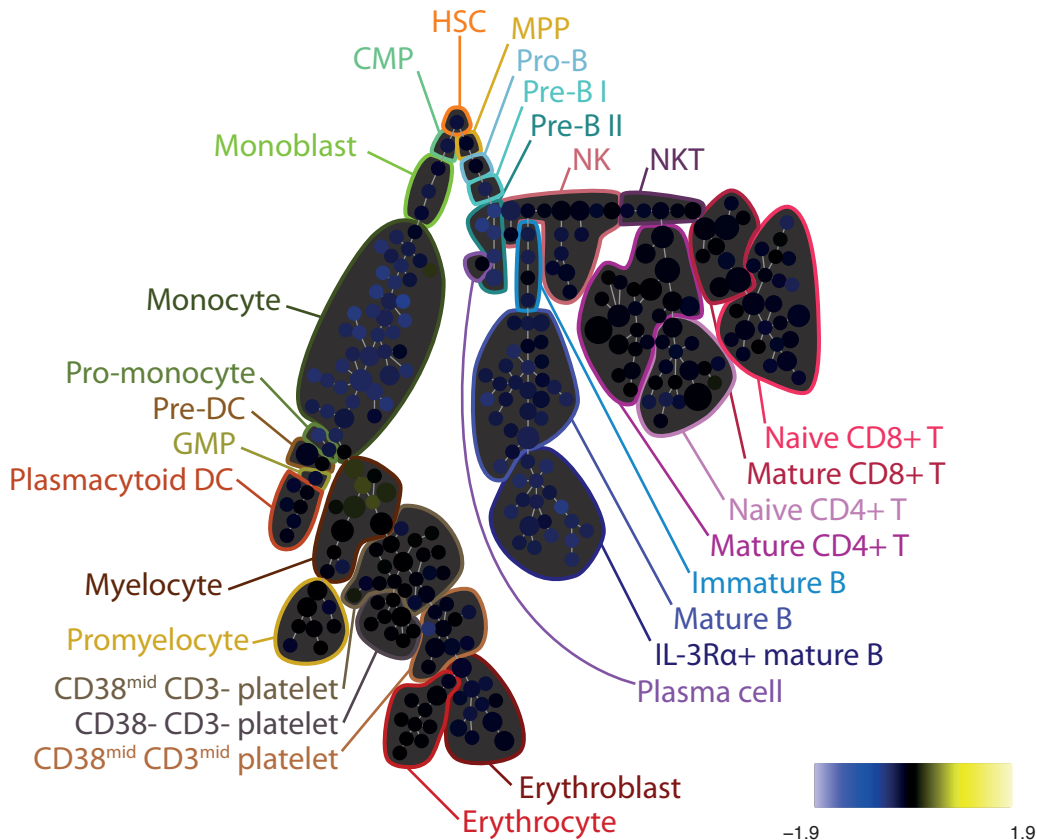


Figure S8B

152-Ki67 --- Dasatinib+BCR vs Ref Ratio

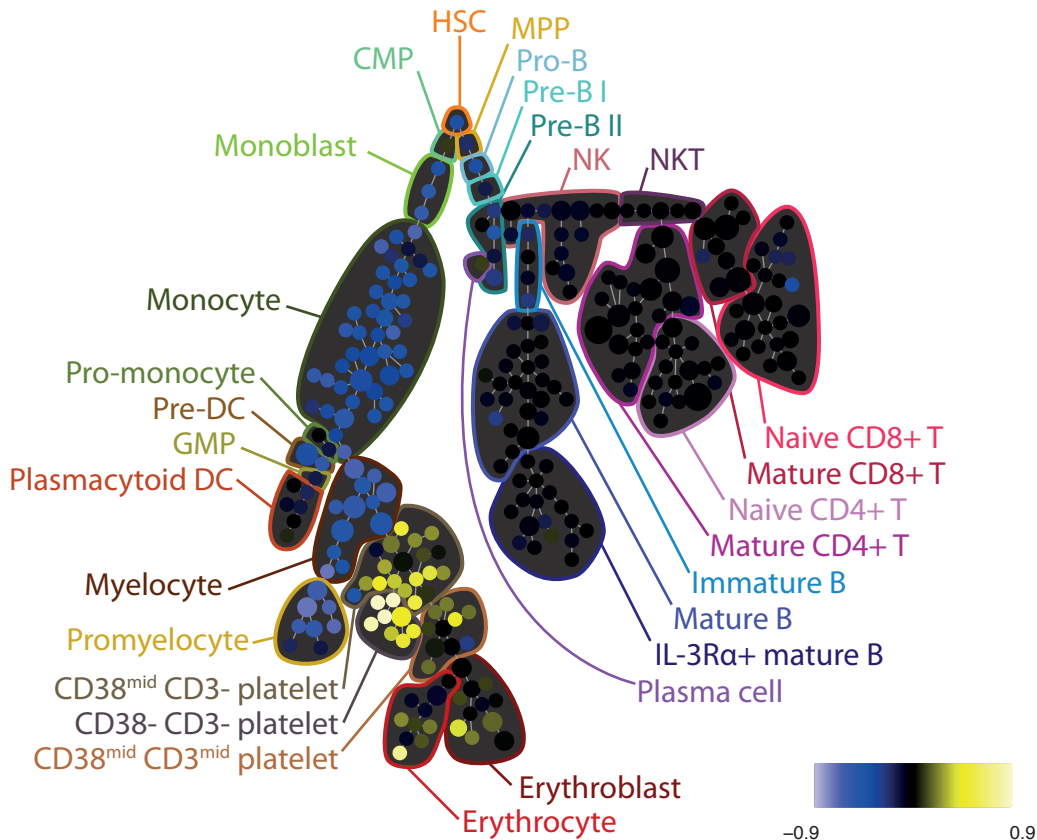


Figure S8B

152-Ki67 ---- Dasatinib+Flt3L vs Ref Ratio

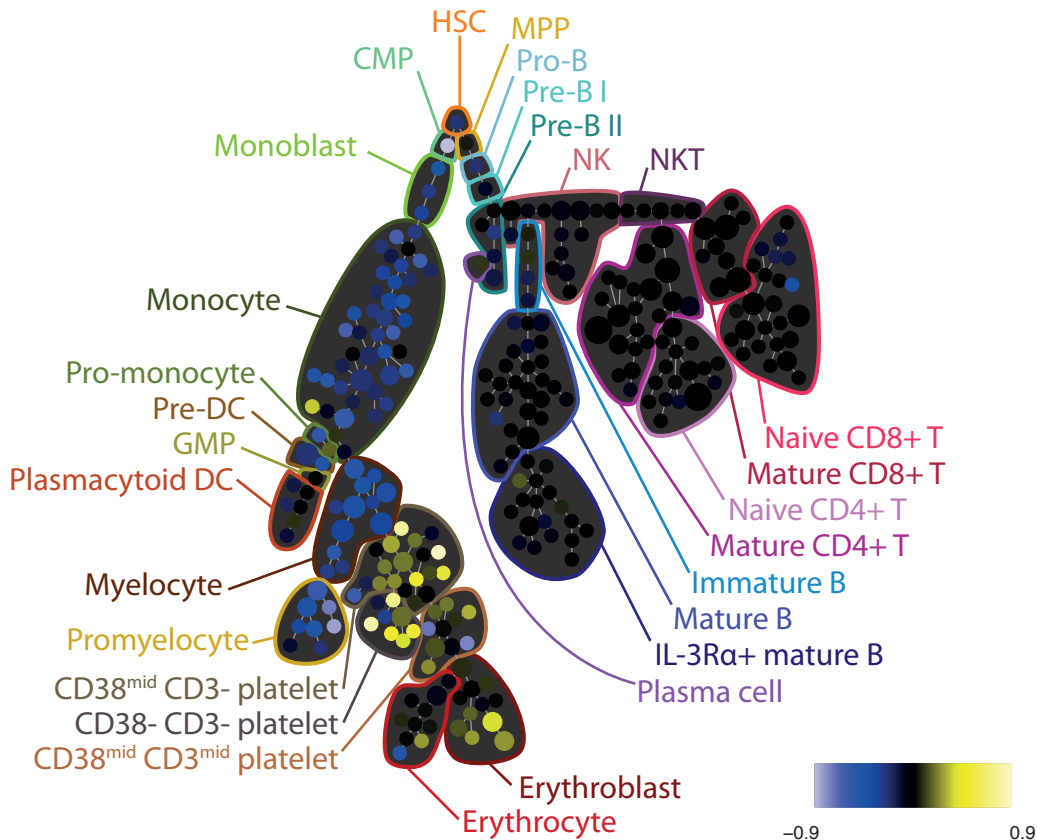


Figure S8B

152-Ki67 ---- Dasatinib+IL7 vs Ref Ratio

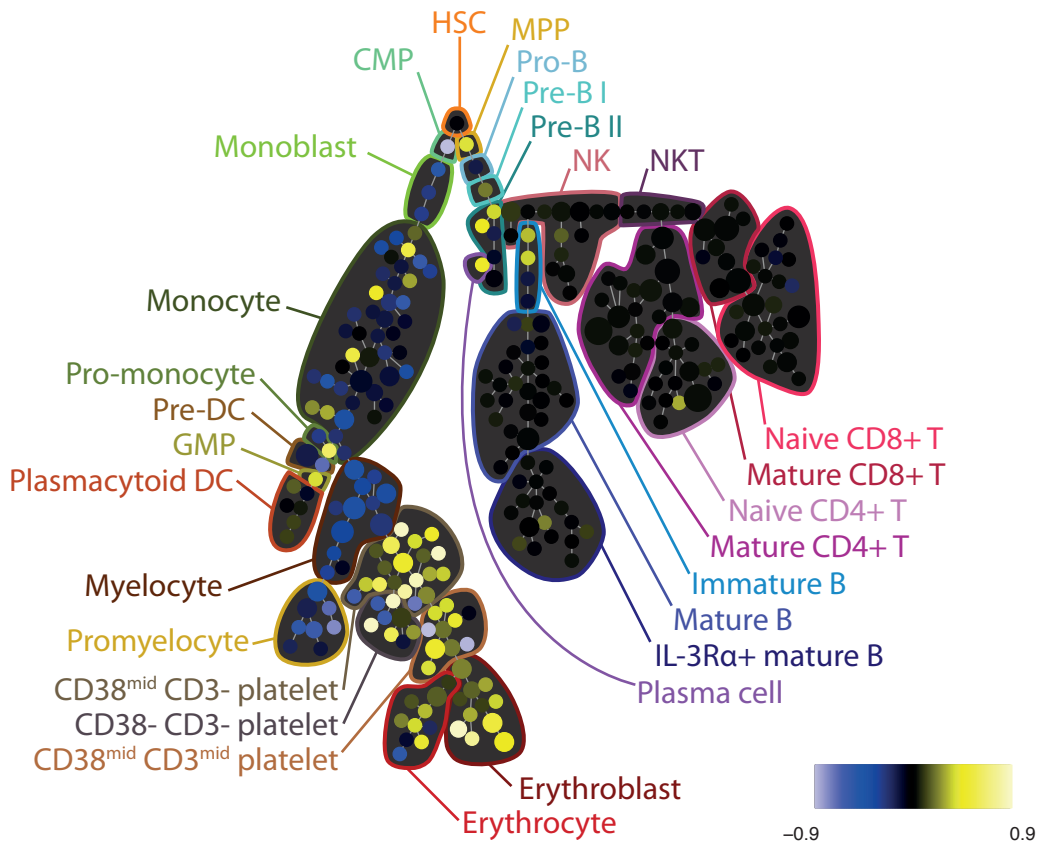


Figure S8B

152-Ki67 ---- Dasatinib+PMAiono vs Ref Ratio

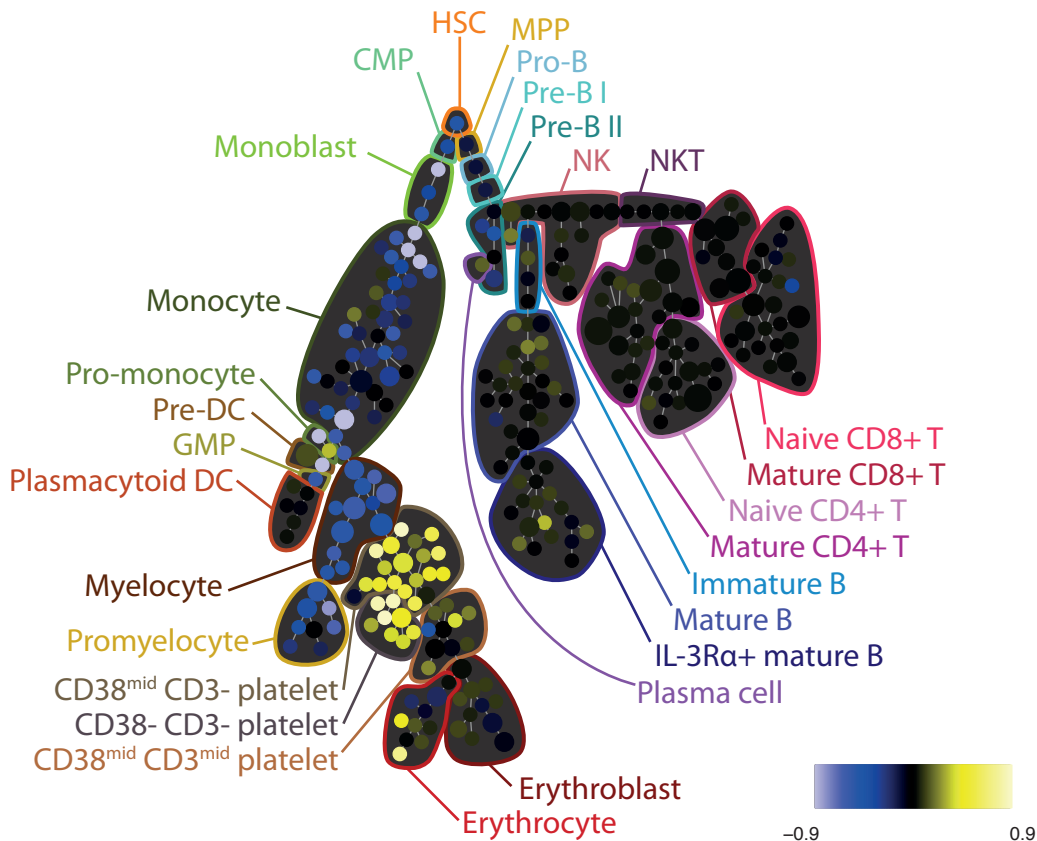


Figure S8B

152-Ki67 ---- Dasatinib+PVO4 vs Ref Ratio

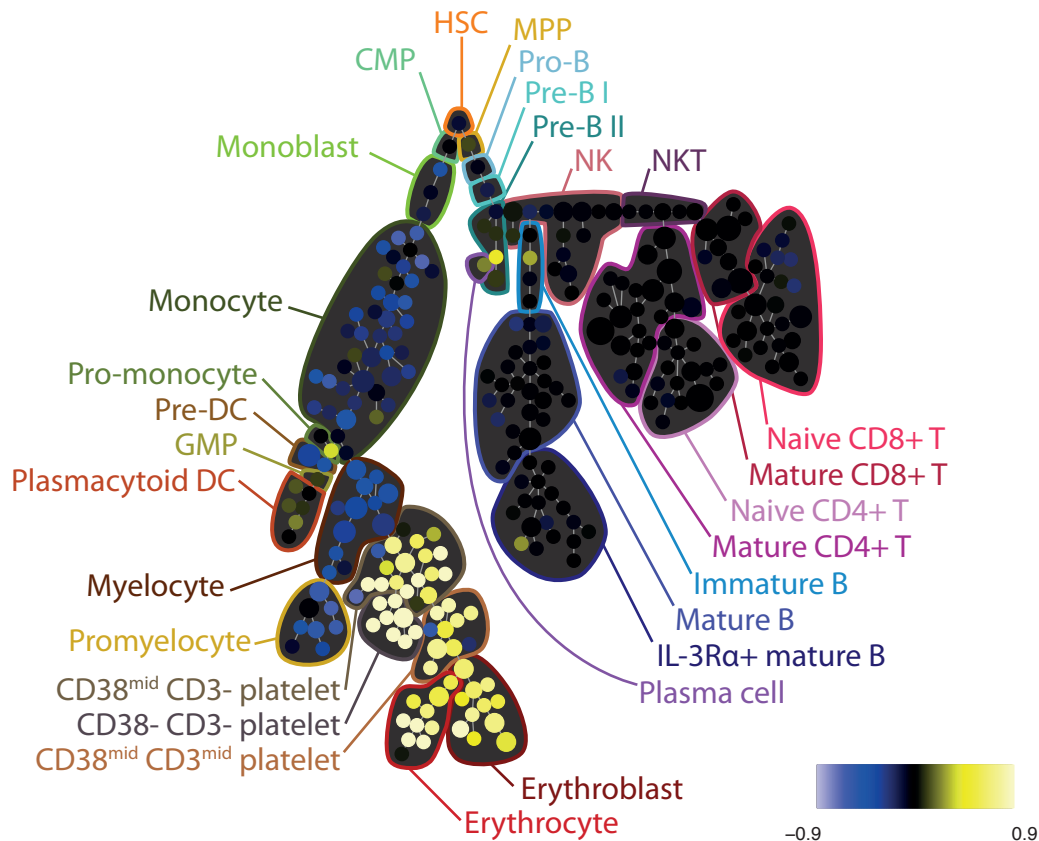


Figure S8B

152-Ki67 ---- Dasatinib+Unstim vs Ref Ratio

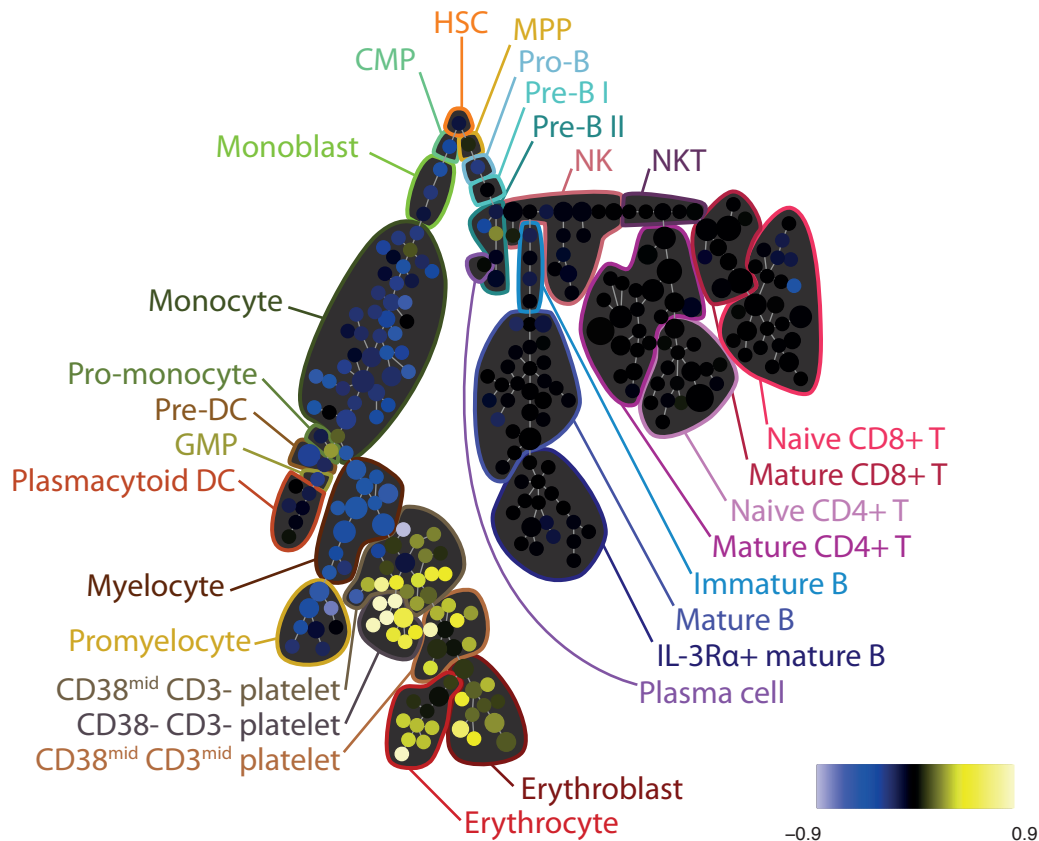


Figure S8B

153-pMAPKAPK2 ---- Dasatinib+BCR vs Ref Ratio

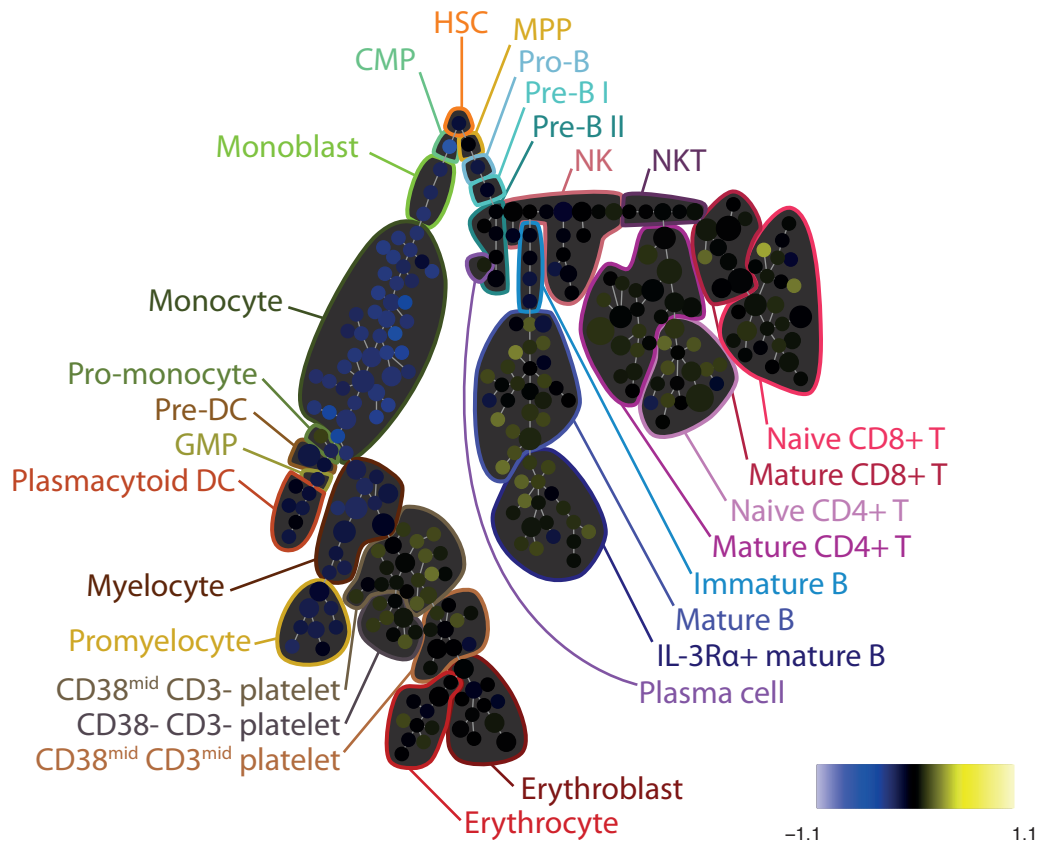


Figure S8B

153-pMAPKAPK2 ---- Dasatinib+Flt3L vs Ref Ratio

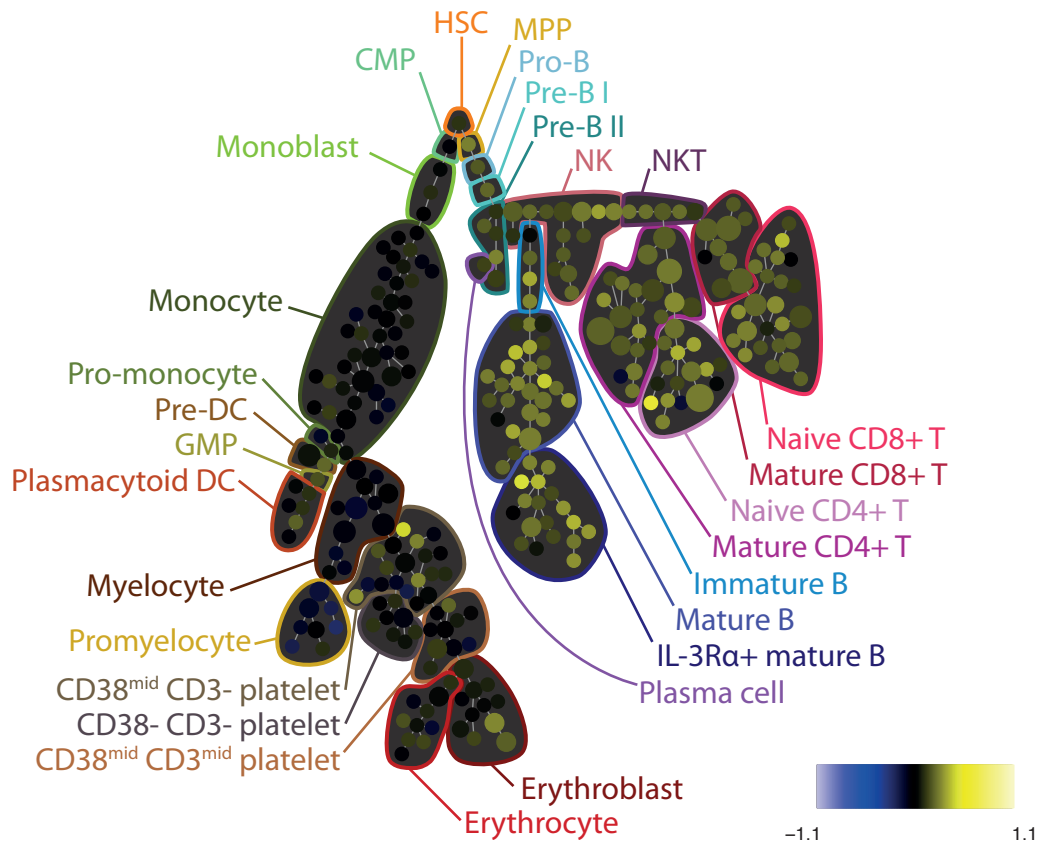


Figure S8B

153-pMAPKAPK2 ---- Dasatinib+IL7 vs Ref Ratio

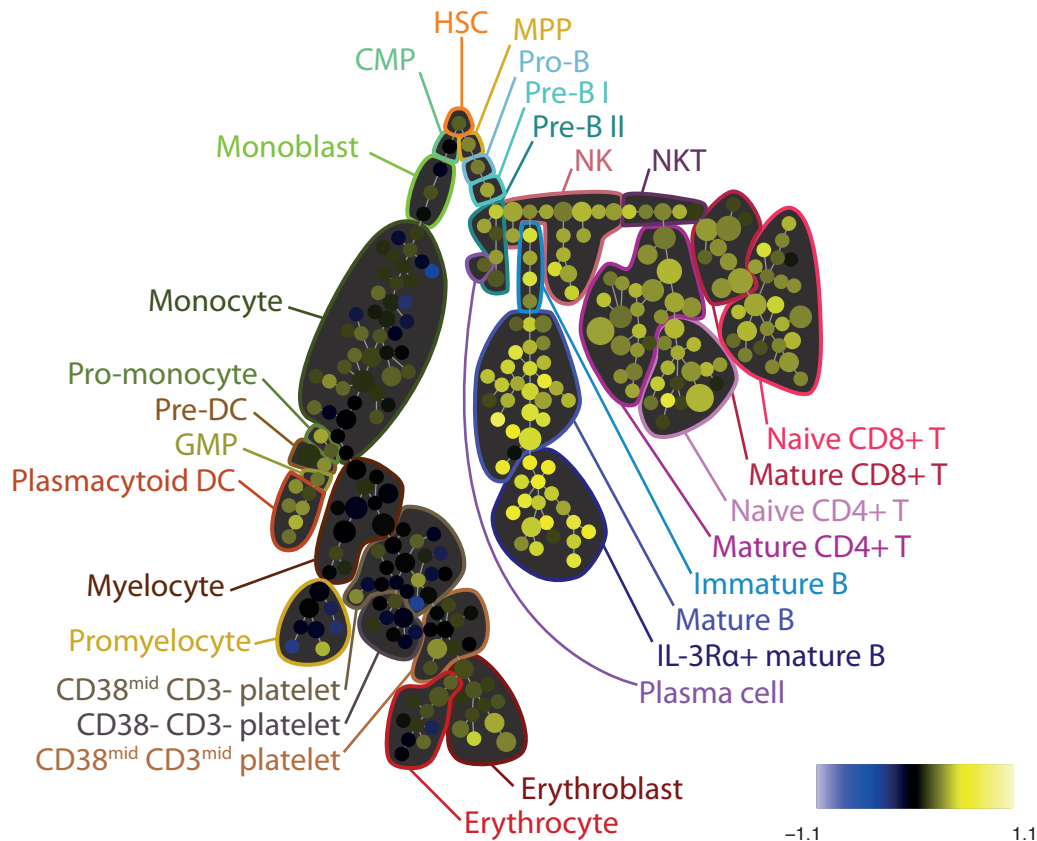


Figure S8B

153-pMAPKAPK2 ---- Dasatinib+PMAiono vs Ref Ratio

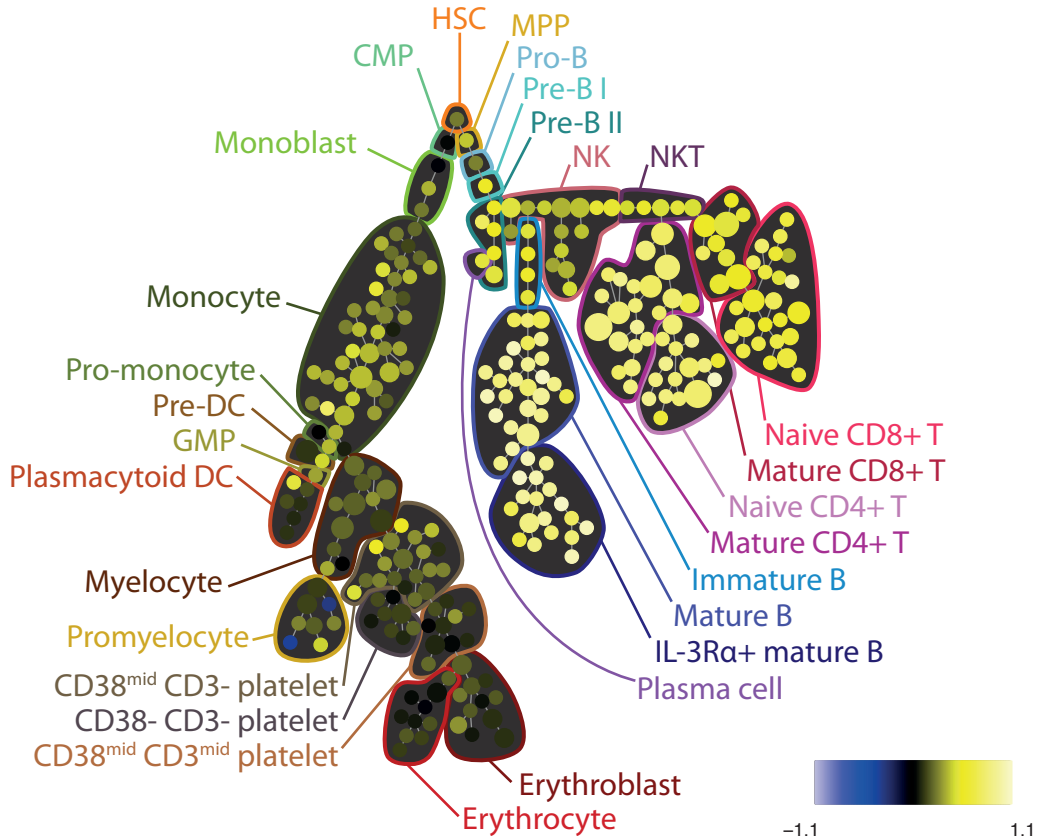


Figure S8B

153-pMAPKAPK2 ---- Dasatinib+PVO4 vs Ref Ratio

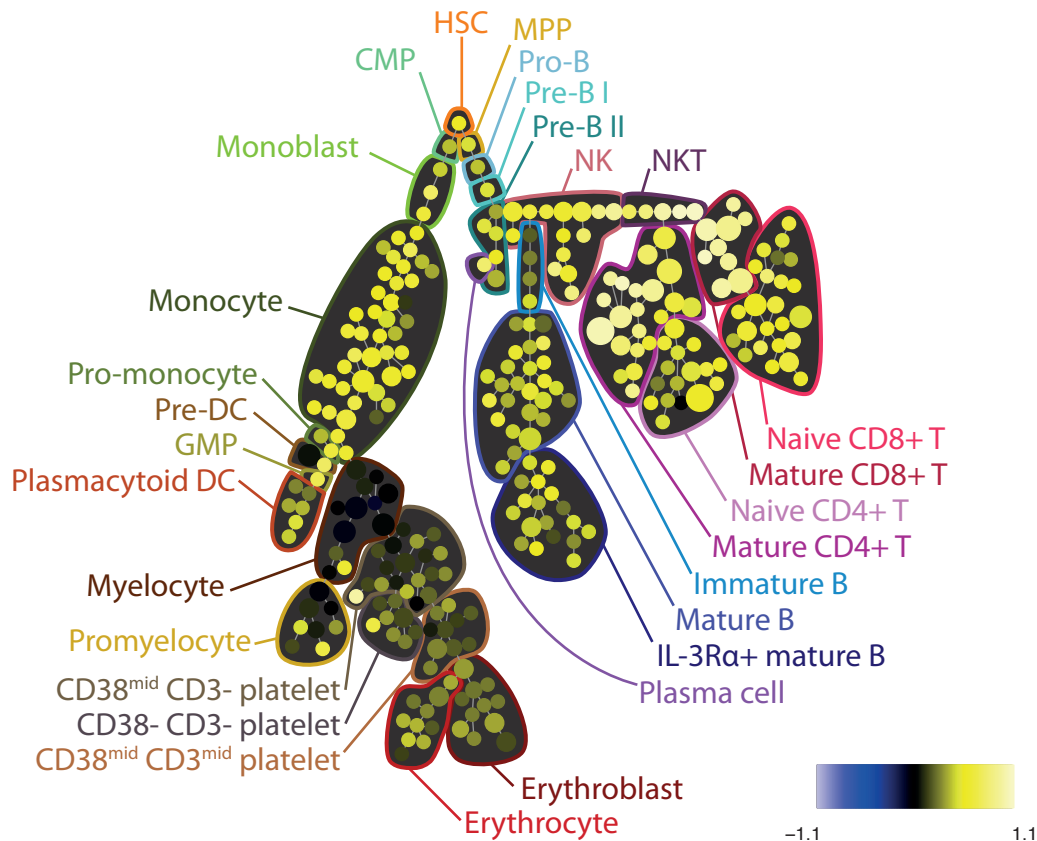


Figure S8B

153-pMAPKAPK2 ---- Dasatinib+Unstim vs Ref Ratio

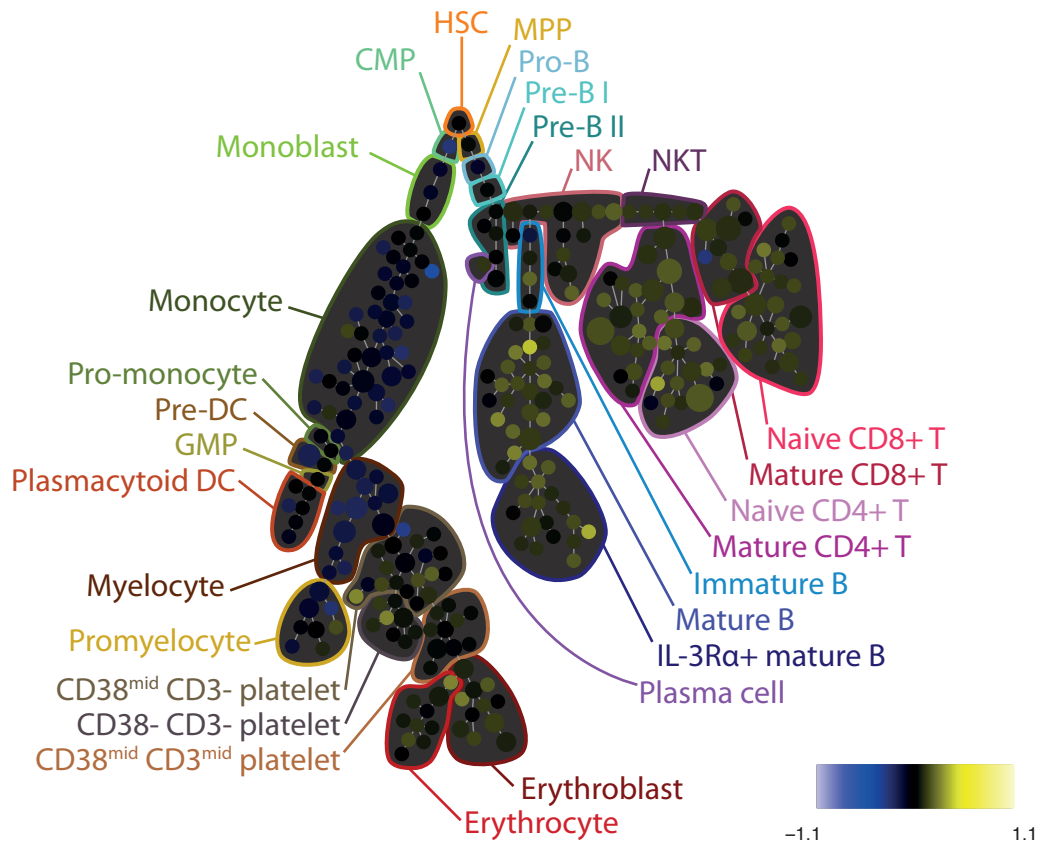


Figure S8B

154-pSHP2 --- Dasatinib+BCR vs Ref Ratio

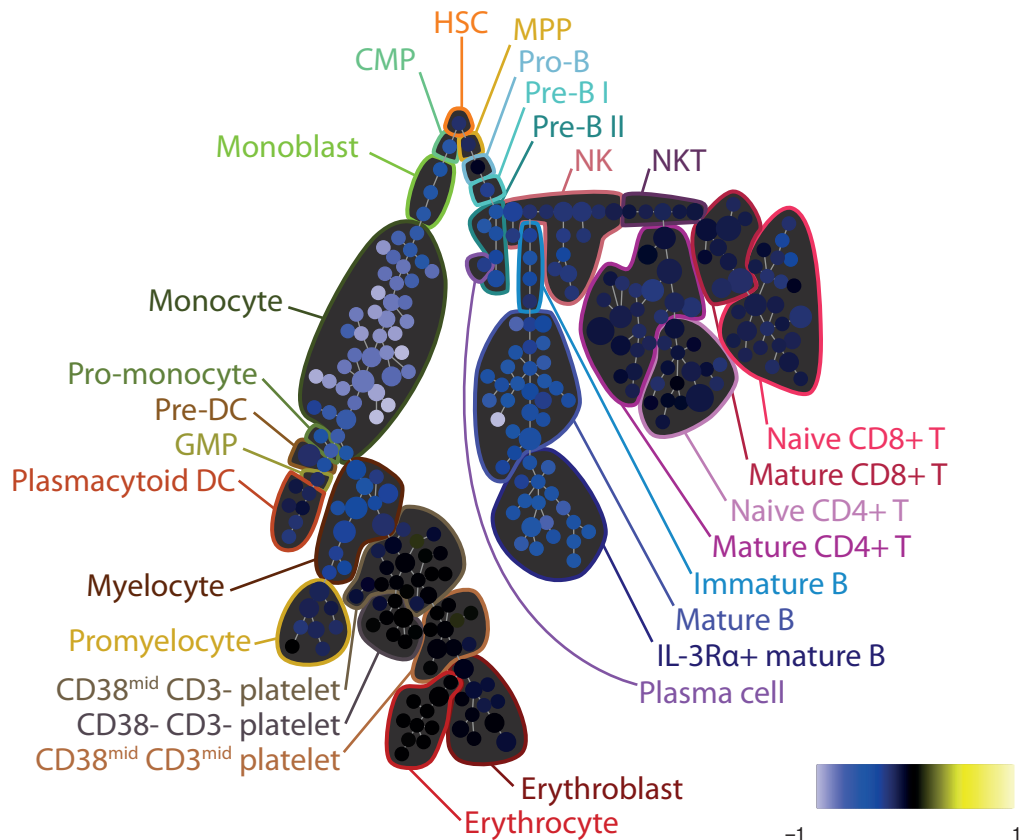


Figure S8B

154-pSHP2 ---- Dasatinib+Flt3L vs Ref Ratio

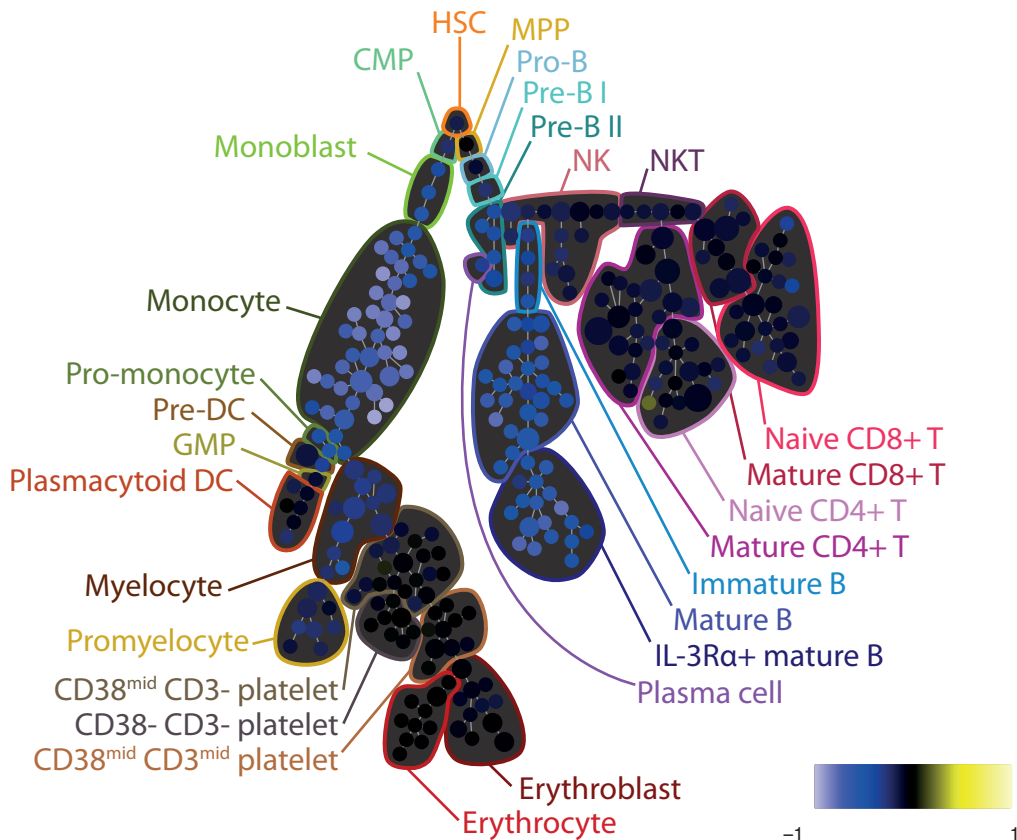


Figure S8B

154-pSHP2 ---- Dasatinib+IL7 vs Ref Ratio

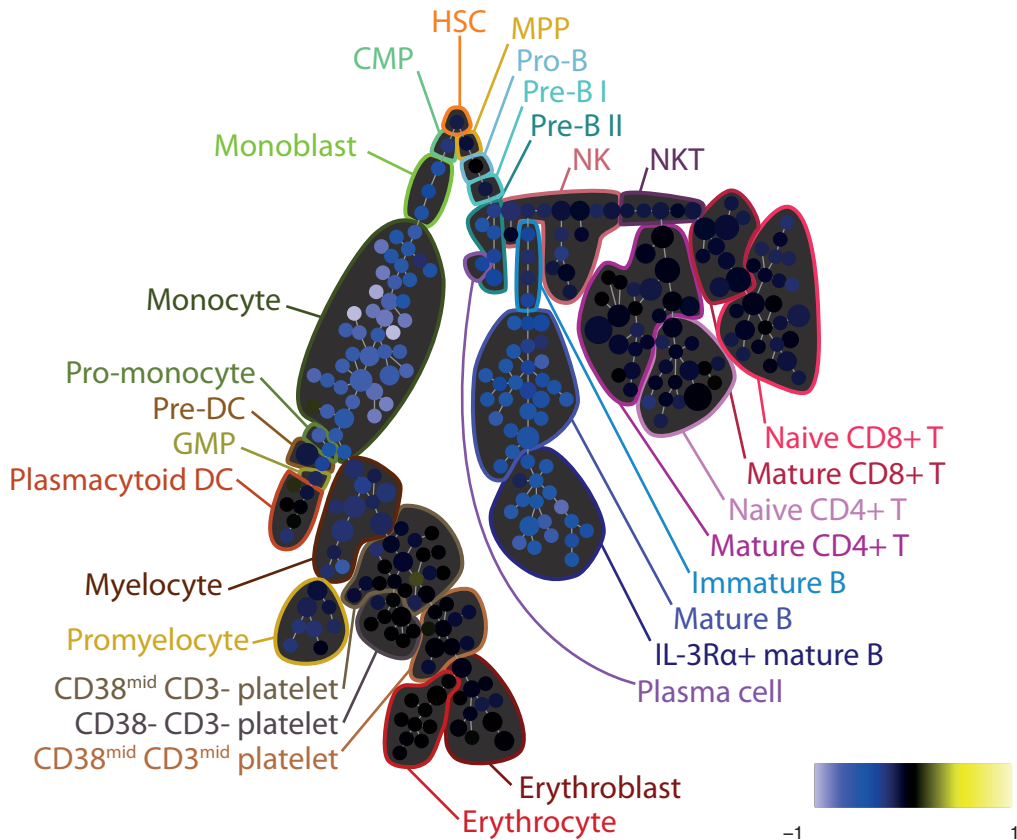


Figure S8B

154-pSHP2 ---- Dasatinib+PMAiono vs Ref Ratio

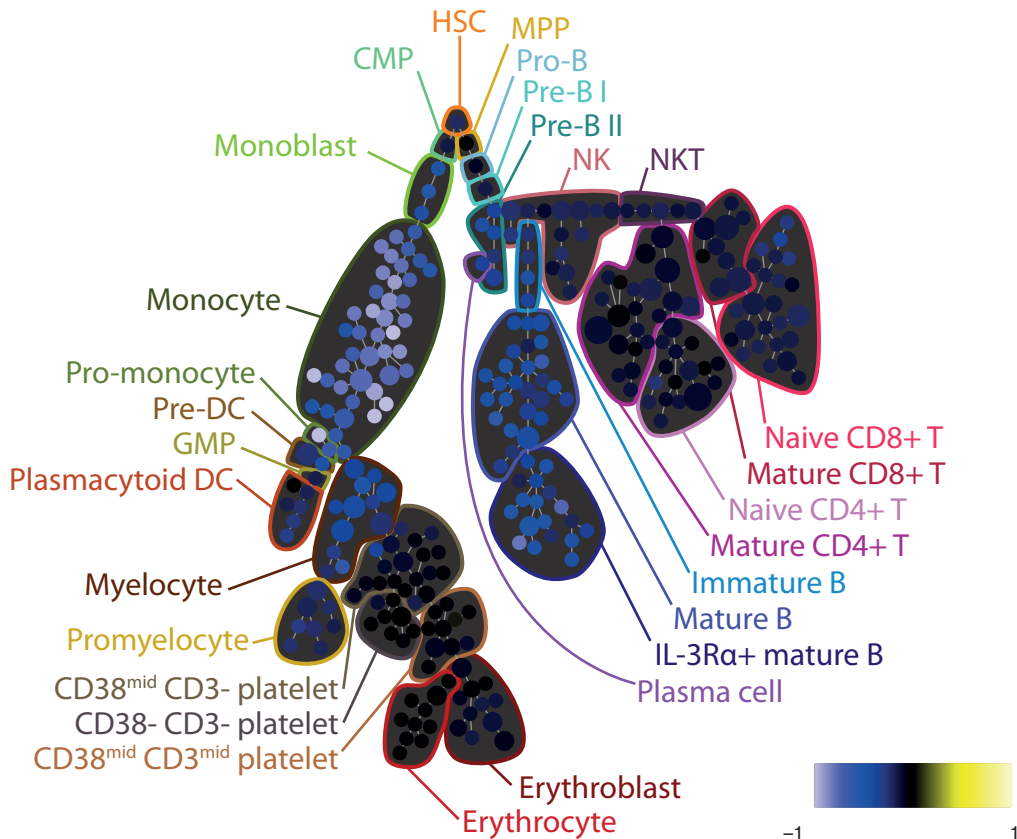


Figure S8B

154-pSHP2 ---- Dasatinib+PVO4 vs Ref Ratio

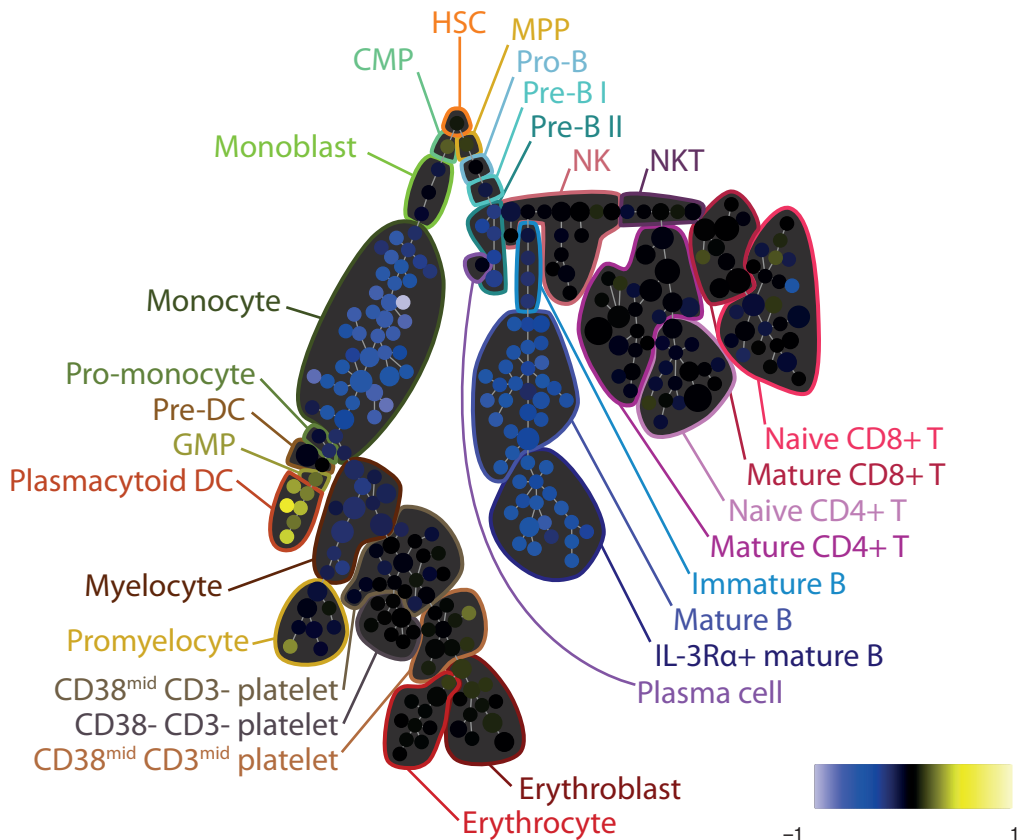


Figure S8B

154-pSHP2 ---- Dasatinib+Unstim vs Ref Ratio

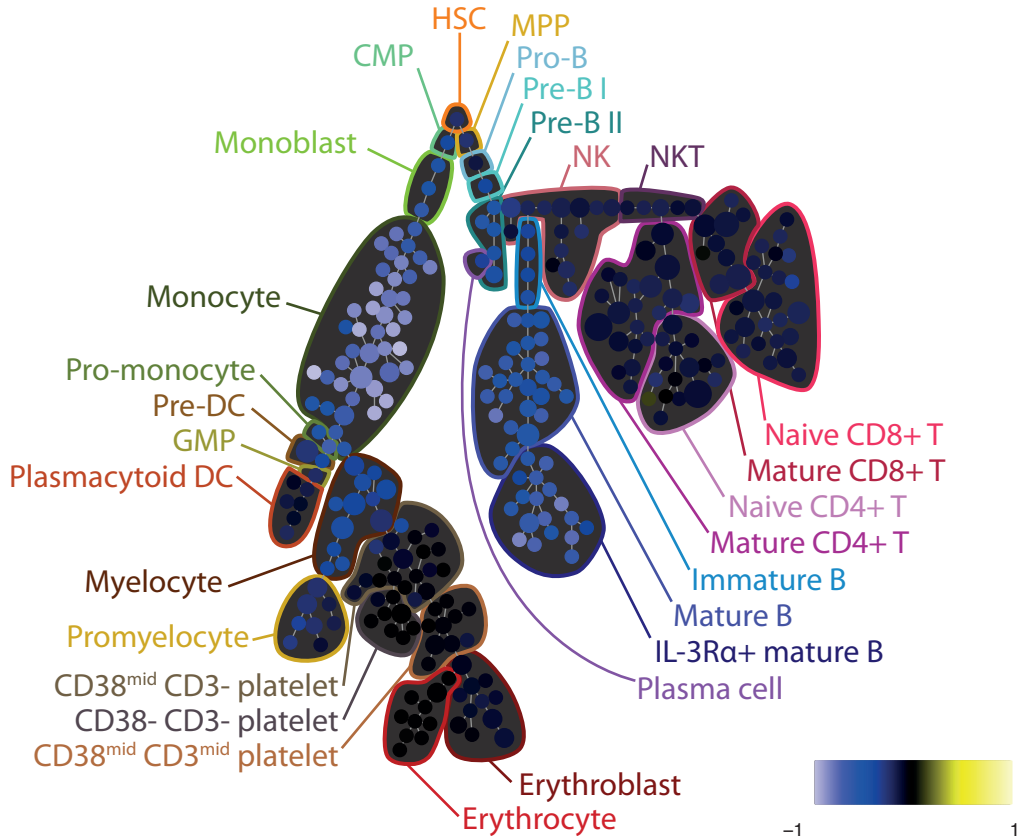


Figure S8B

156-pZAP70/Syk --- Dasatinib+BCR vs Ref Ratio

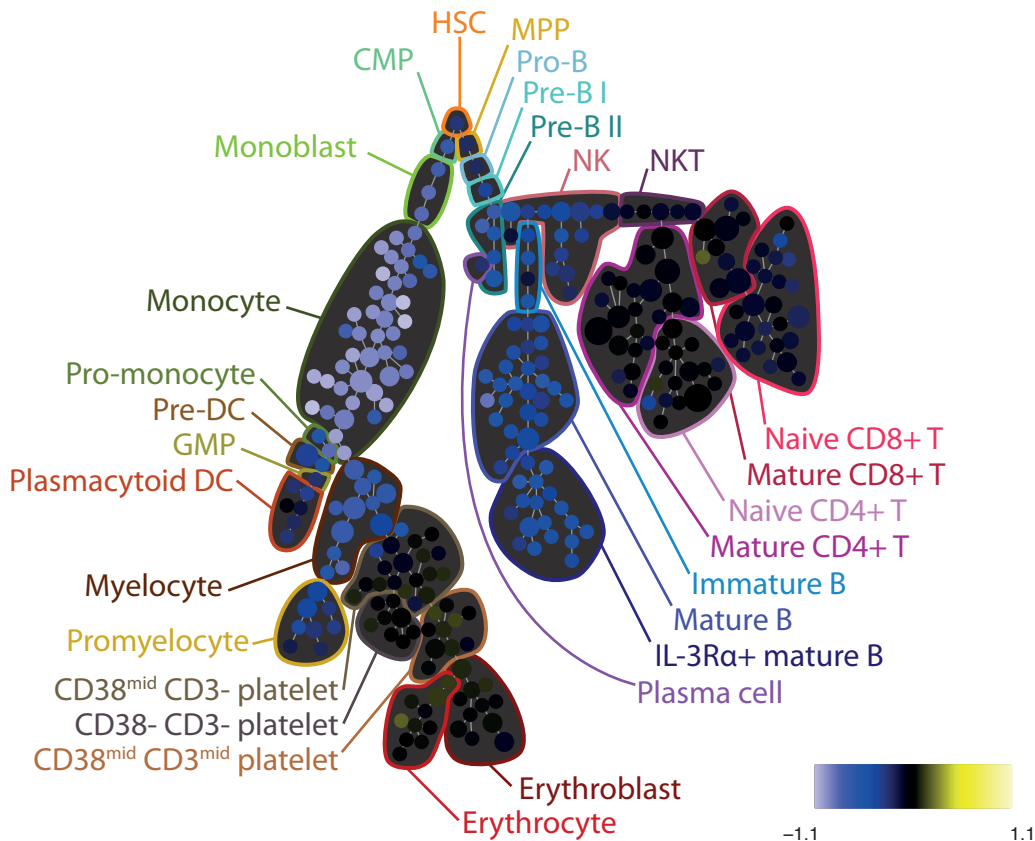


Figure S8B

156-pZAP70/Syk ---- Dasatinib+Flt3L vs Ref Ratio

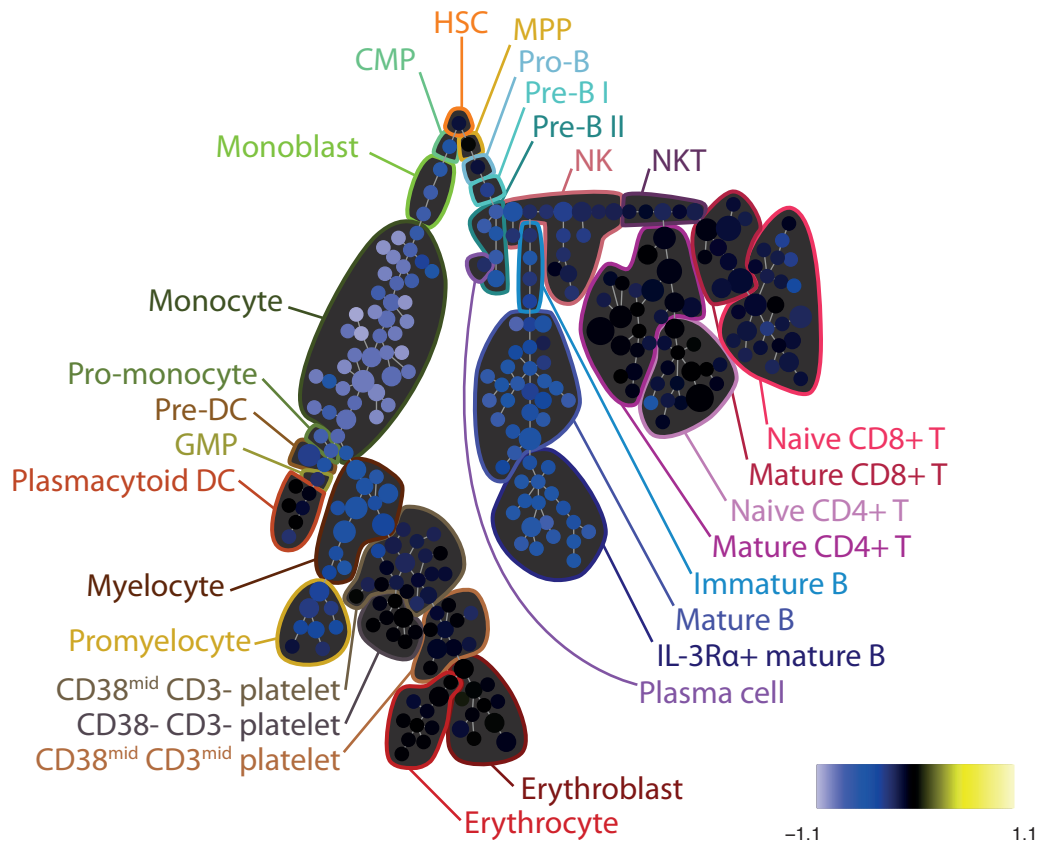


Figure S8B

156-pZAP70/Syk ---- Dasatinib+IL7 vs Ref Ratio

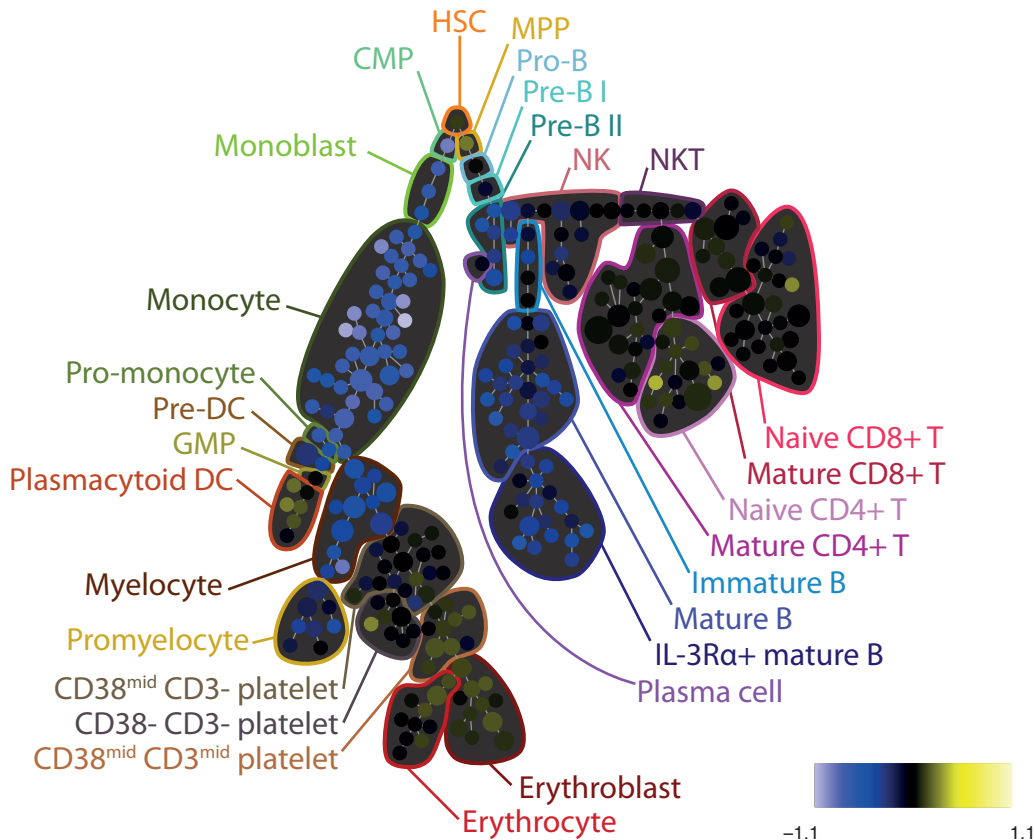


Figure S8B

156-pZAP70/Syk ---- Dasatinib+PMAiono vs Ref Ratio

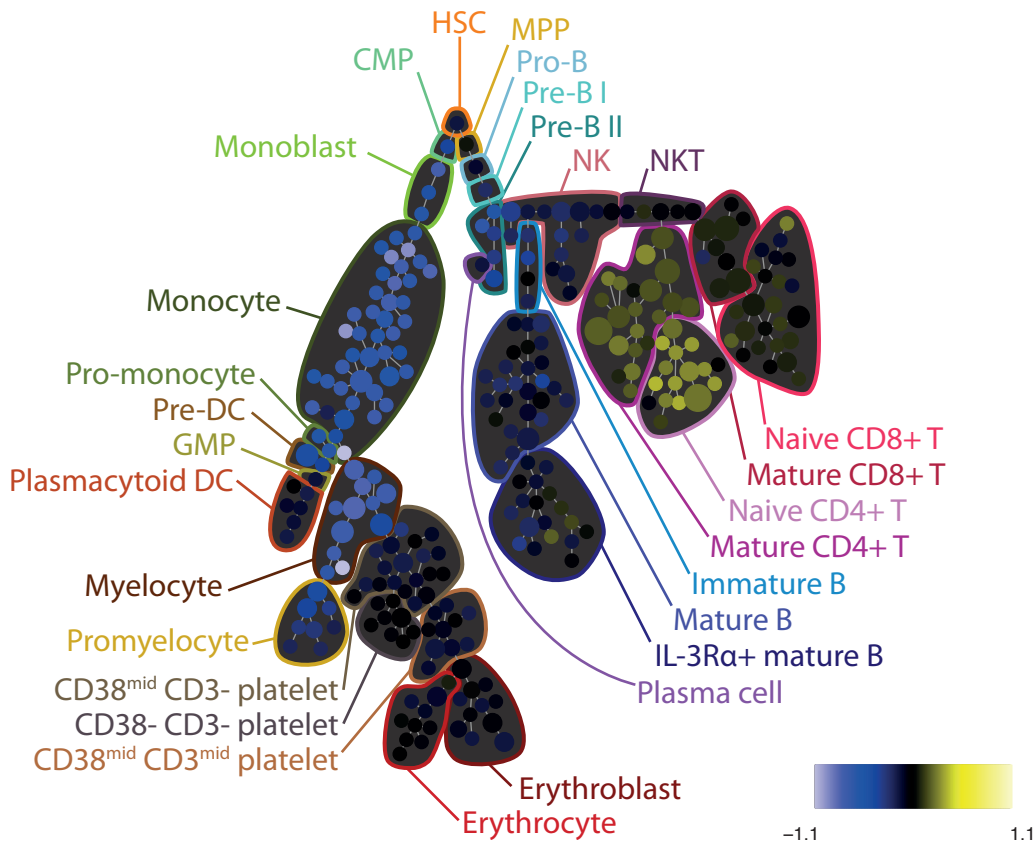


Figure S8B

156-pZAP70/Syk ---- Dasatinib+PVO4 vs Ref Ratio

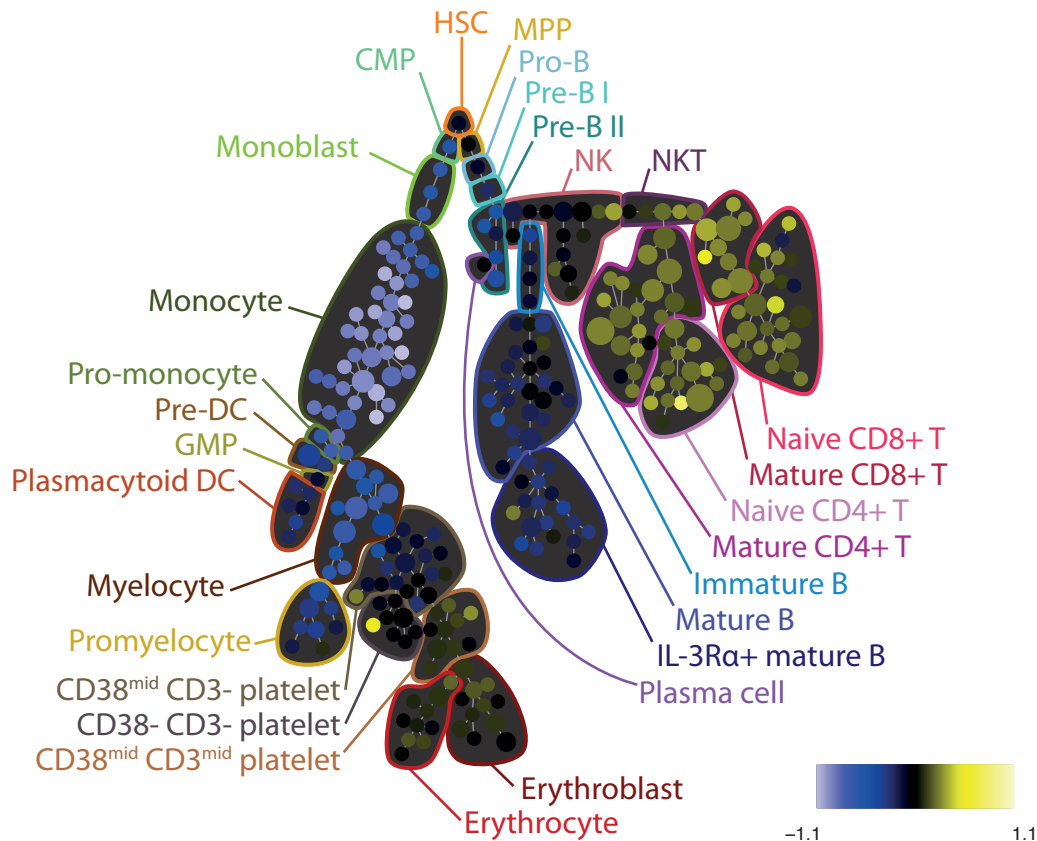


Figure S8B

156-pZAP70/Syk ---- Dasatinib+Unstim vs Ref Ratio

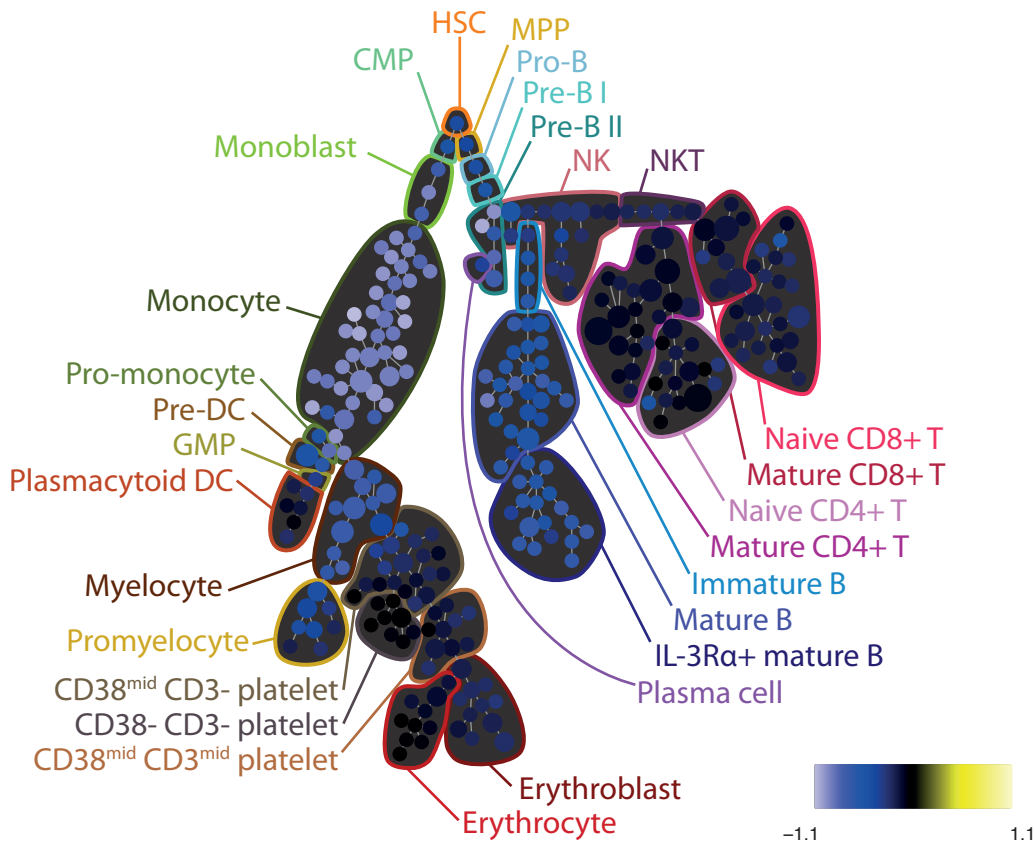


Figure S8B

159-pSTAT3 ---- Dasatinib+BCR vs Ref Ratio

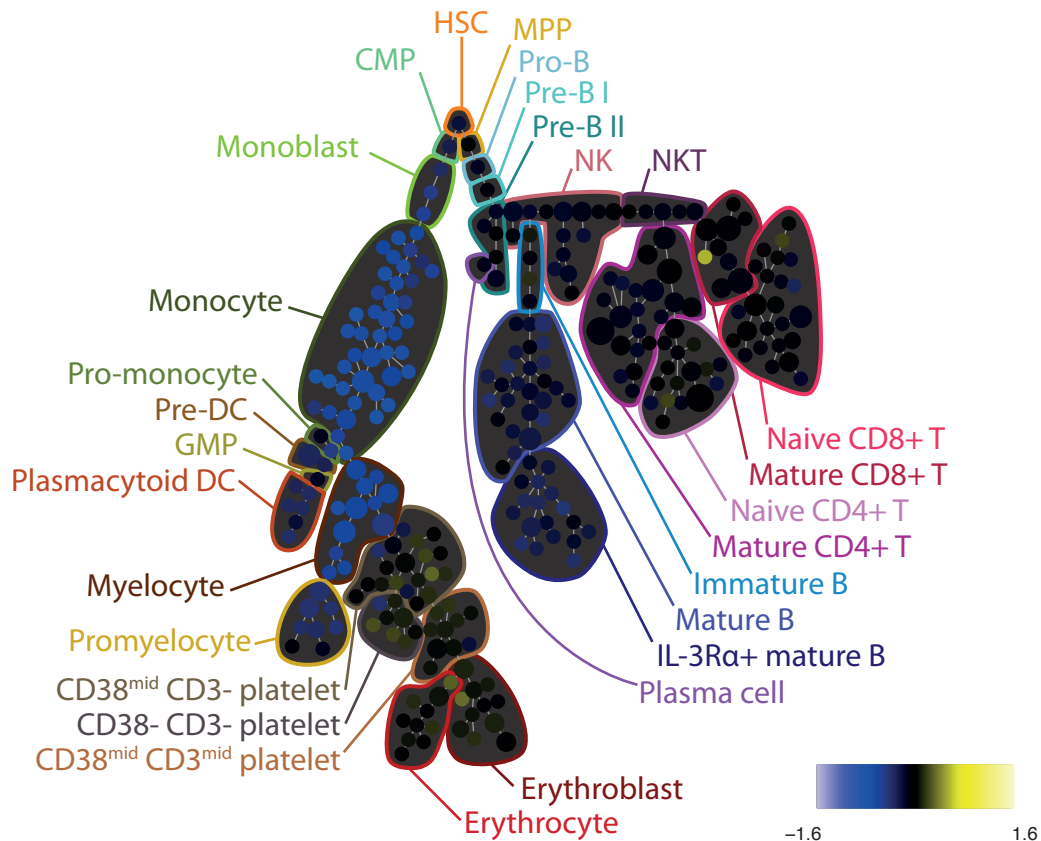


Figure S8B

159-pSTAT3 ---- Dasatinib+Flt3L vs Ref Ratio

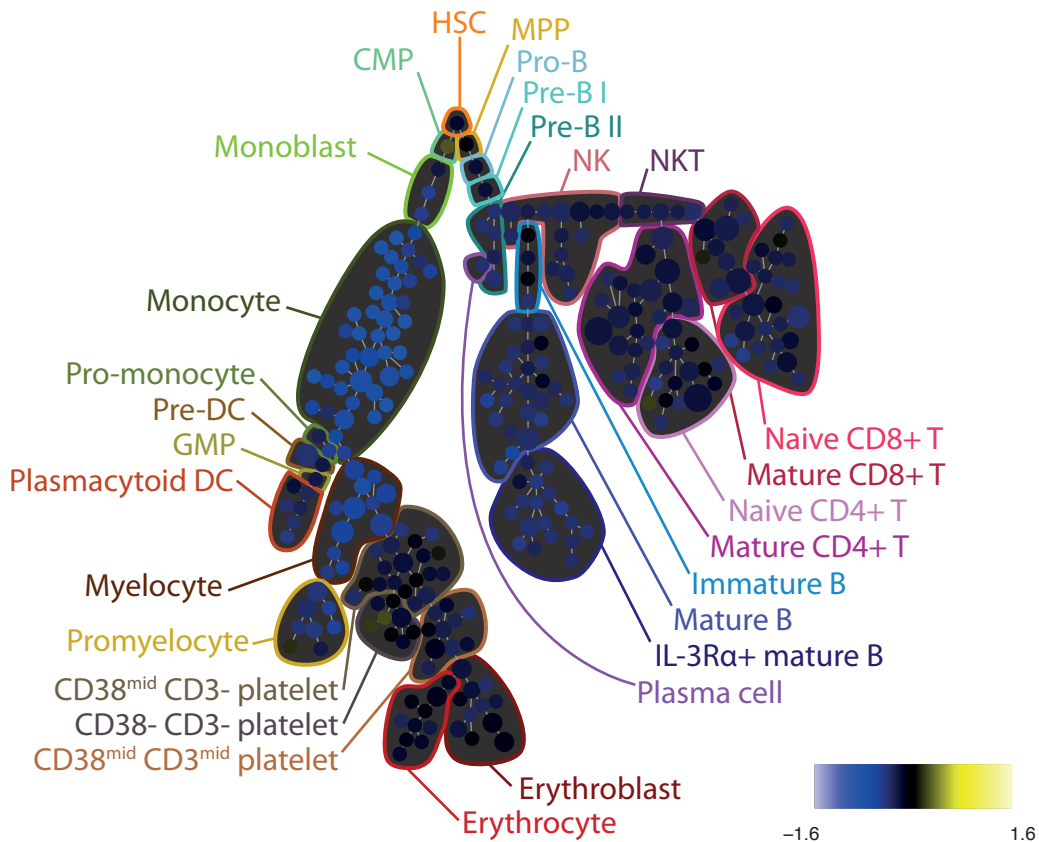


Figure S8B

159-pSTAT3 ---- Dasatinib+IL7 vs Ref Ratio

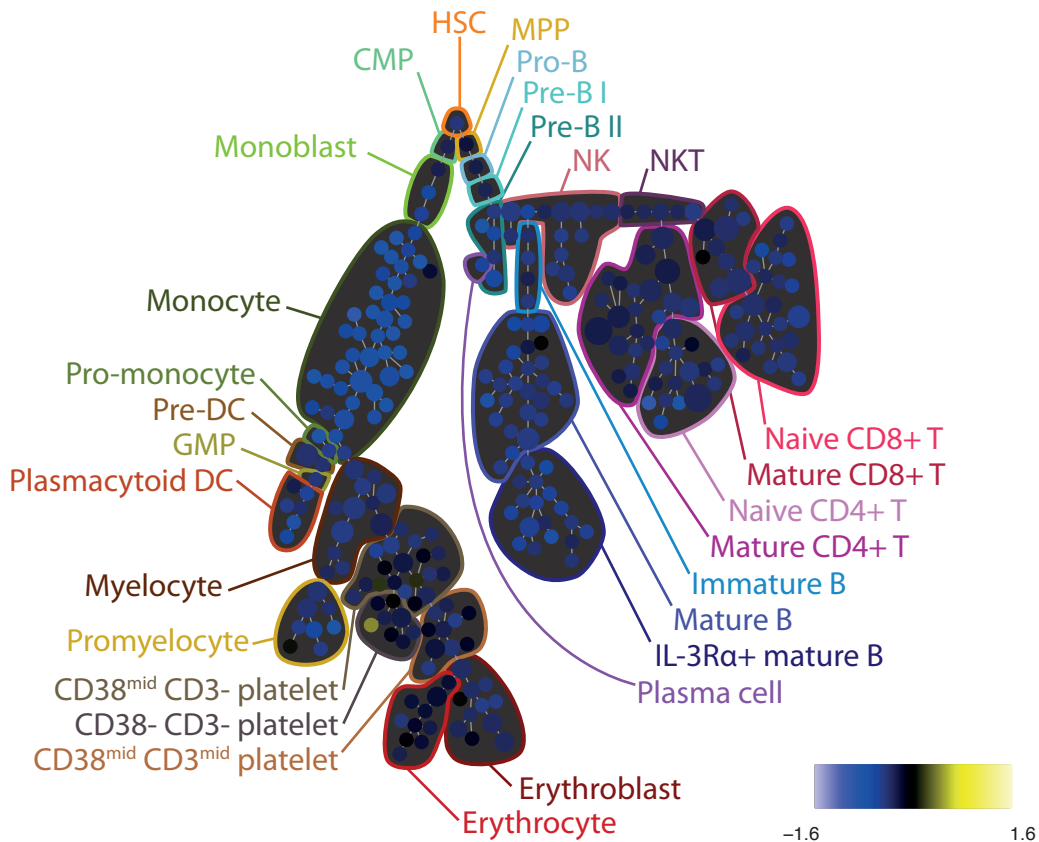


Figure S8B

159-pSTAT3 --- Dasatinib+PMAiono vs Ref Ratio

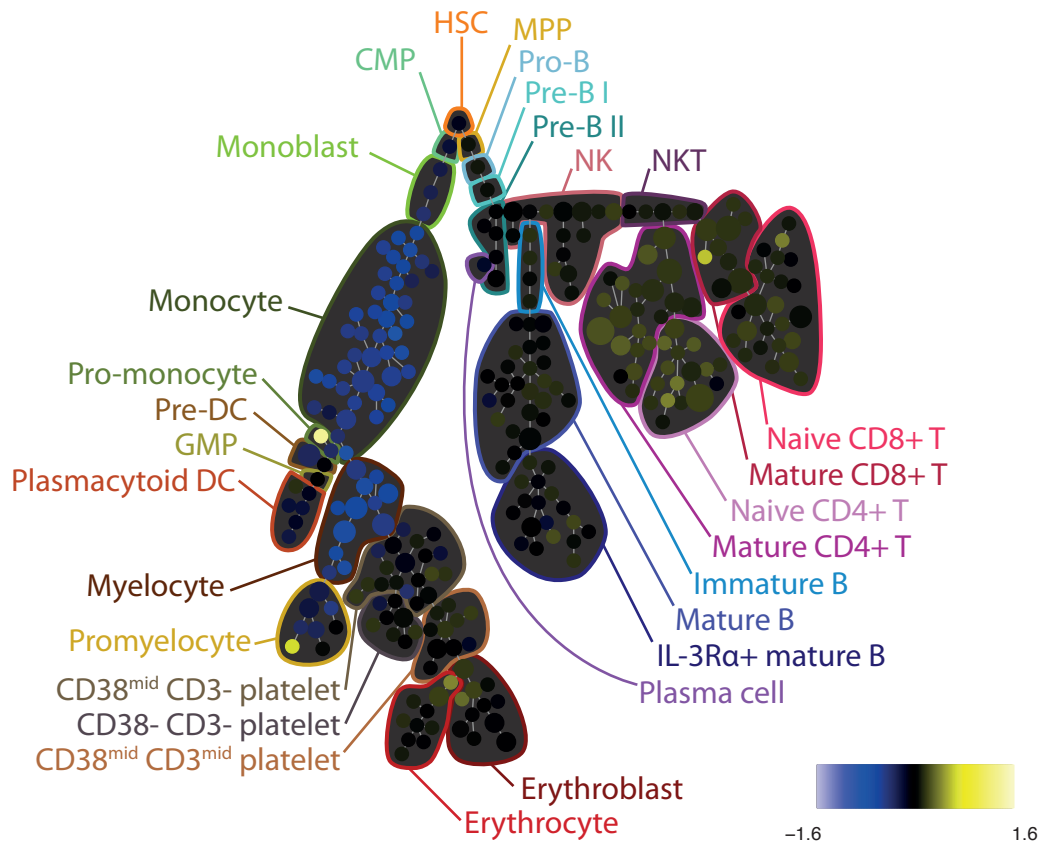


Figure S8B

159-pSTAT3 ---- Dasatinib+PVO4 vs Ref Ratio

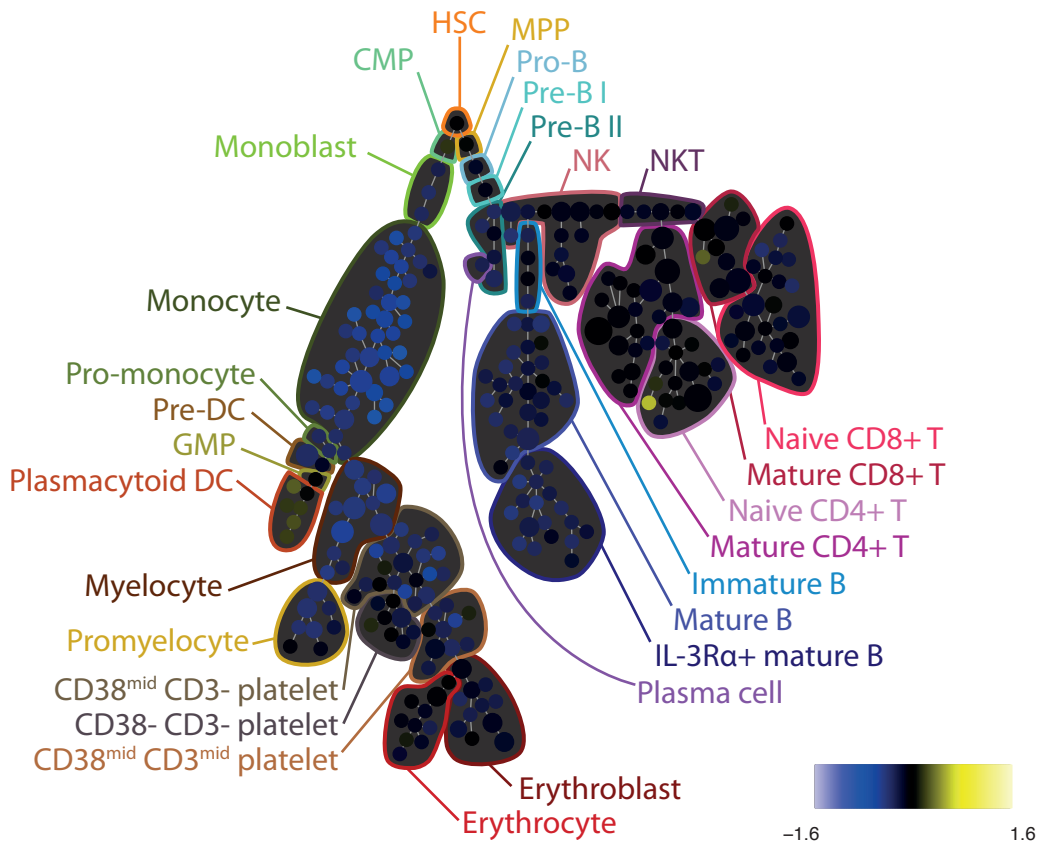


Figure S8B

159-pSTAT3 ---- Dasatinib+Unstim vs Ref Ratio

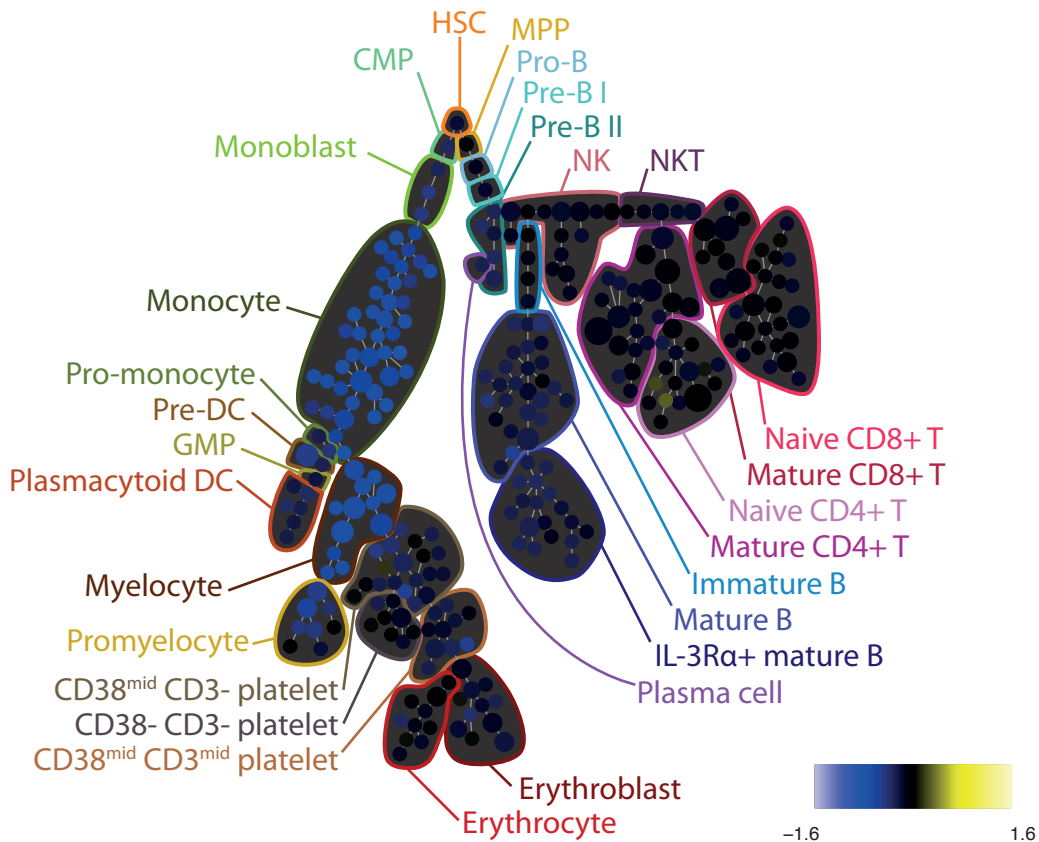


Figure S8B

164-pSLP-76 ---- Dasatinib+BCR vs Ref Ratio

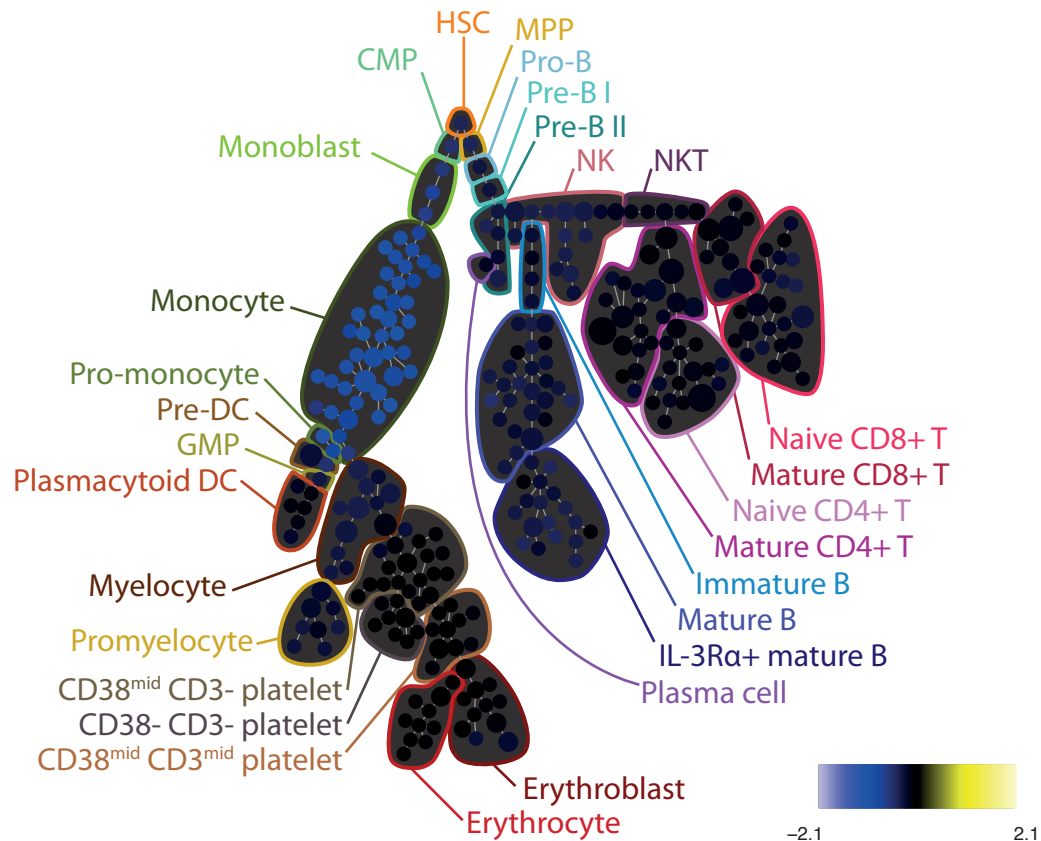


Figure S8B

164-pSLP-76 ---- Dasatinib+Flt3L vs Ref Ratio

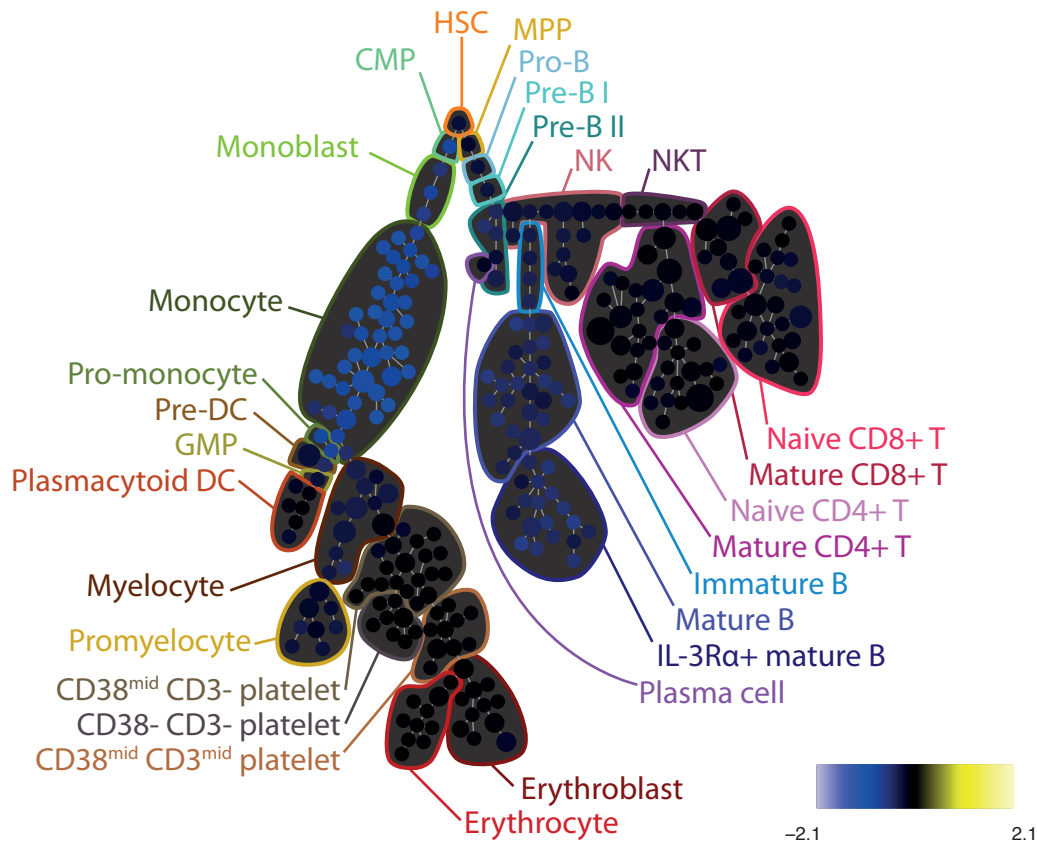


Figure S8B

164-pSLP-76 ---- Dasatinib+IL7 vs Ref Ratio

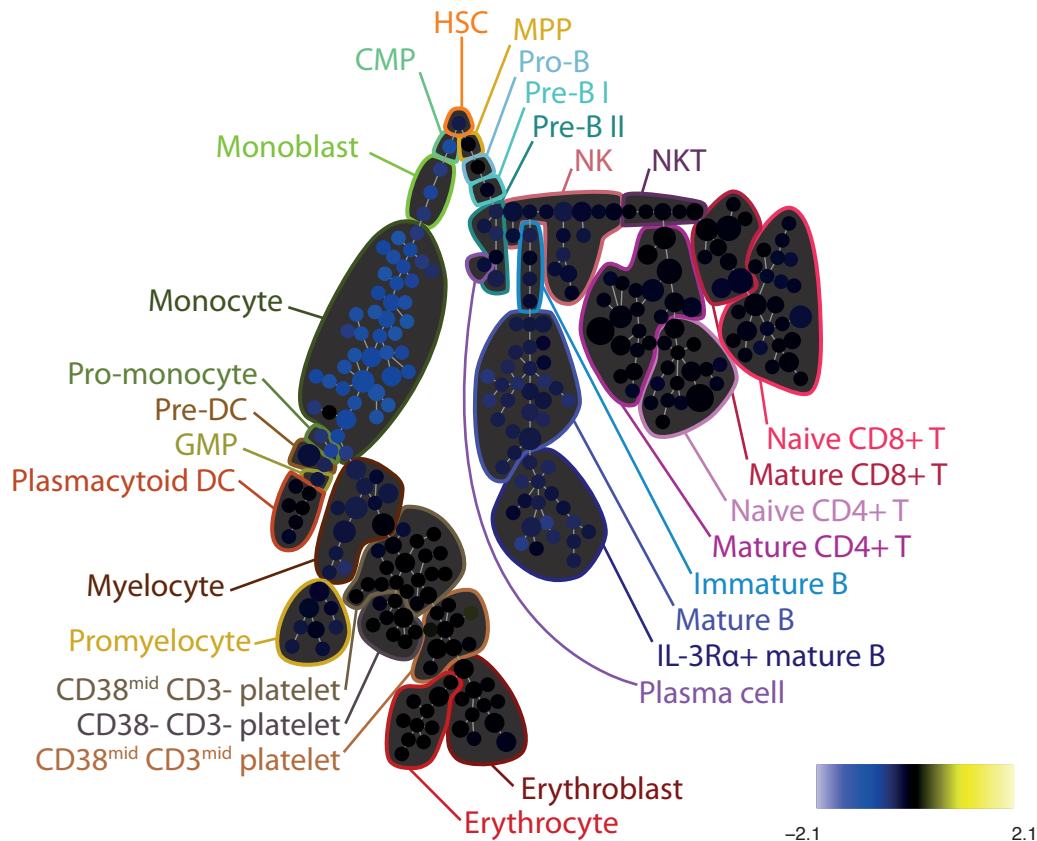


Figure S8B

164-pSLP-76 --- Dasatinib+PMAiono vs Ref Ratio

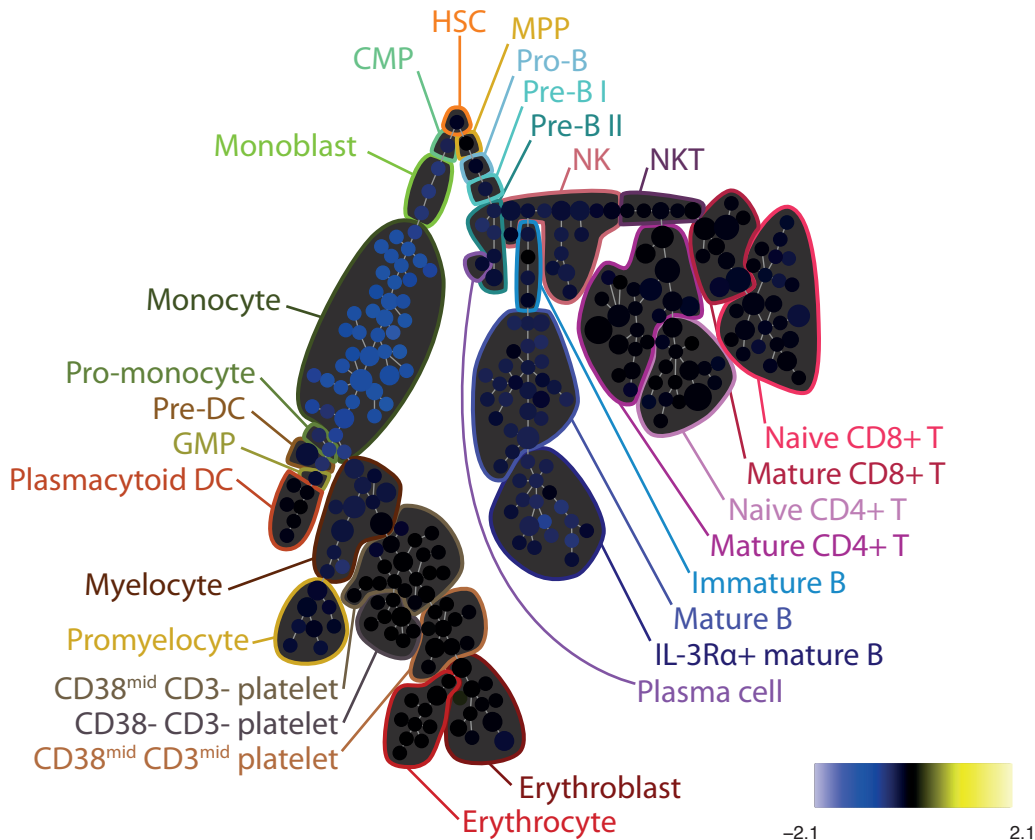


Figure S8B

164-pSLP-76 ---- Dasatinib+PVO4 vs Ref Ratio

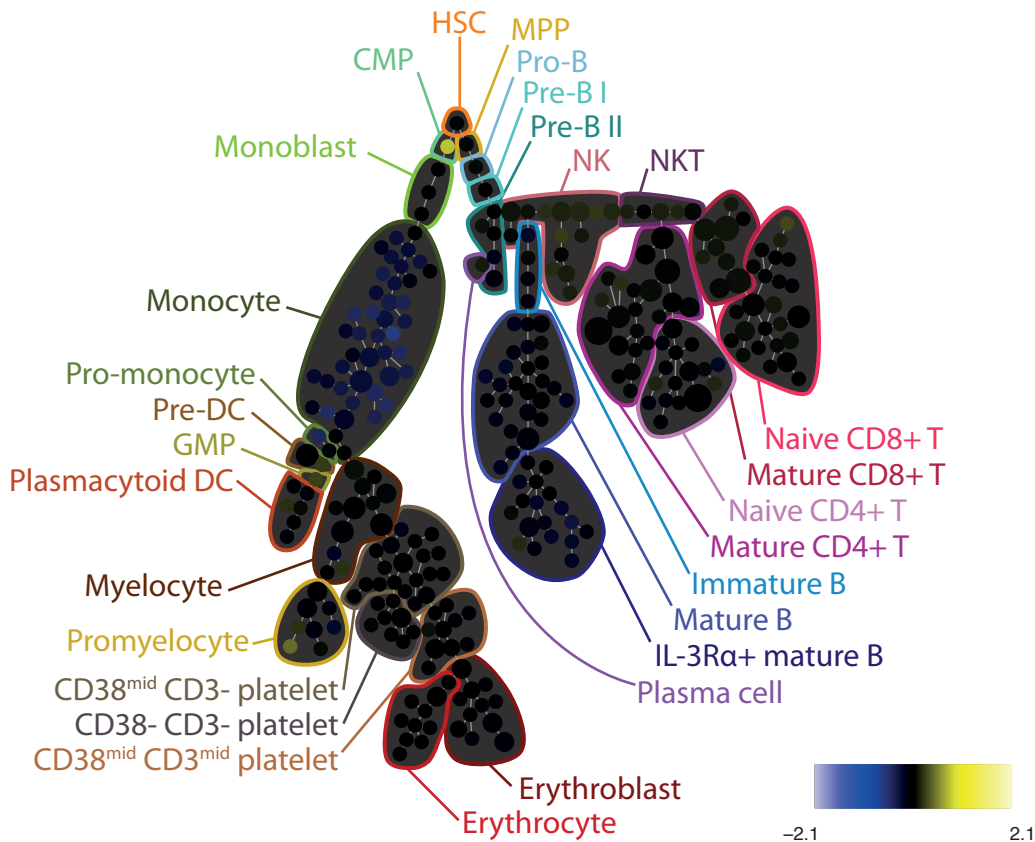


Figure S8B

164-pSLP-76 --- Dasatinib+Unstim vs Ref Ratio

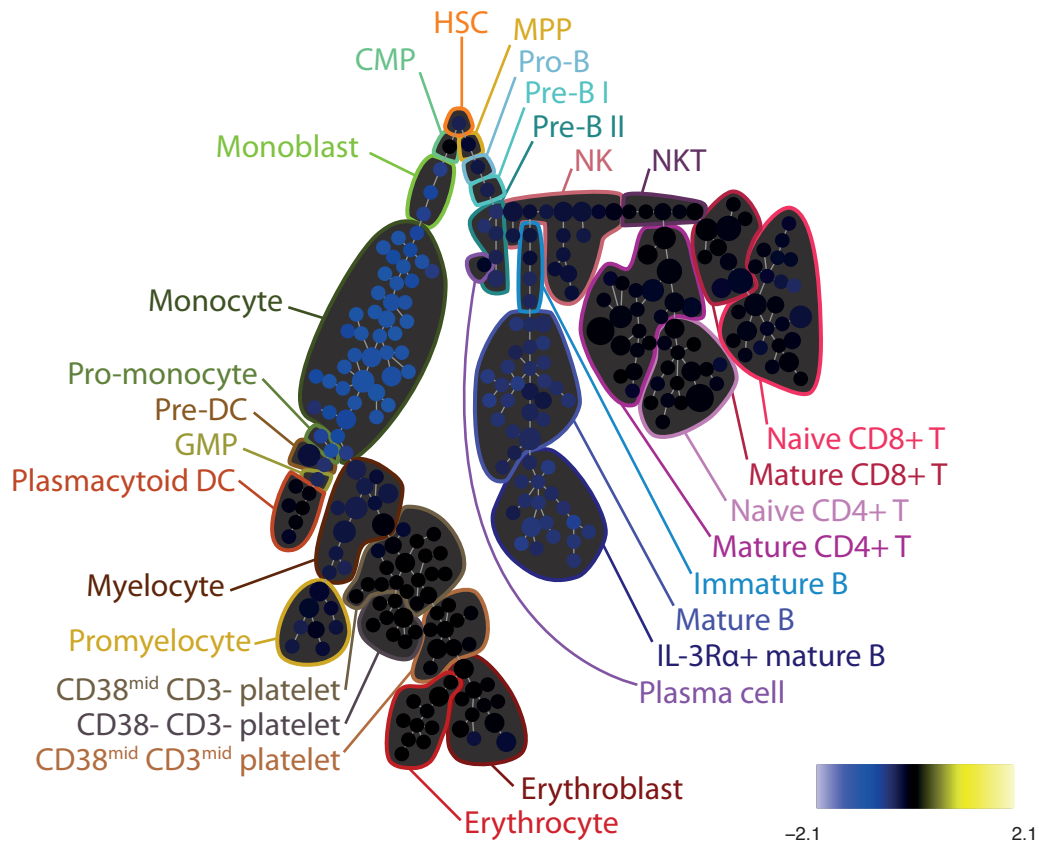


Figure S8B

165-pNFkB ---- Dasatinib+BCR vs Ref Ratio

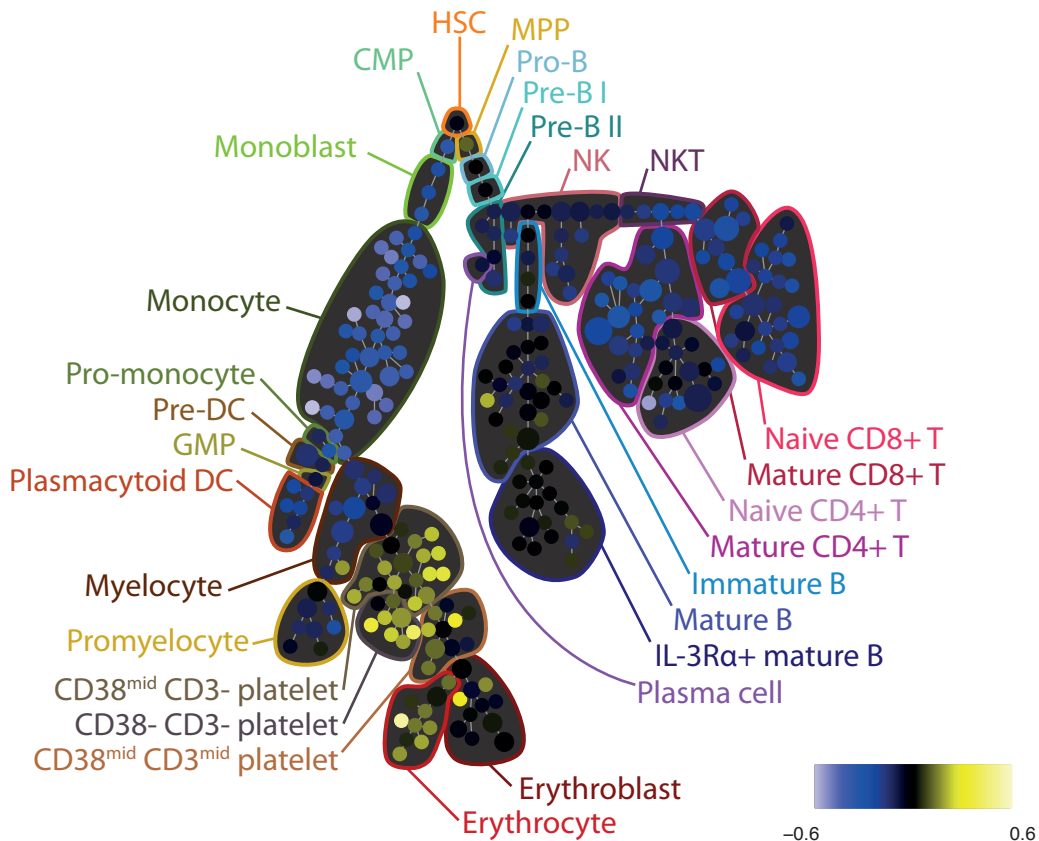


Figure S8B

165-pNFkB ---- Dasatinib+Flt3L vs Ref Ratio

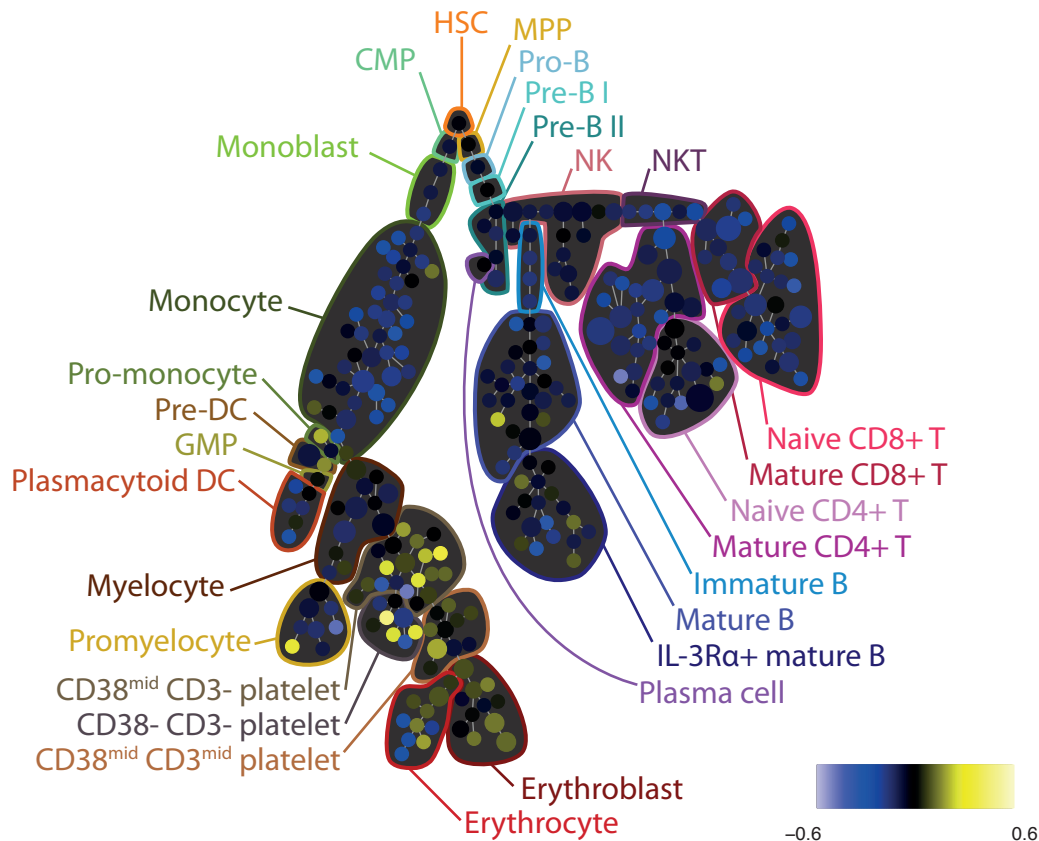


Figure S8B

165-pNFkB ---- Dasatinib+IL7 vs Ref Ratio

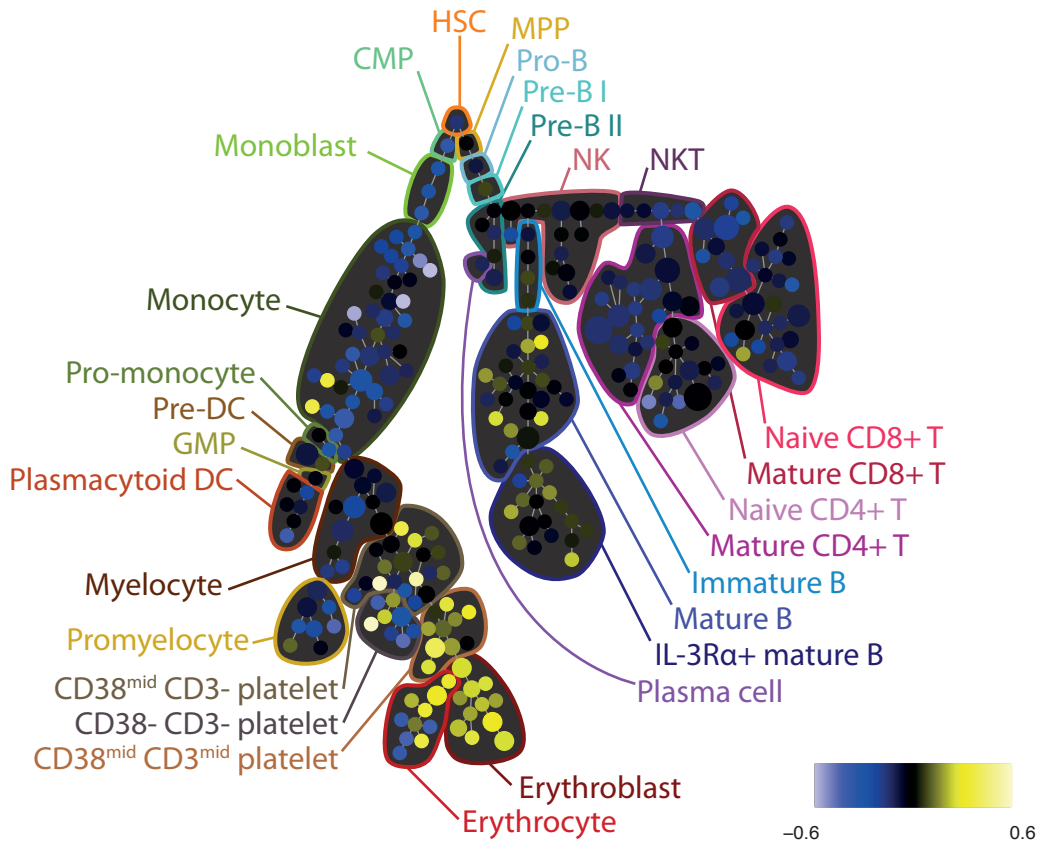


Figure S8B

165-pNFkB ---- Dasatinib+PMAiono vs Ref Ratio

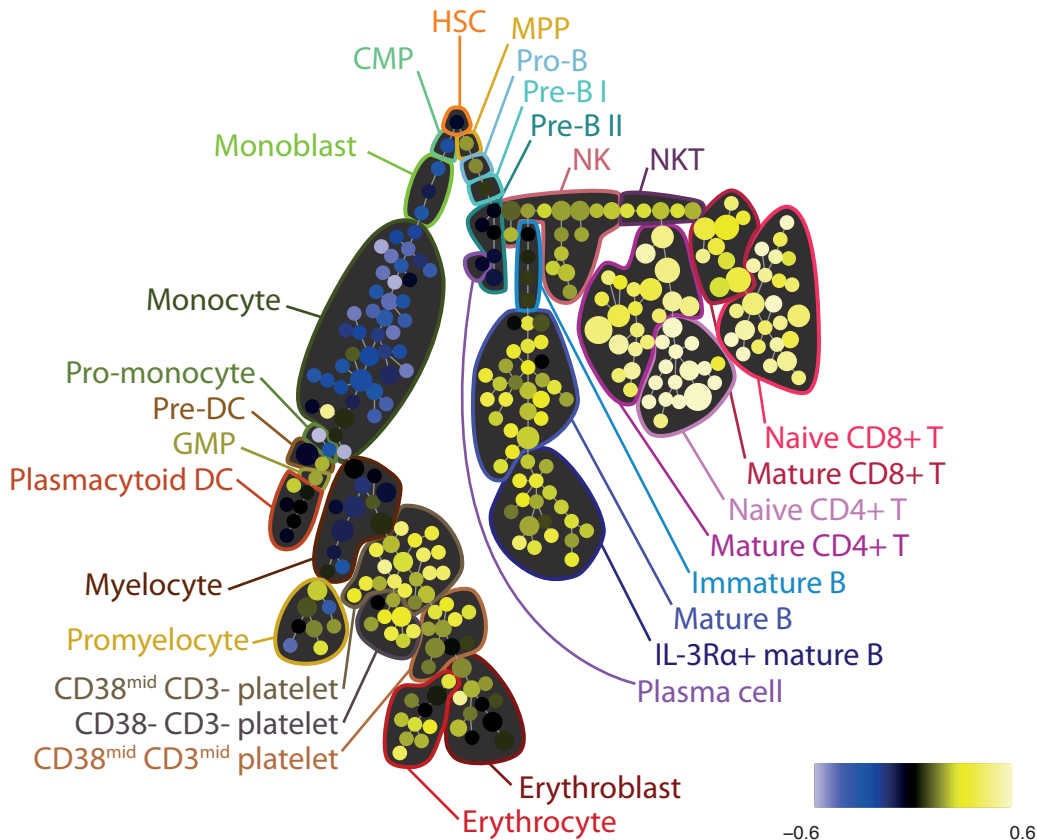


Figure S8B

165-pNFkB ---- Dasatinib+PVO4 vs Ref Ratio

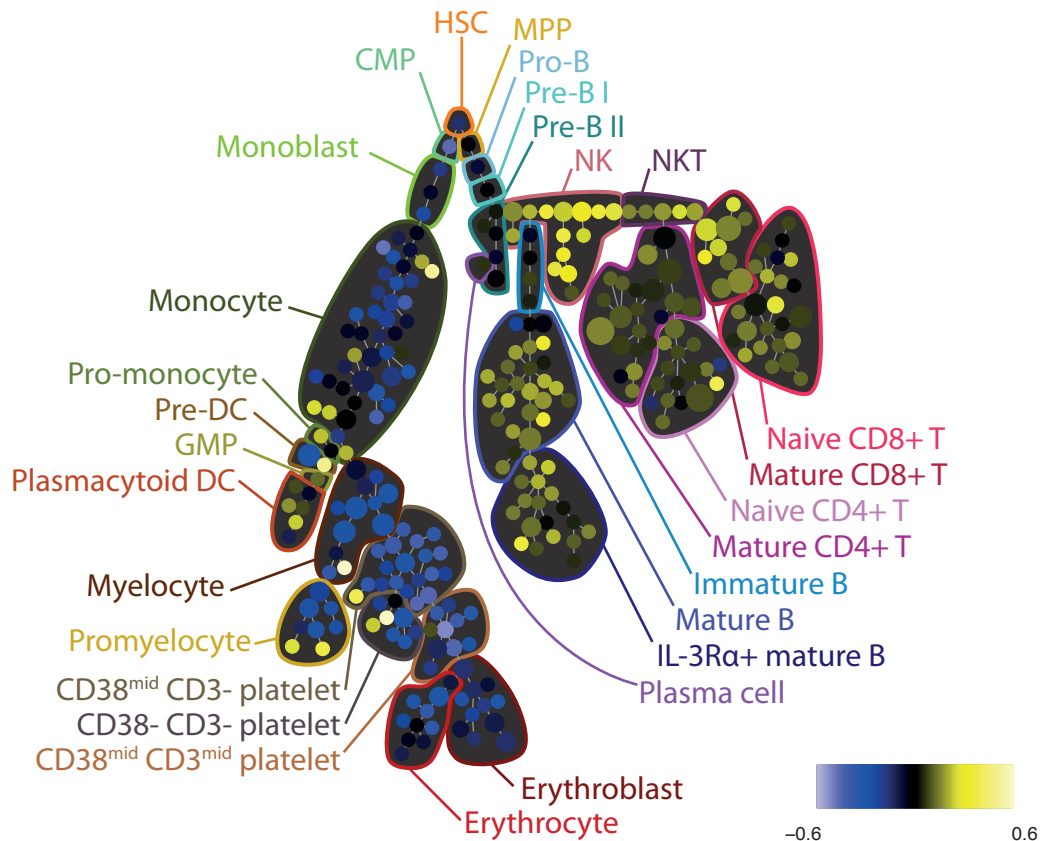


Figure S8B

165-pNFkB ---- Dasatinib+Unstim vs Ref Ratio

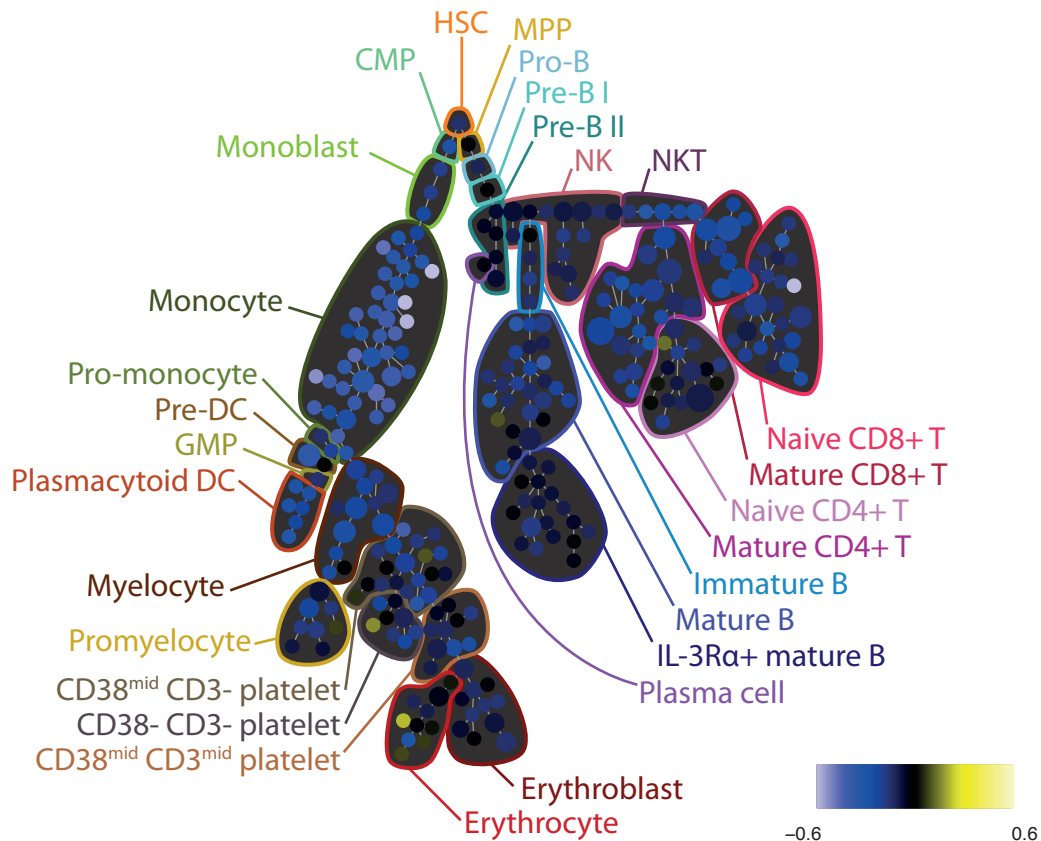


Figure S8B

166-IkBalpha ---- Dasatinib+BCR vs Ref Ratio

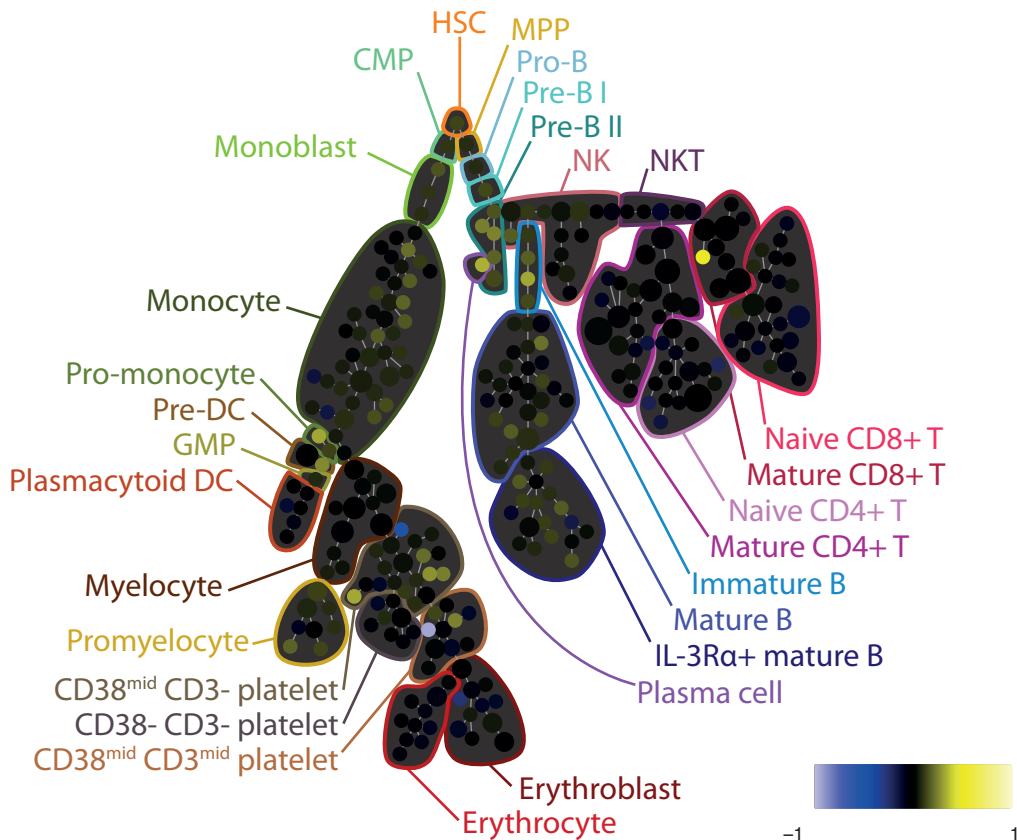


Figure S8B

166-IkBaIpha ---- Dasatinib+Flt3L vs Ref Ratio

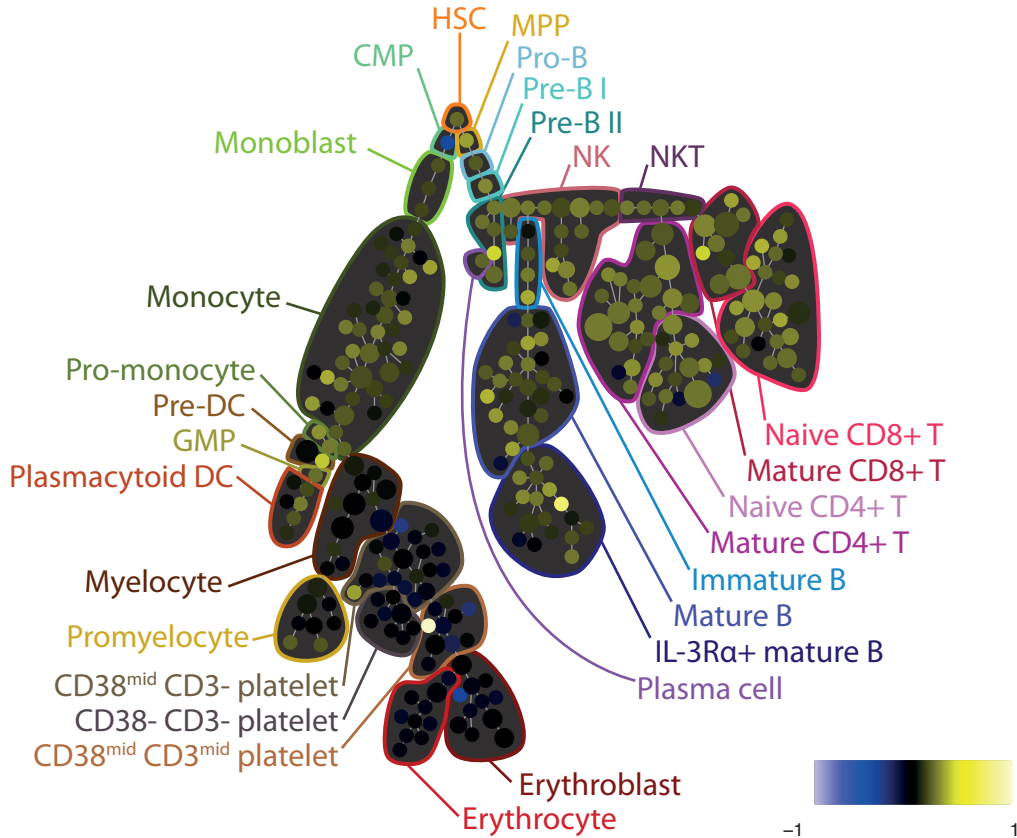


Figure S8B

166-IkBAlpha ---- Dasatinib+IL7 vs Ref Ratio

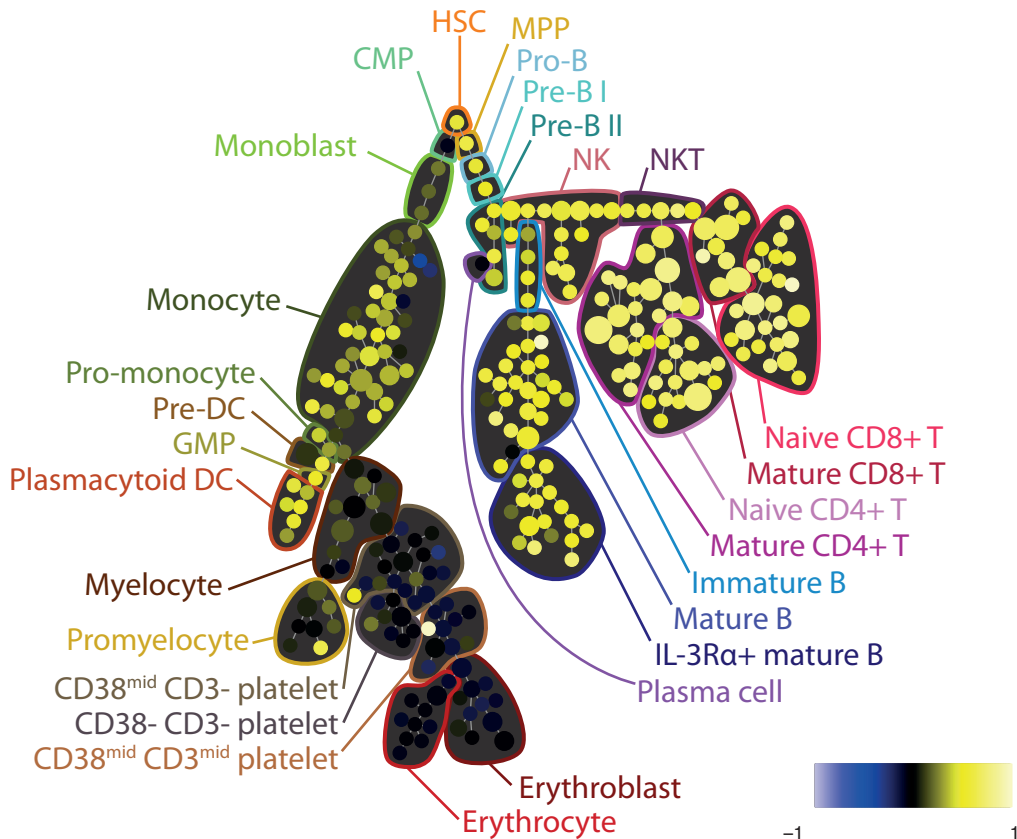


Figure S8B

166-IkBalpha --- Dasatinib+PMAiono vs Ref Ratio

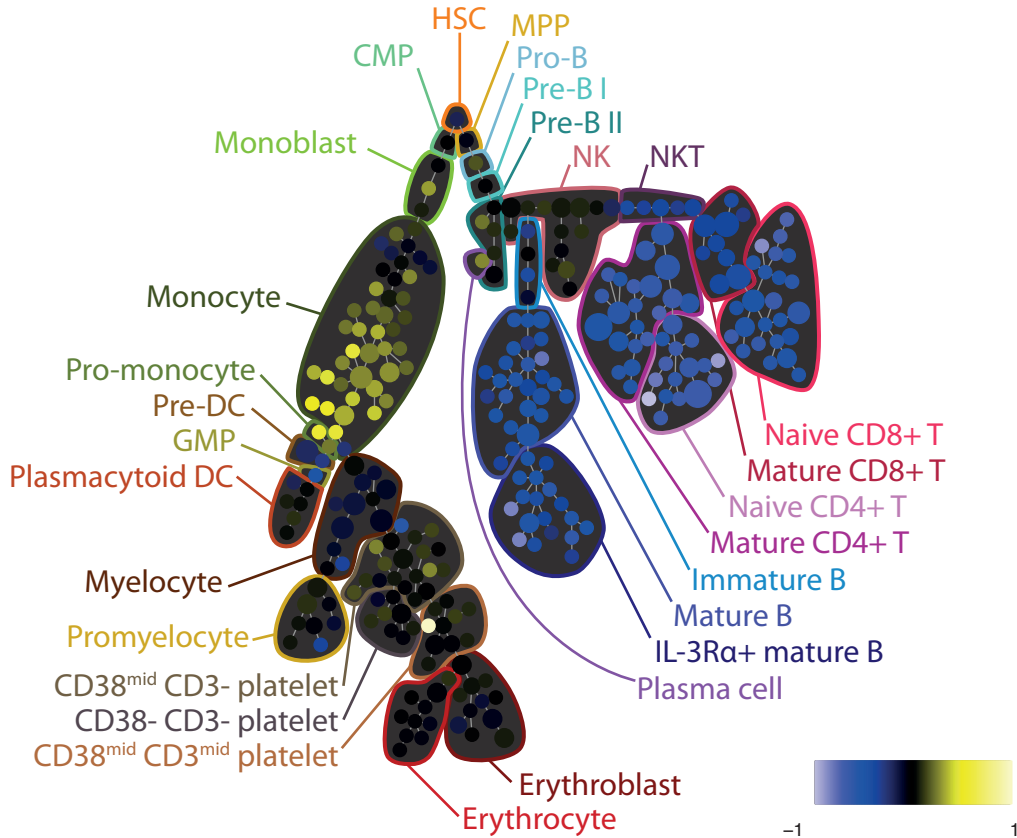


Figure S8B

166-IkBalpa ---- Dasatinib+PVO4 vs Ref Ratio

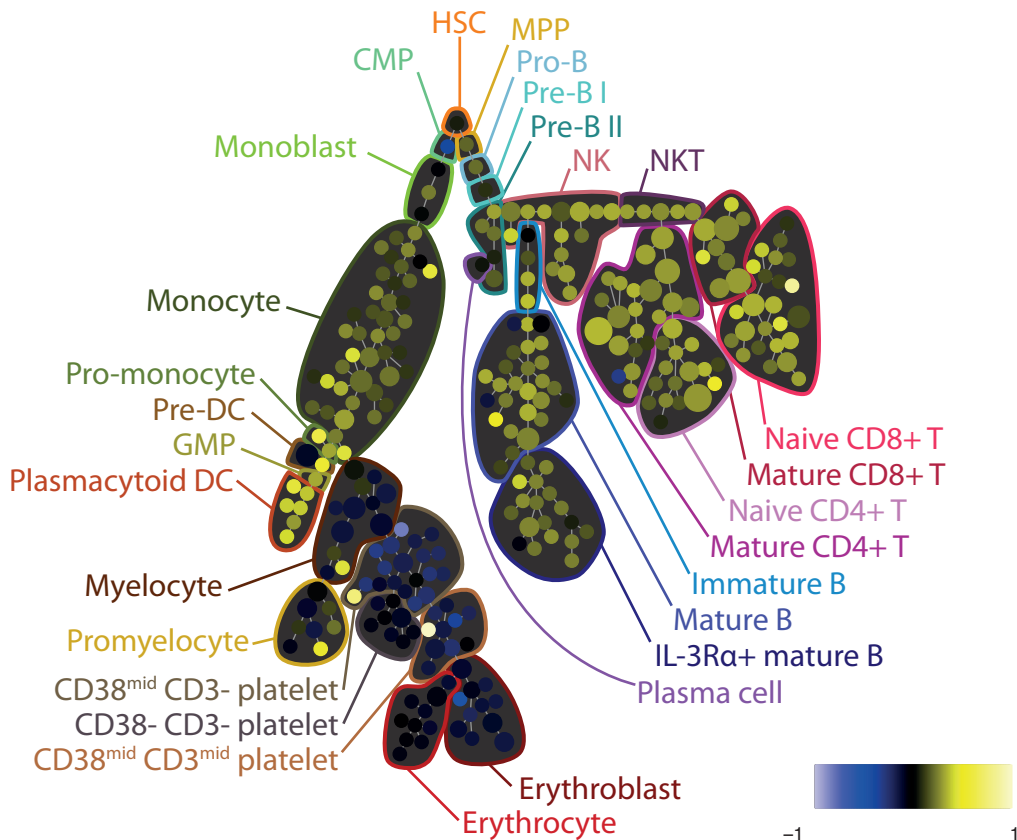


Figure S8B

166-IkBalpha ---- Dasatinib+Unstim vs Ref Ratio

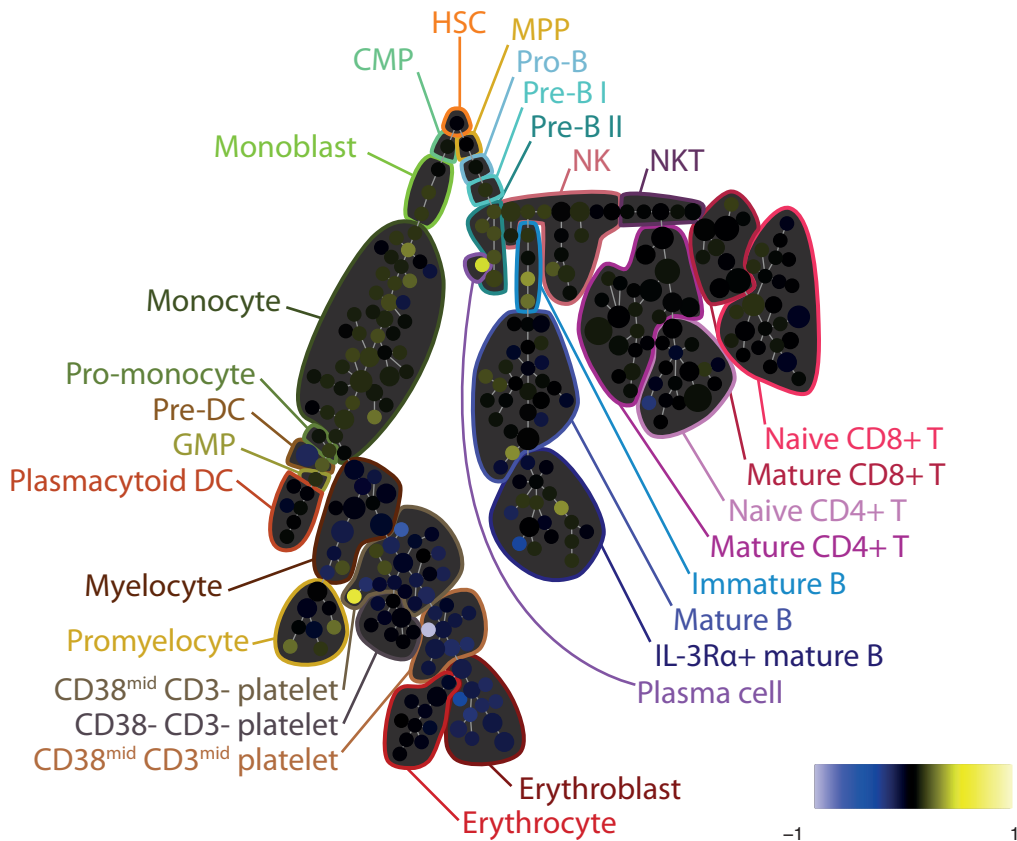


Figure S8B

168-pH3 ---- Dasatinib+BCR vs Ref Ratio

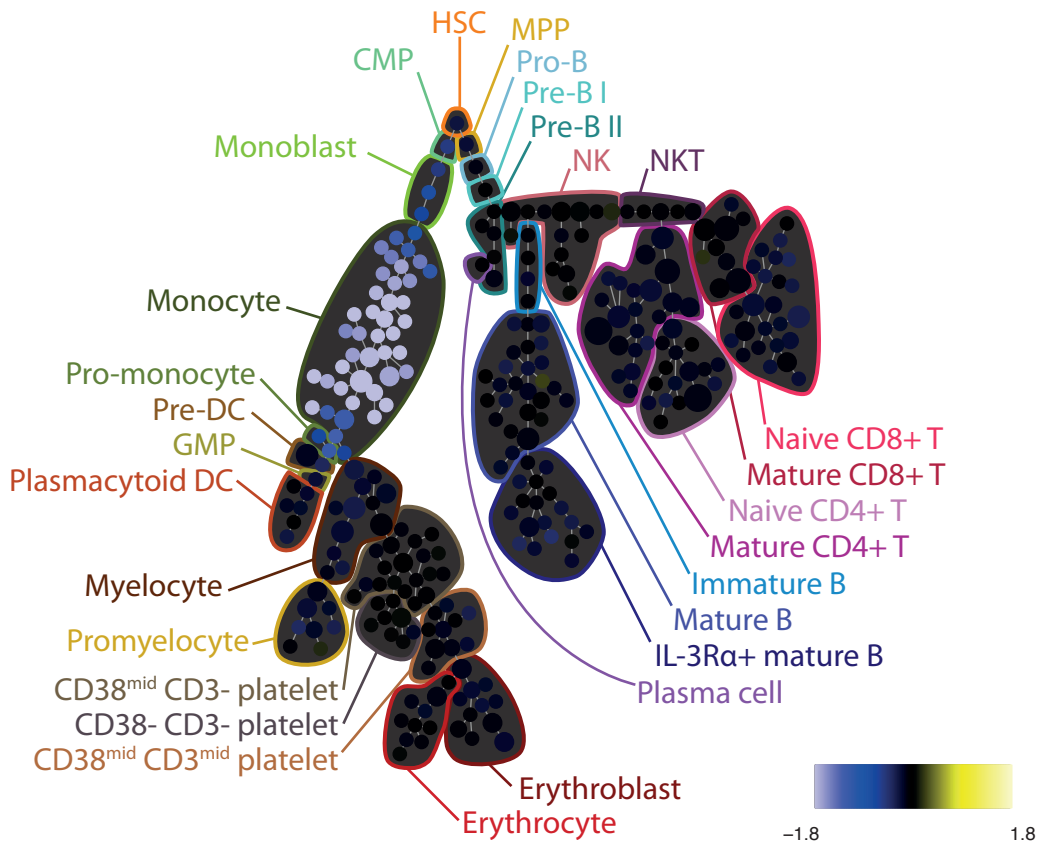


Figure S8B

168-pH3 ---- Dasatinib+Flt3L vs Ref Ratio

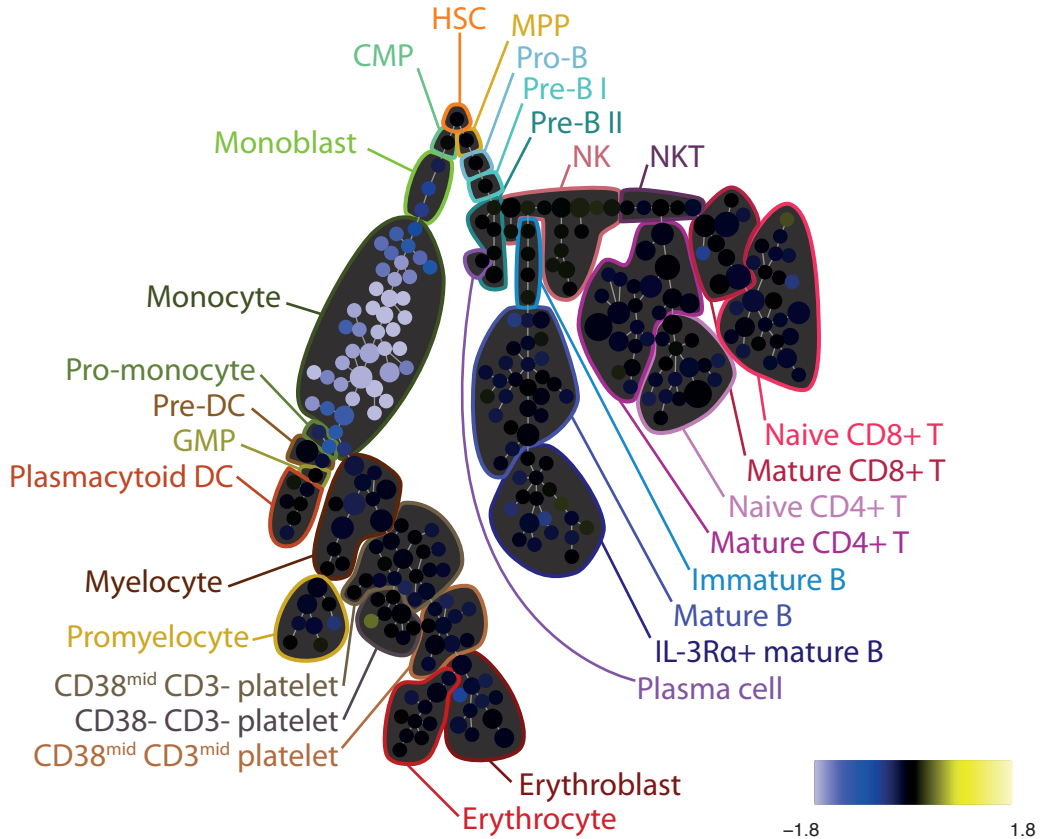


Figure S8B

168-pH3 ---- Dasatinib+IL7 vs Ref Ratio

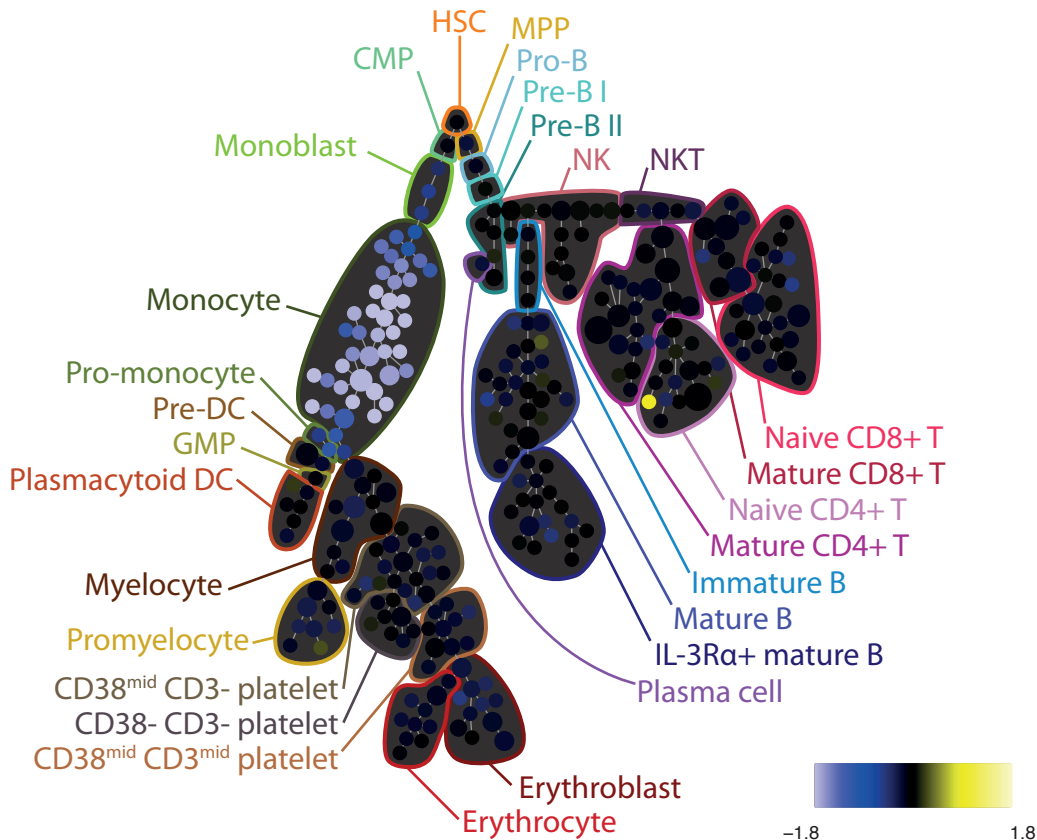


Figure S8B

168-pH3 --- Dasatinib+PMA Aiono vs Ref Ratio

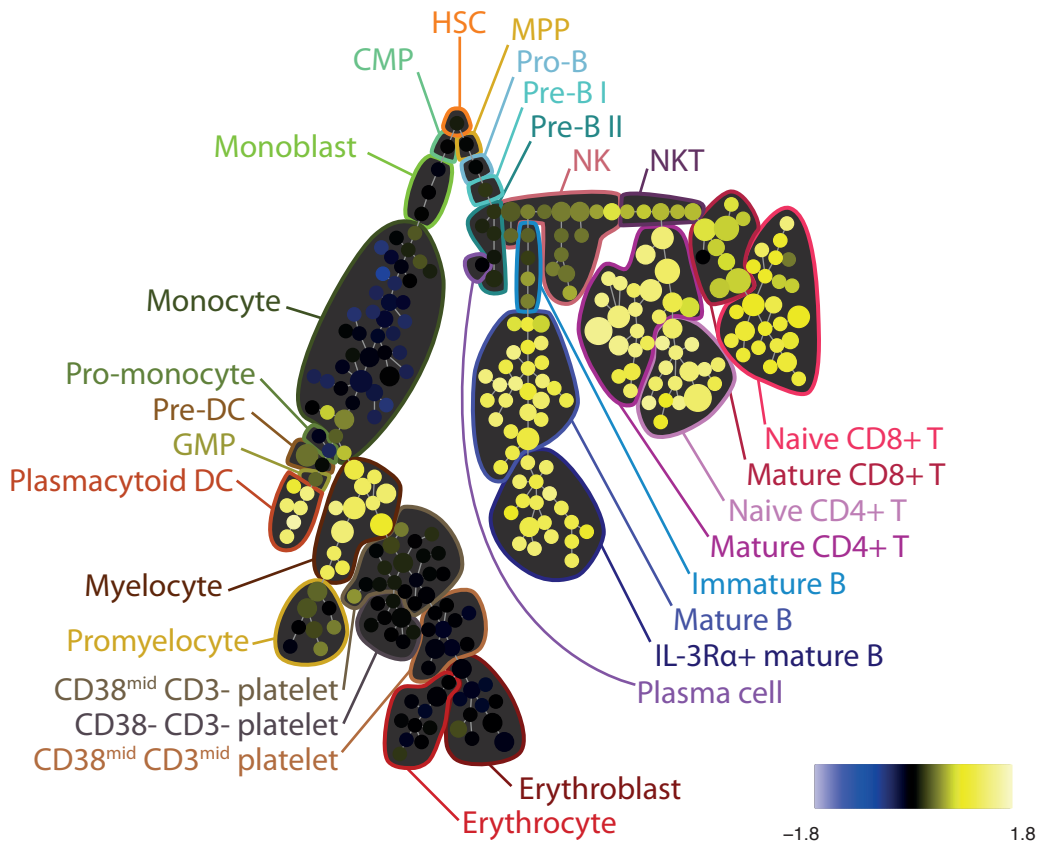


Figure S8B

168-pH3 ---- Dasatinib+PVO4 vs Ref Ratio

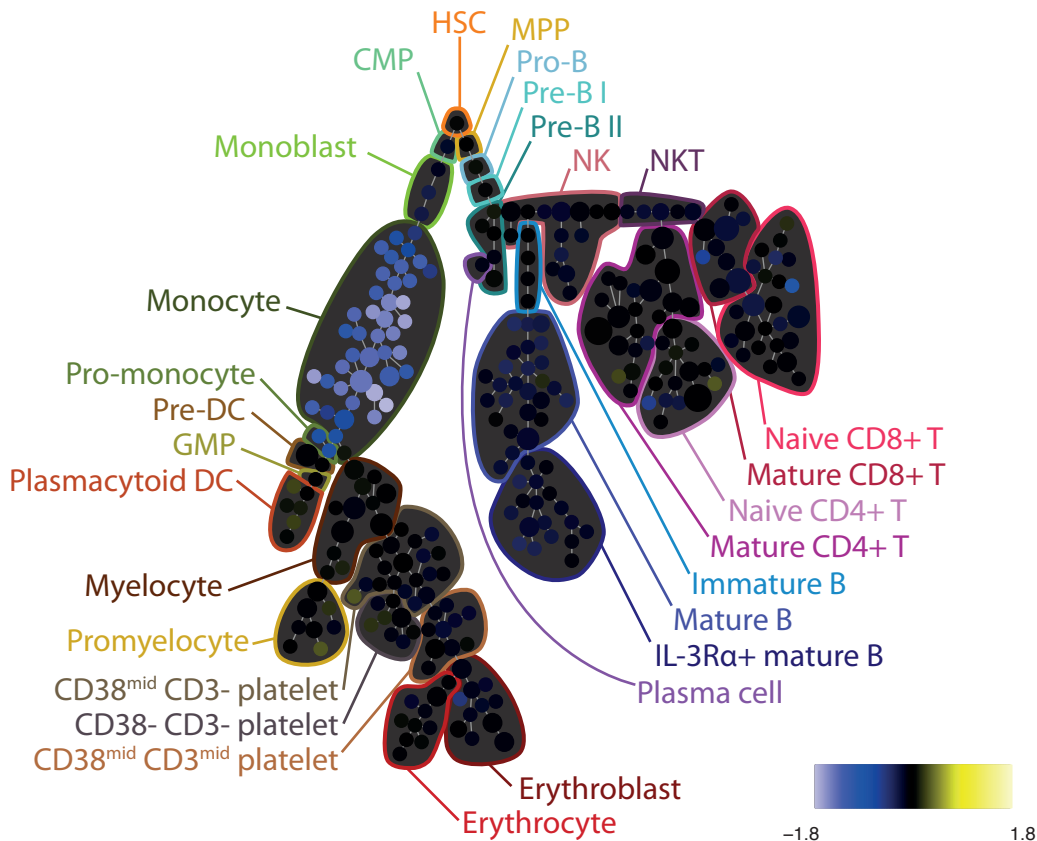


Figure S8B

168-pH3 --- Dasatinib+Unstim vs Ref Ratio

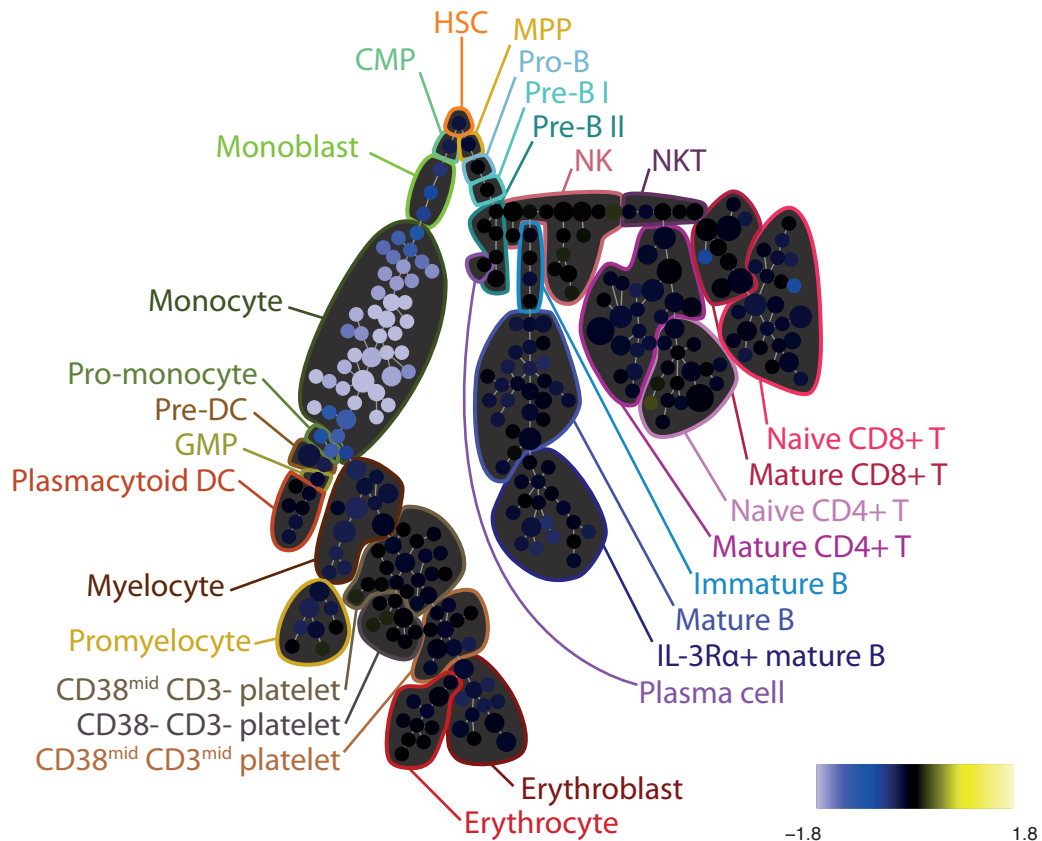


Figure S8B

169-pP38 ---- Dasatinib+BCR vs Ref Ratio

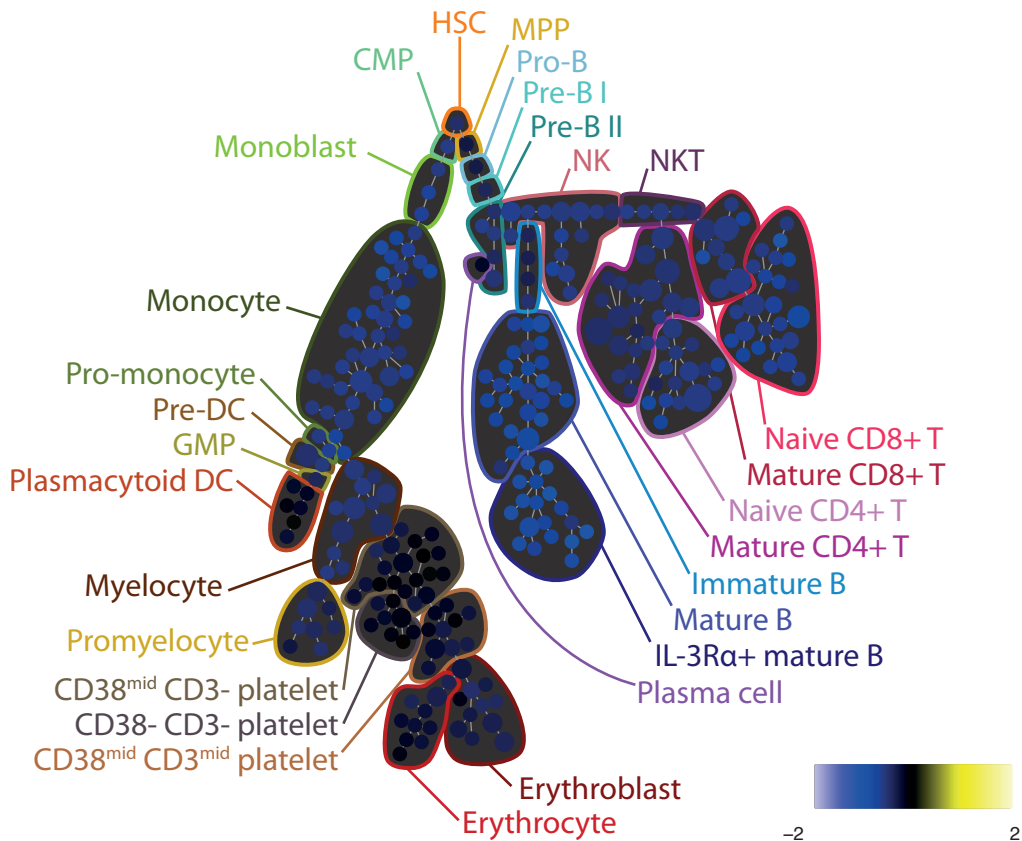


Figure S8B

169-pP38 ---- Dasatinib+Fit3L vs Ref Ratio

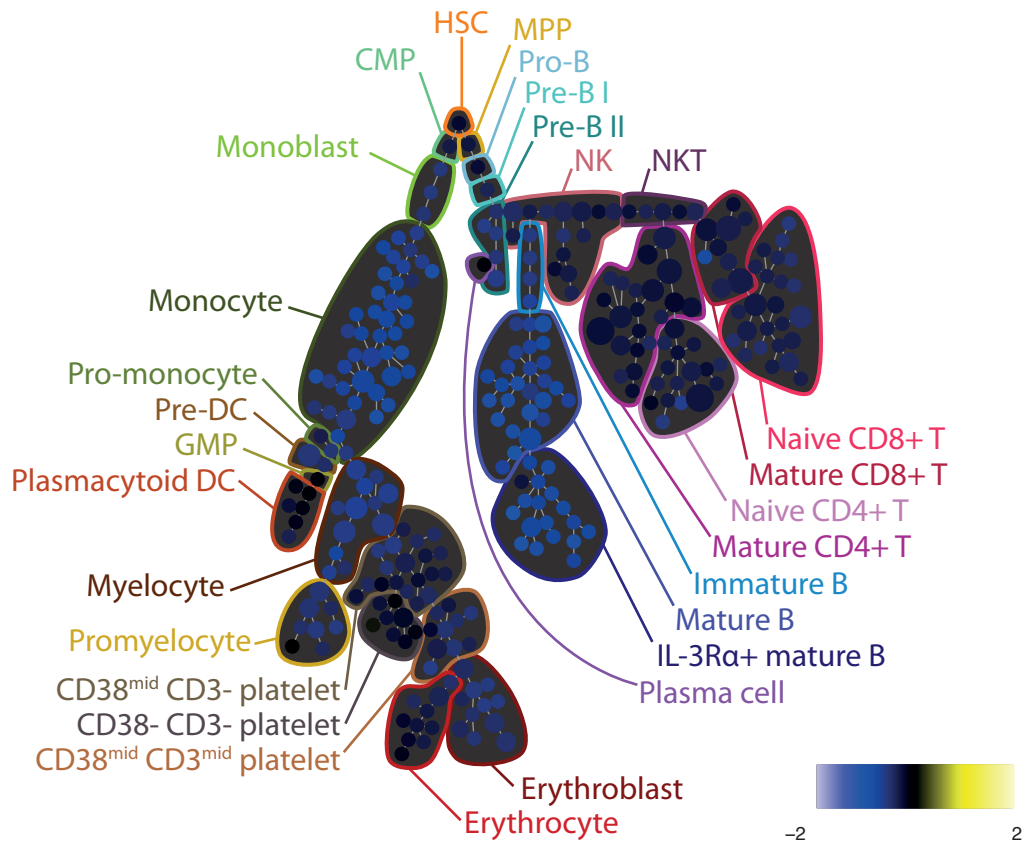


Figure S8B

169-pP38 ---- Dasatinib+IL7 vs Ref Ratio

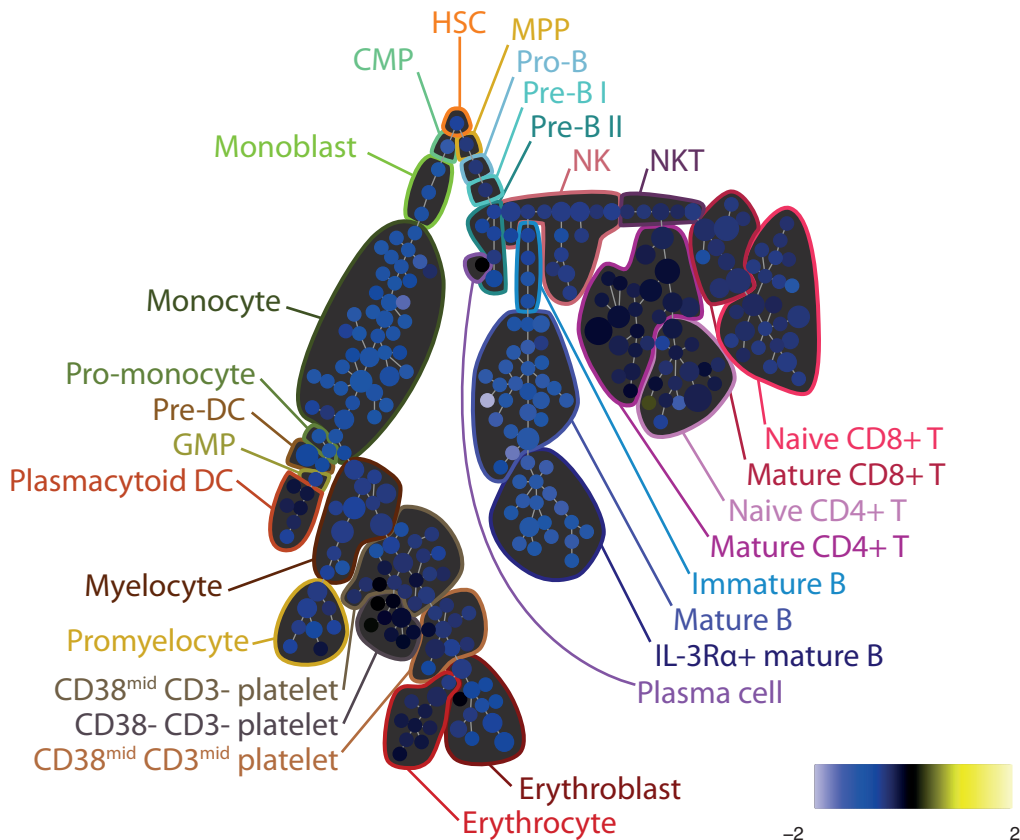


Figure S8B

169-pP38 — Dasatinib+PMAiono vs Ref Ratio

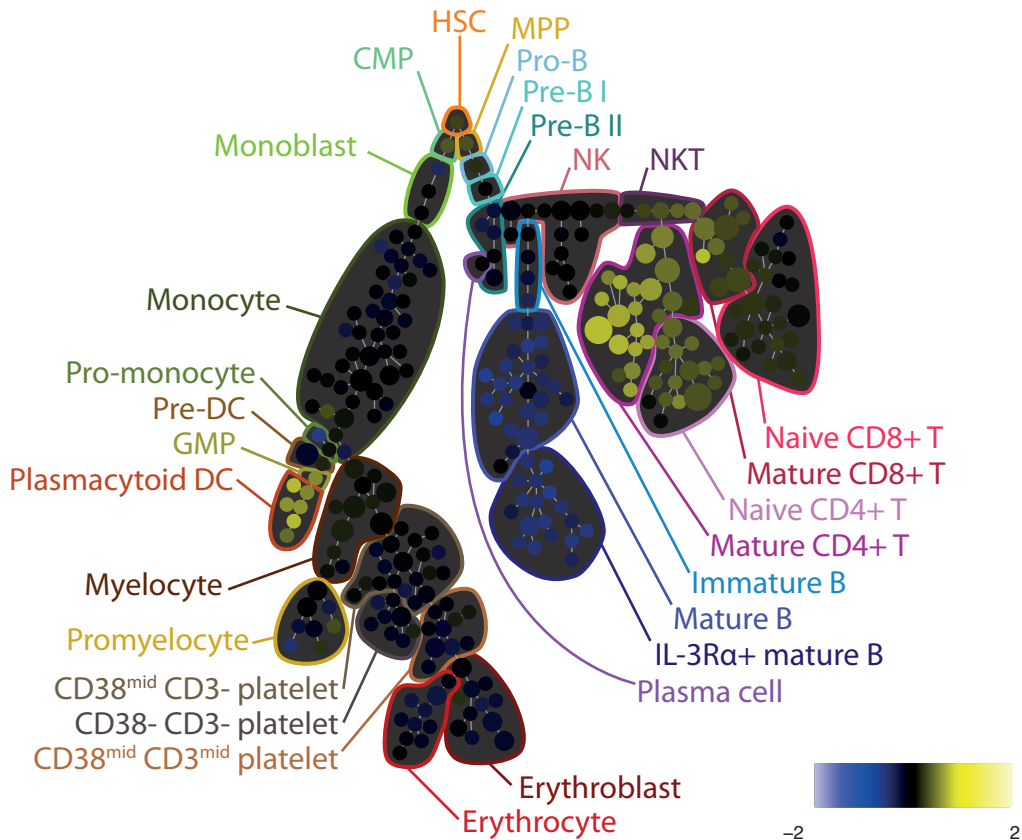


Figure S8B

169-pP38 ---- Dasatinib+PVO4 vs Ref Ratio

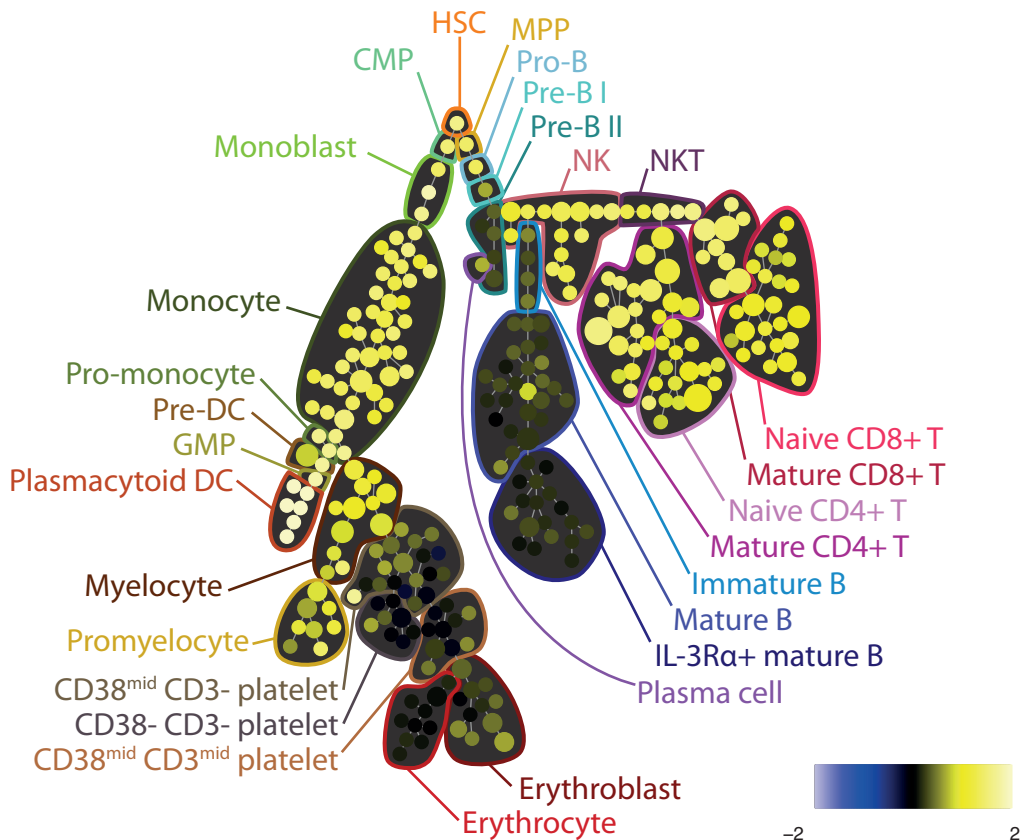


Figure S8B

169-pP38 ---- Dasatinib+Unstim vs Ref Ratio

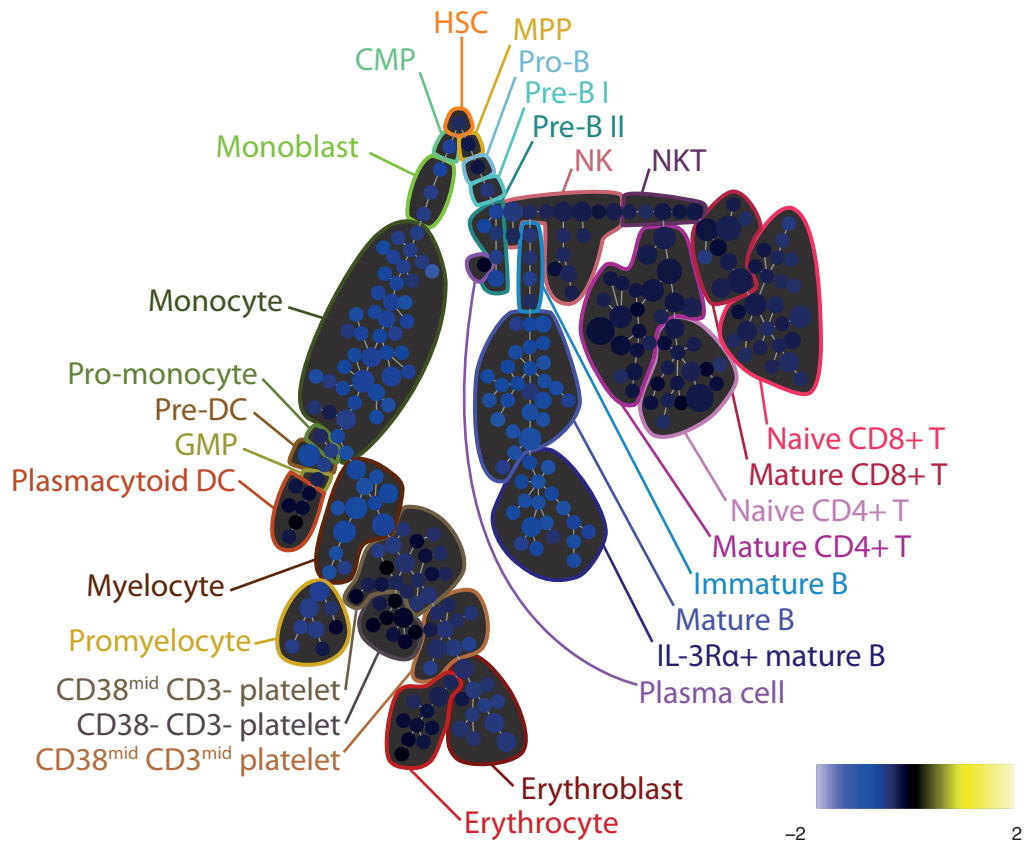


Figure S8B

171-pBtk/Itk ---- Dasatinib+BCR vs Ref Ratio

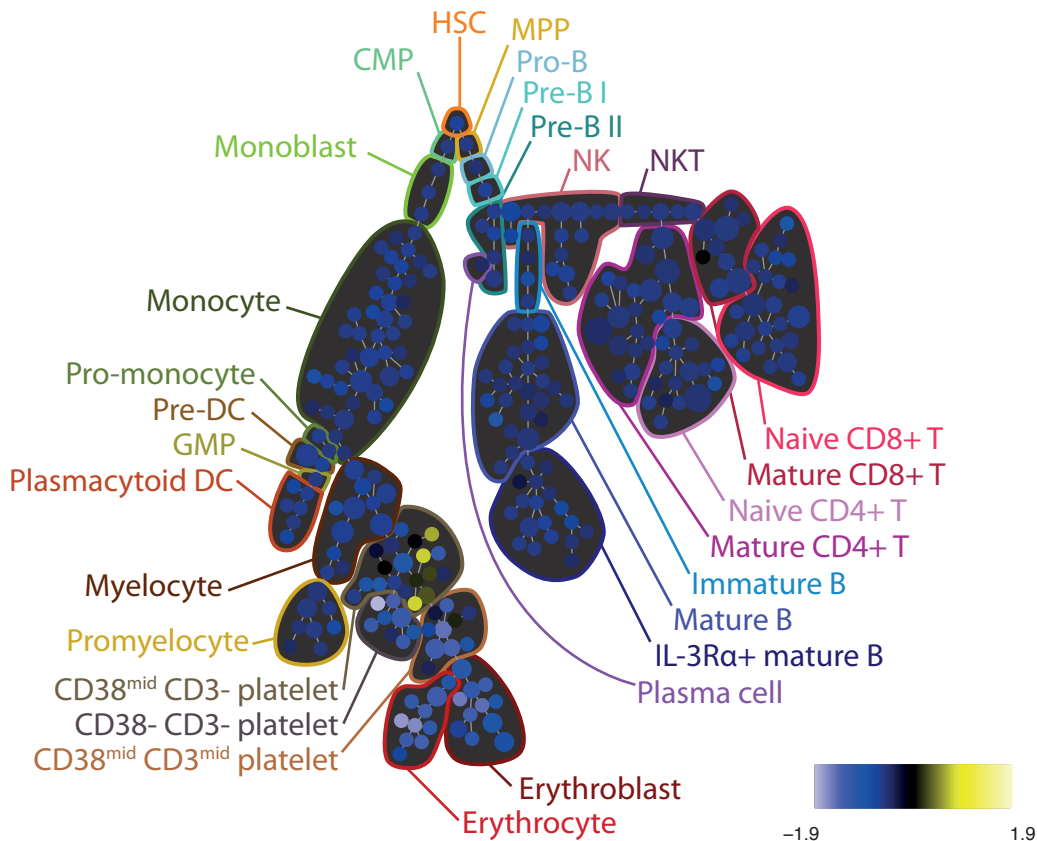


Figure S8B

171-pBtk/Itk ---- Dasatinib+Flt3L vs Ref Ratio

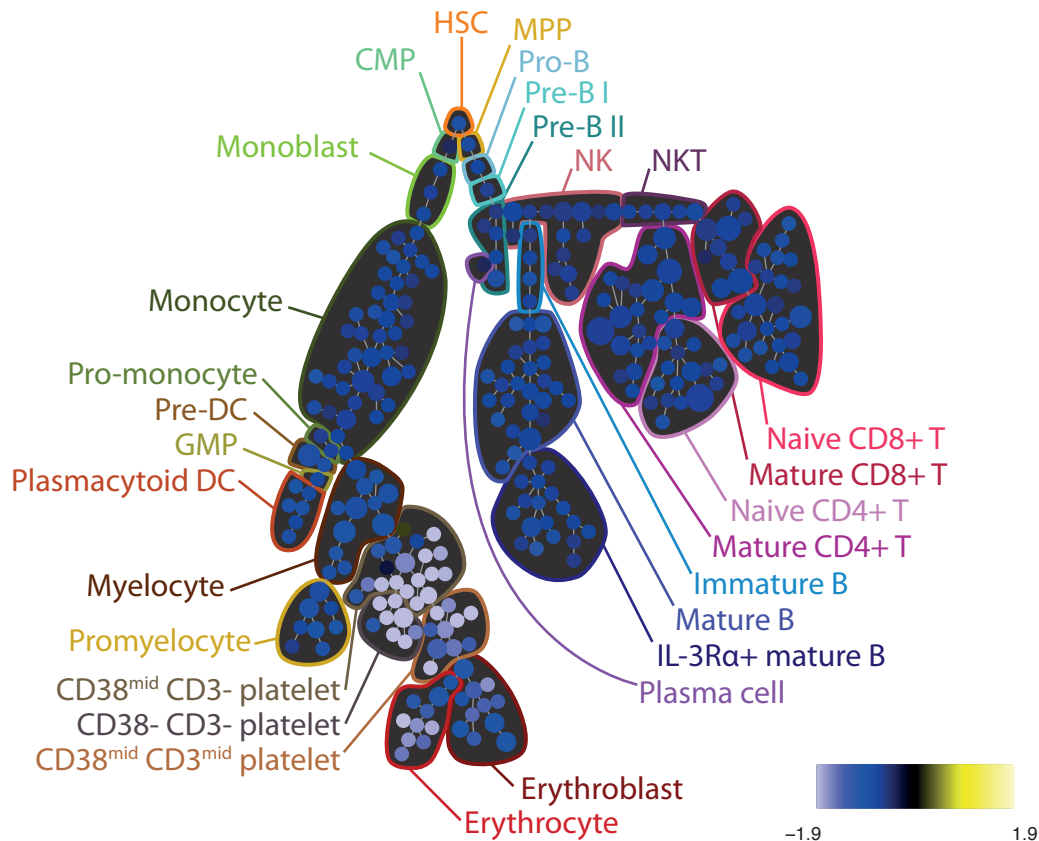


Figure S8B

171-pBtk/Itk — Dasatinib+IL7 vs Ref Ratio

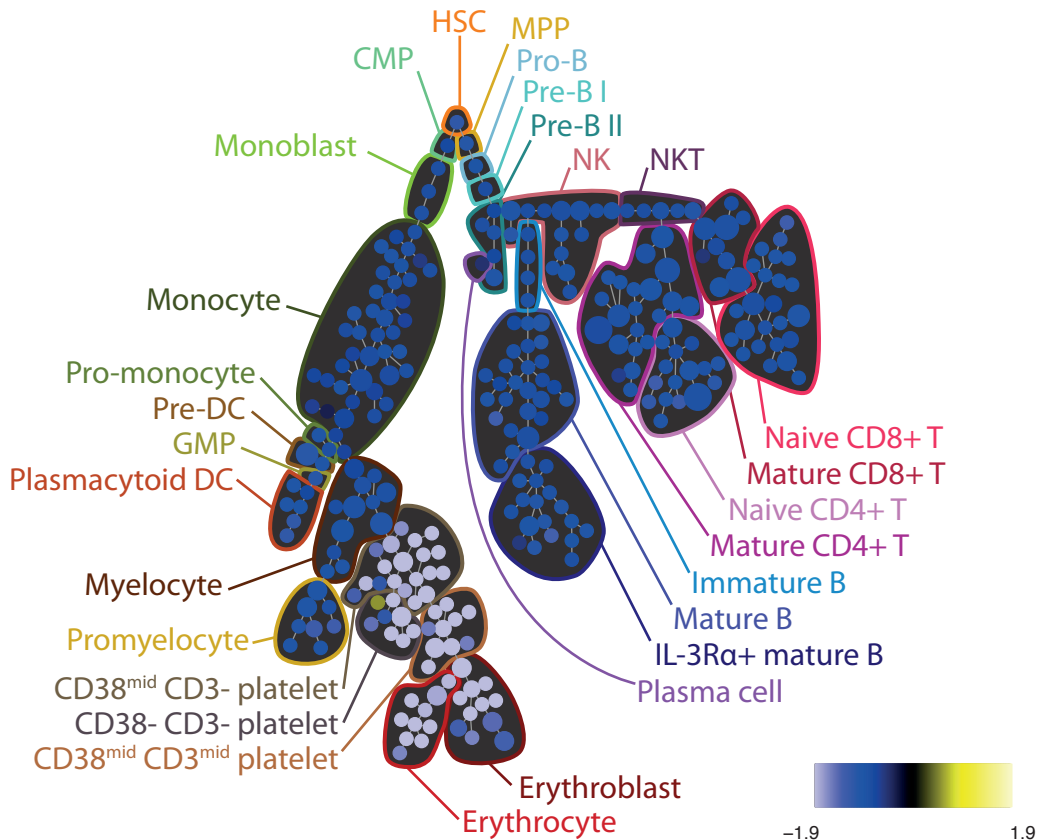


Figure S8B

171-pBtk/Itk ---- Dasatinib+PMAiono vs Ref Ratio

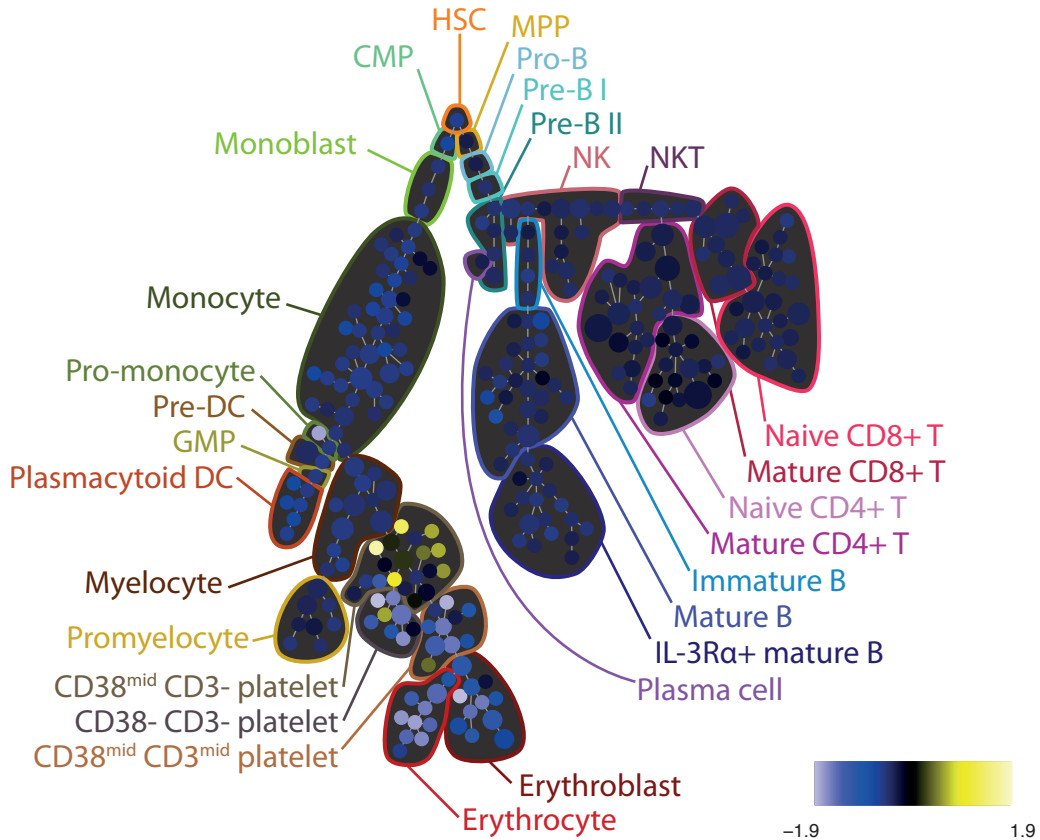


Figure S8B

171-pBtk/Itk — Dasatinib+PVO4 vs Ref Ratio

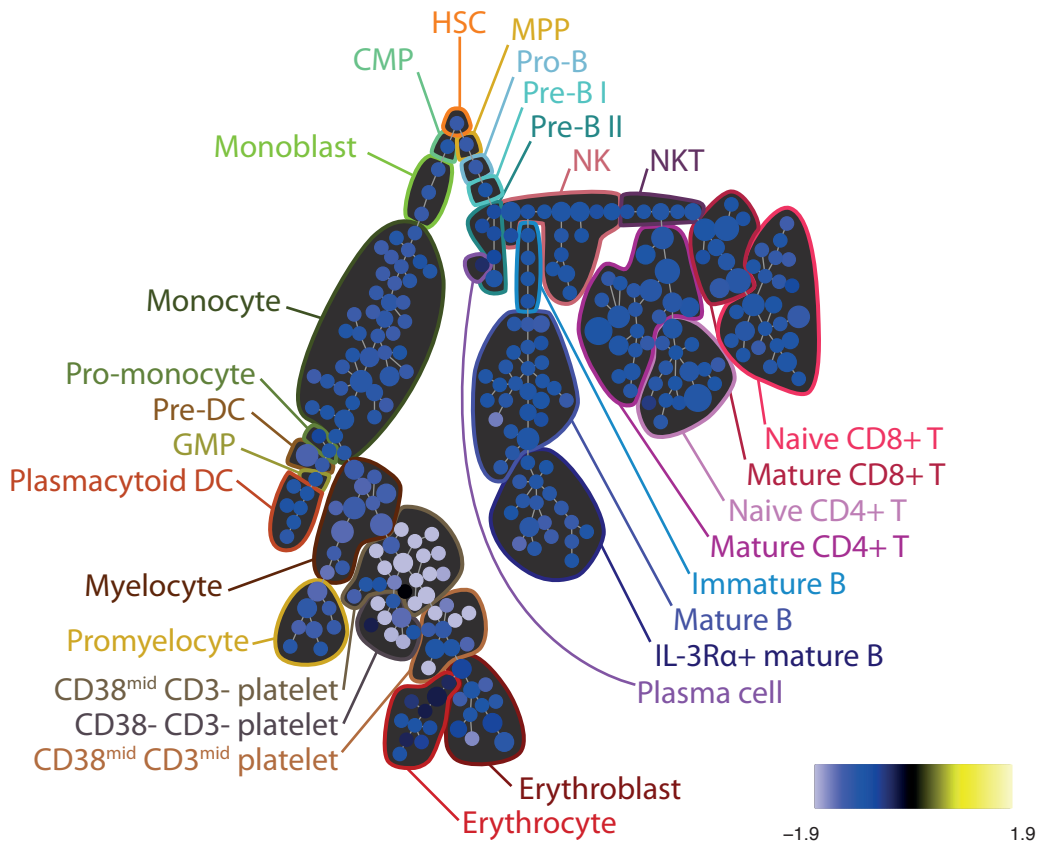


Figure S8B

171-pBtk/Itk ---- Dasatinib+Unstim vs Ref Ratio

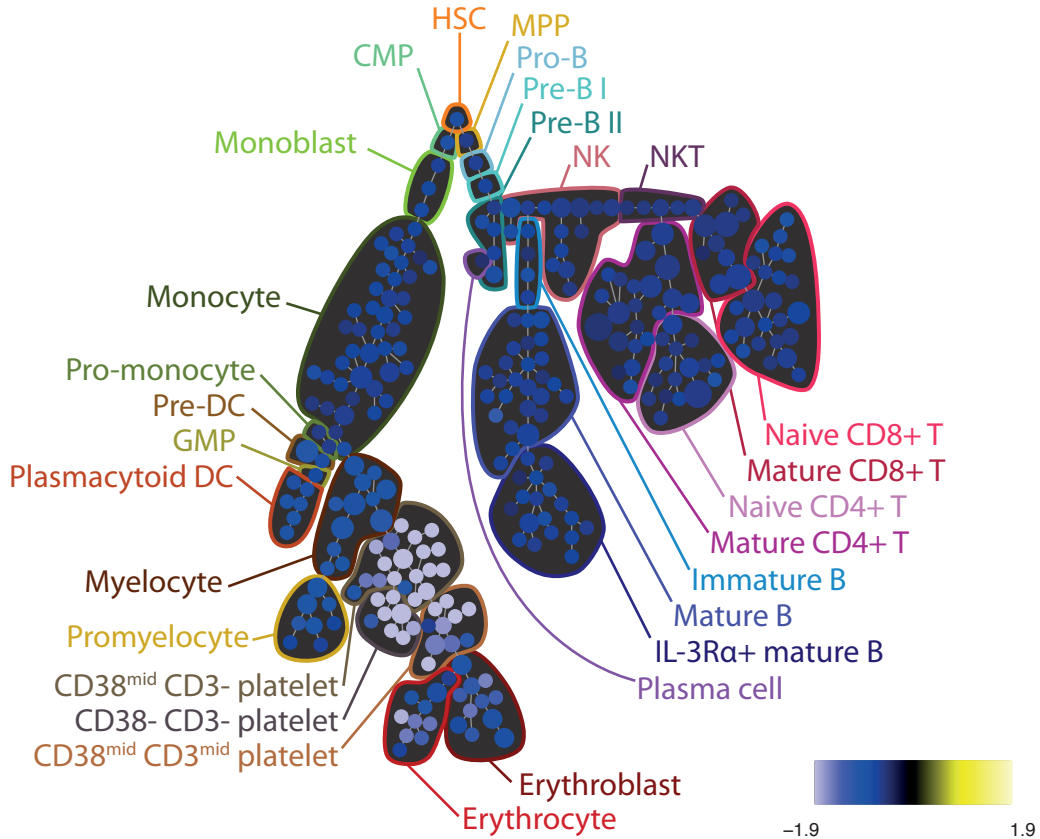


Figure S8B

172-pS6 ---- Dasatinib+BCR vs Ref Ratio

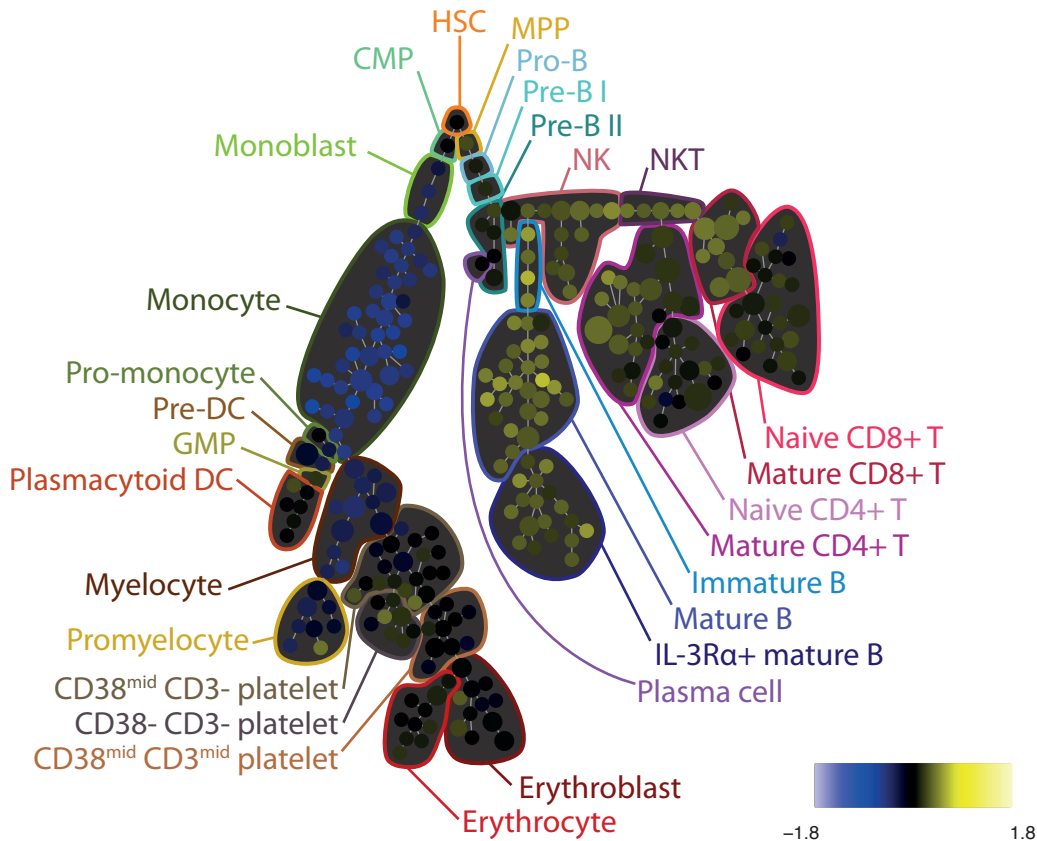


Figure S8B

172-pS6 ---- Dasatinib+Flt3L vs Ref Ratio

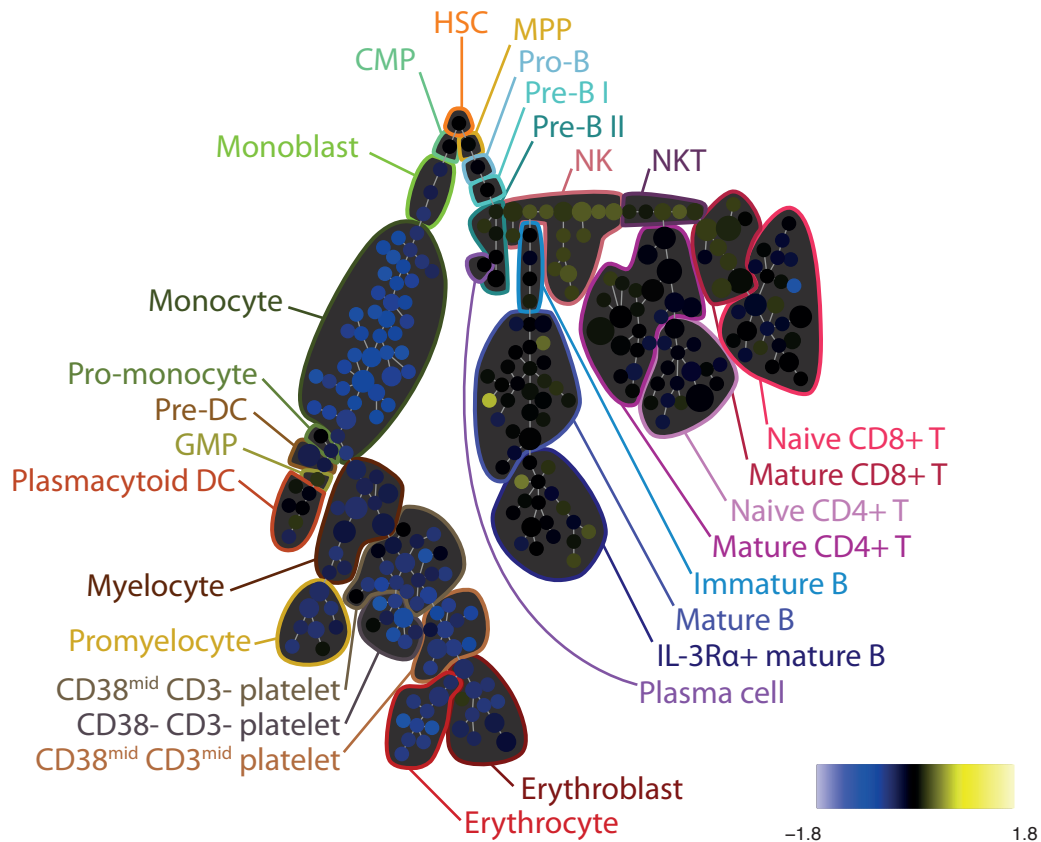


Figure S8B

172-pS6 ---- Dasatinib+IL7 vs Ref Ratio

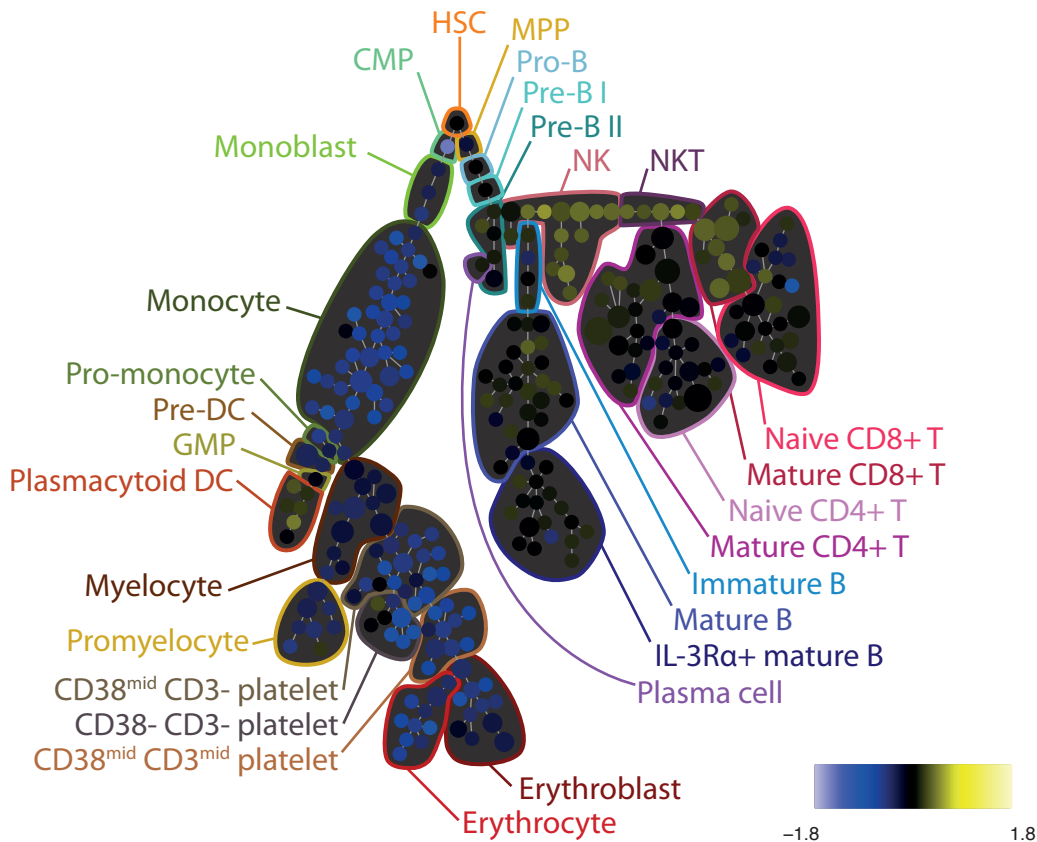


Figure S8B

172-pS6 --- Dasatinib+PMAiono vs Ref Ratio

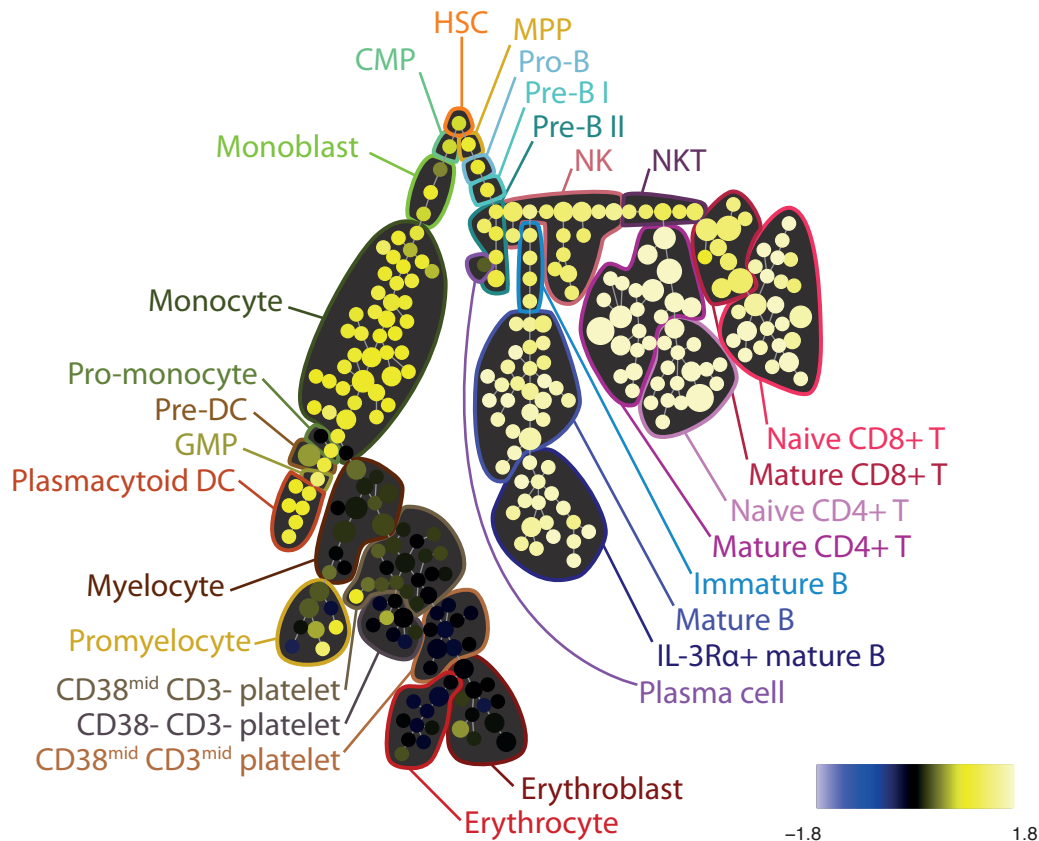


Figure S8B

172-pS6 ---- Dasatinib+PVO4 vs Ref Ratio

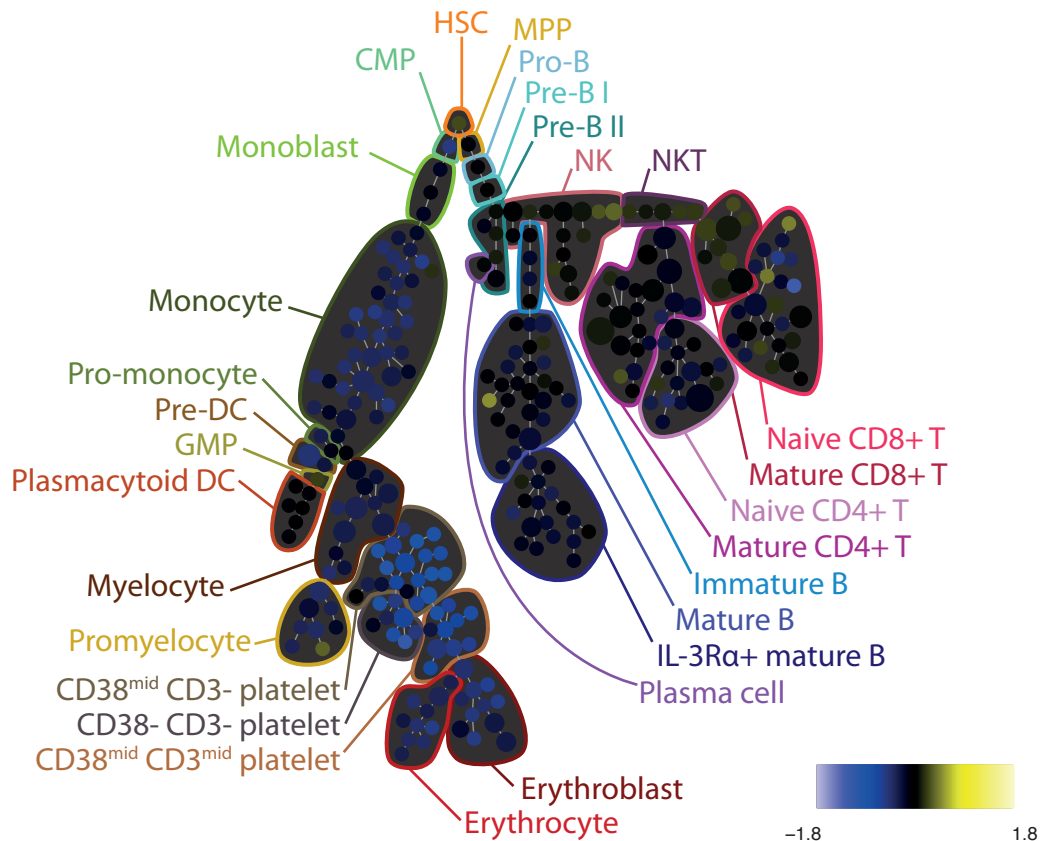


Figure S8B

172-pS6 --- Dasatinib+Unstim vs Ref Ratio

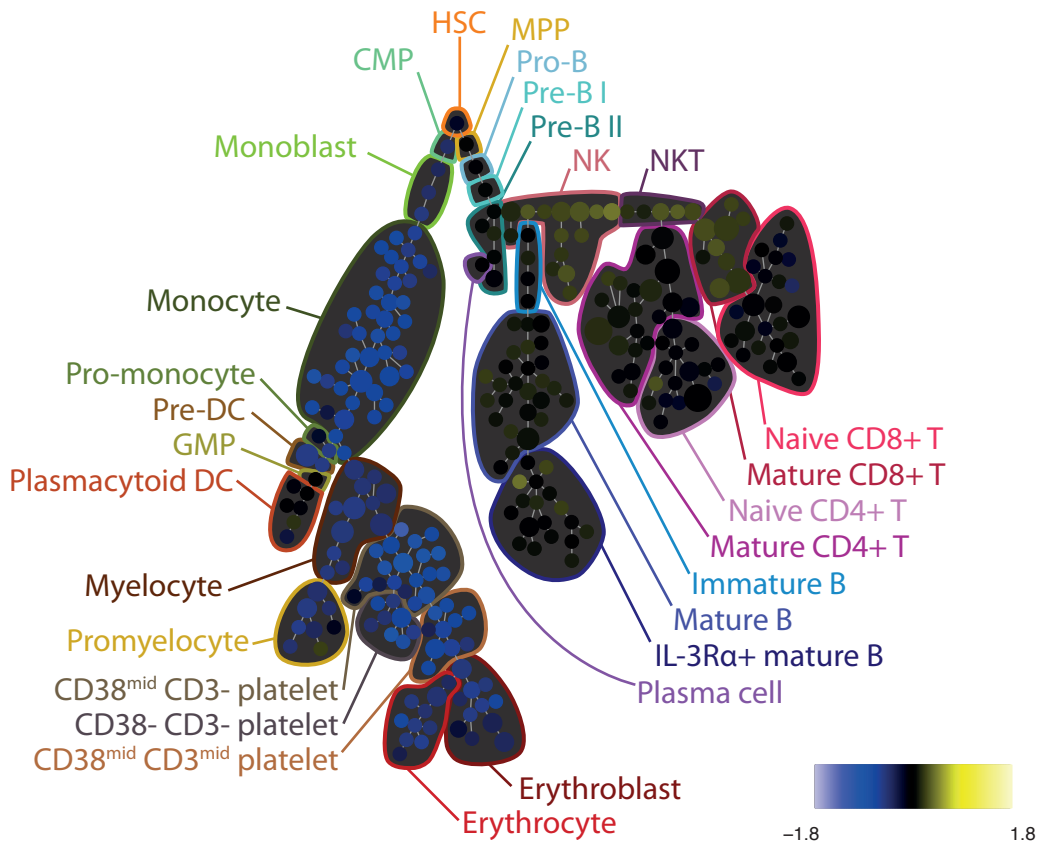


Figure S8B

174-pSrcFK ---- Dasatinib+BCR vs Ref Ratio

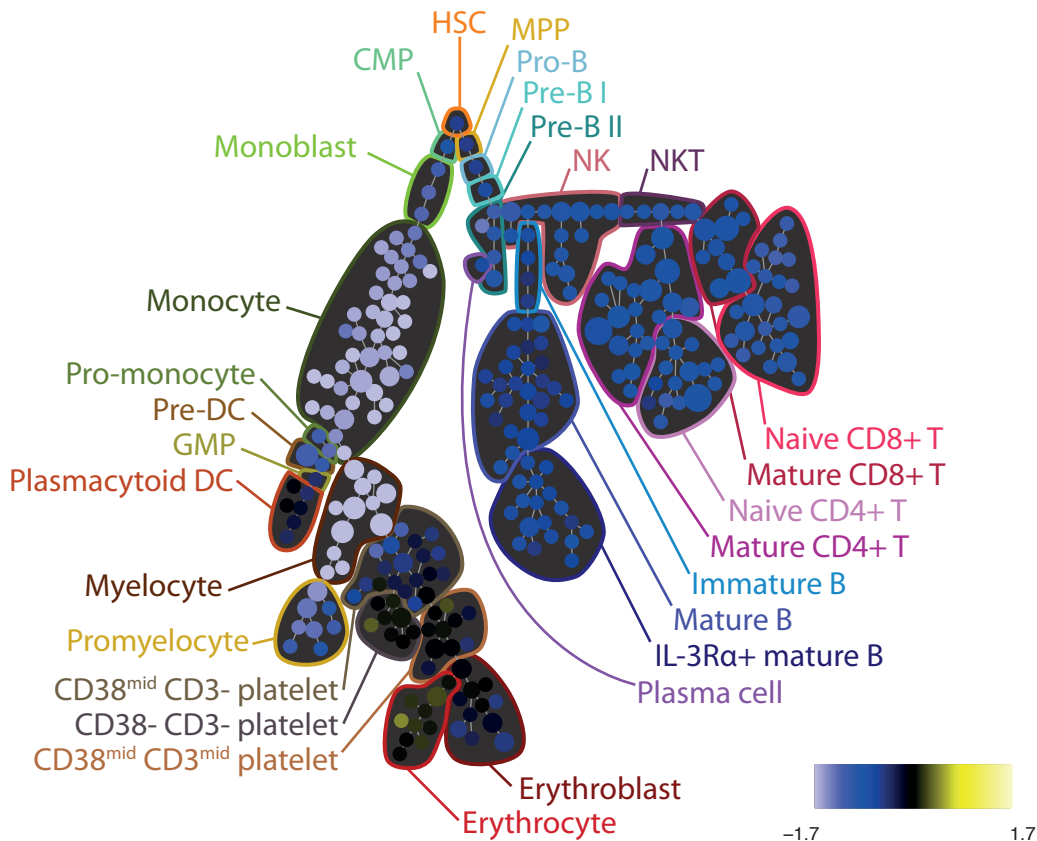


Figure S8B

174-pSrcFK --- Dasatinib+Flt3L vs Ref Ratio

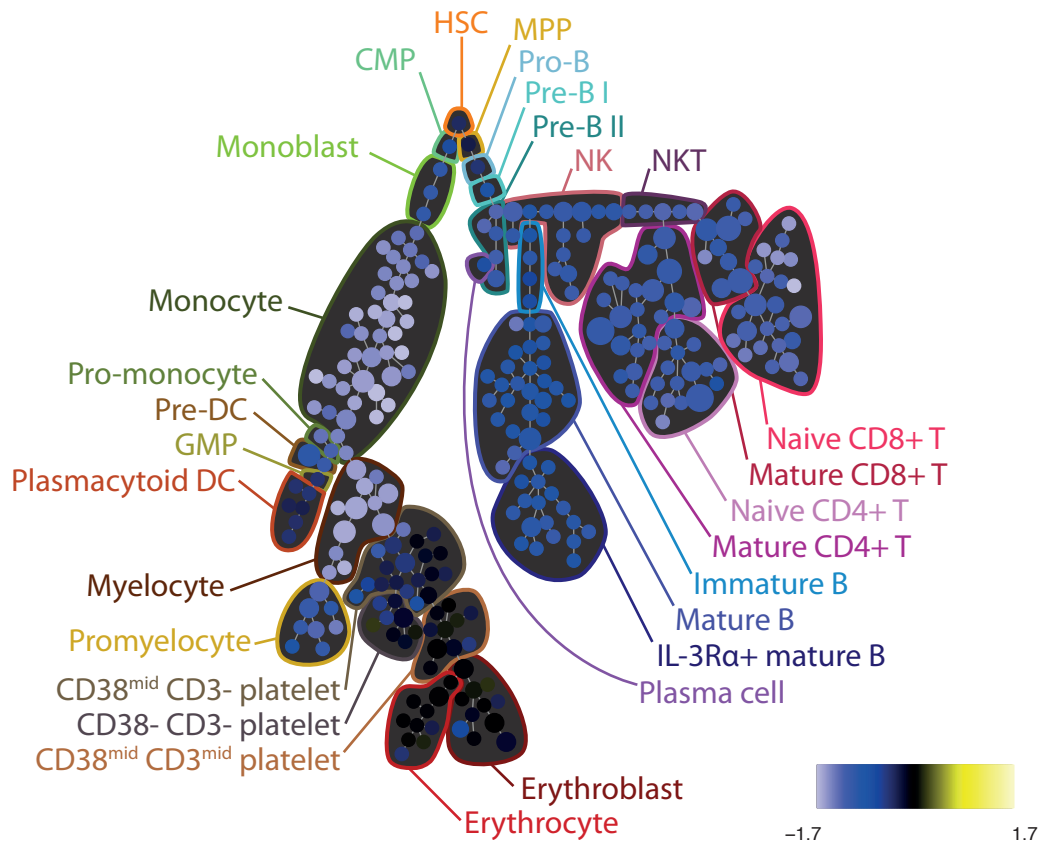


Figure S8B

174-pSrcFK — Dasatinib+IL7 vs Ref Ratio

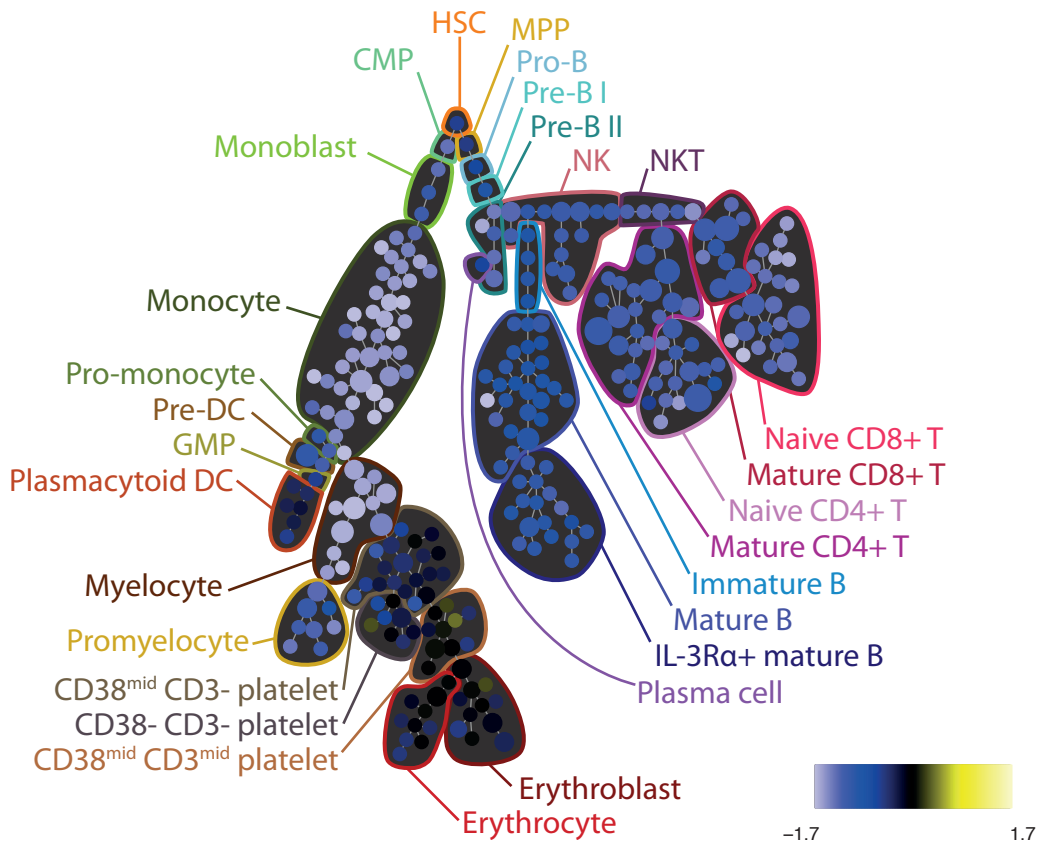


Figure S8B

174-pSrcFK ---- Dasatinib+PMAiono vs Ref Ratio

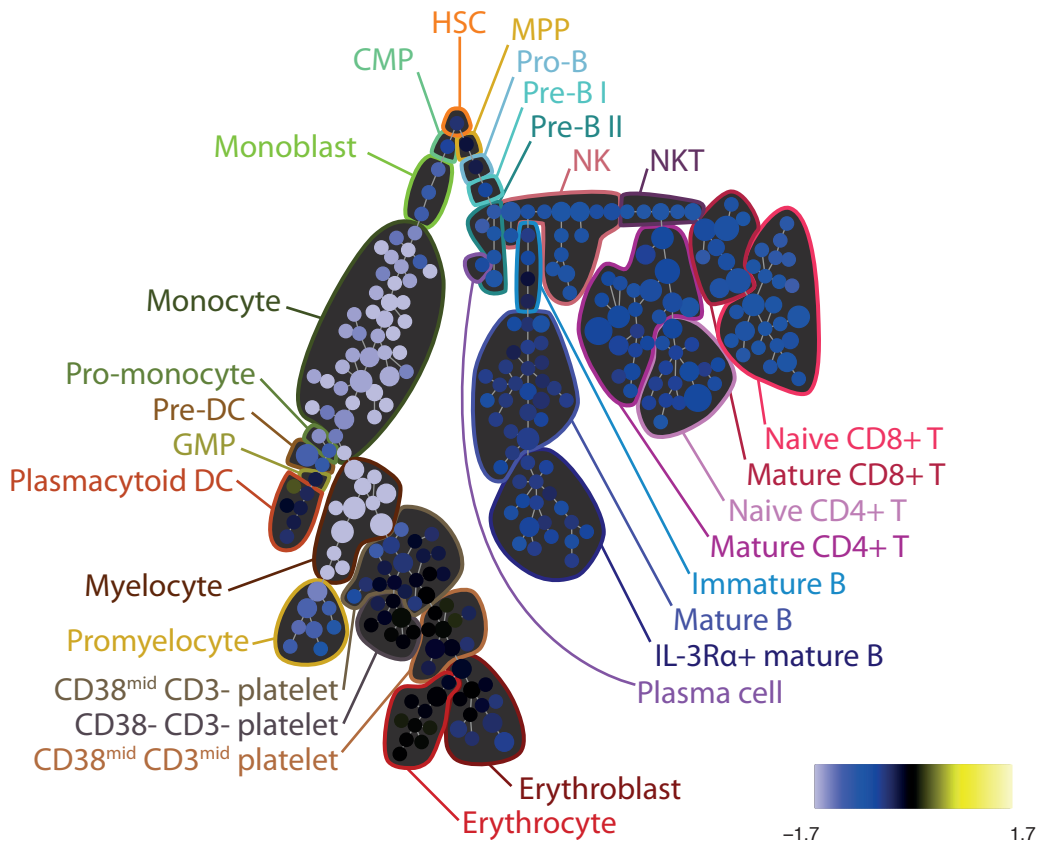


Figure S8B

174-pSrcFK — Dasatinib+PVO4 vs Ref Ratio

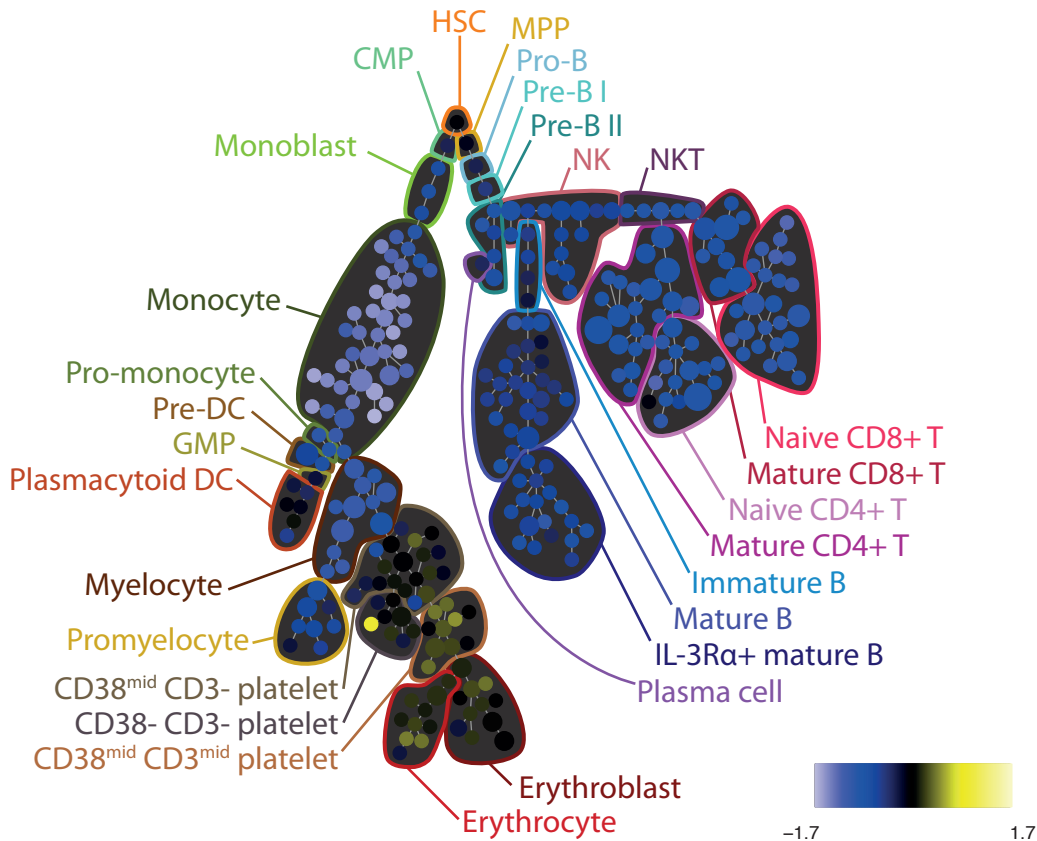


Figure S8B

174-pSrcFK ---- Dasatinib+Unstim vs Ref Ratio

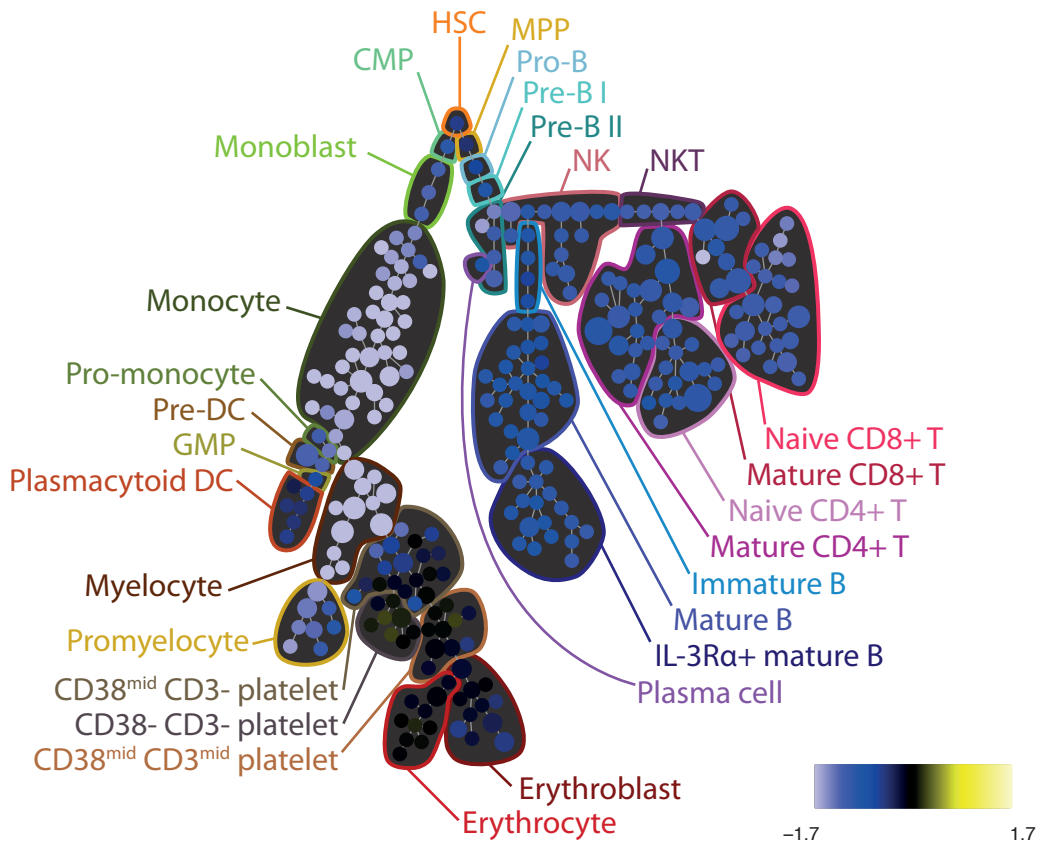


Figure S8B

175-pCrkL ---- Dasatinib+BCR vs Ref Ratio

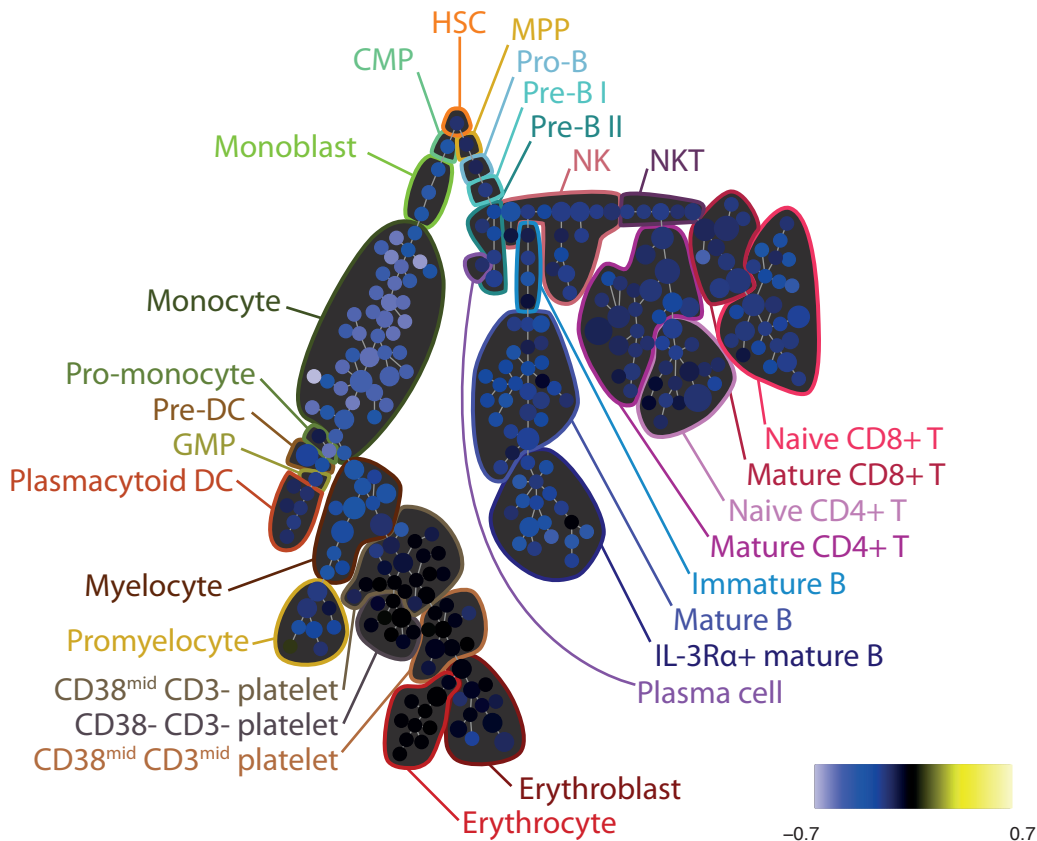


Figure S8B

175-pCrKL ---- Dasatinib+Flt3L vs Ref Ratio

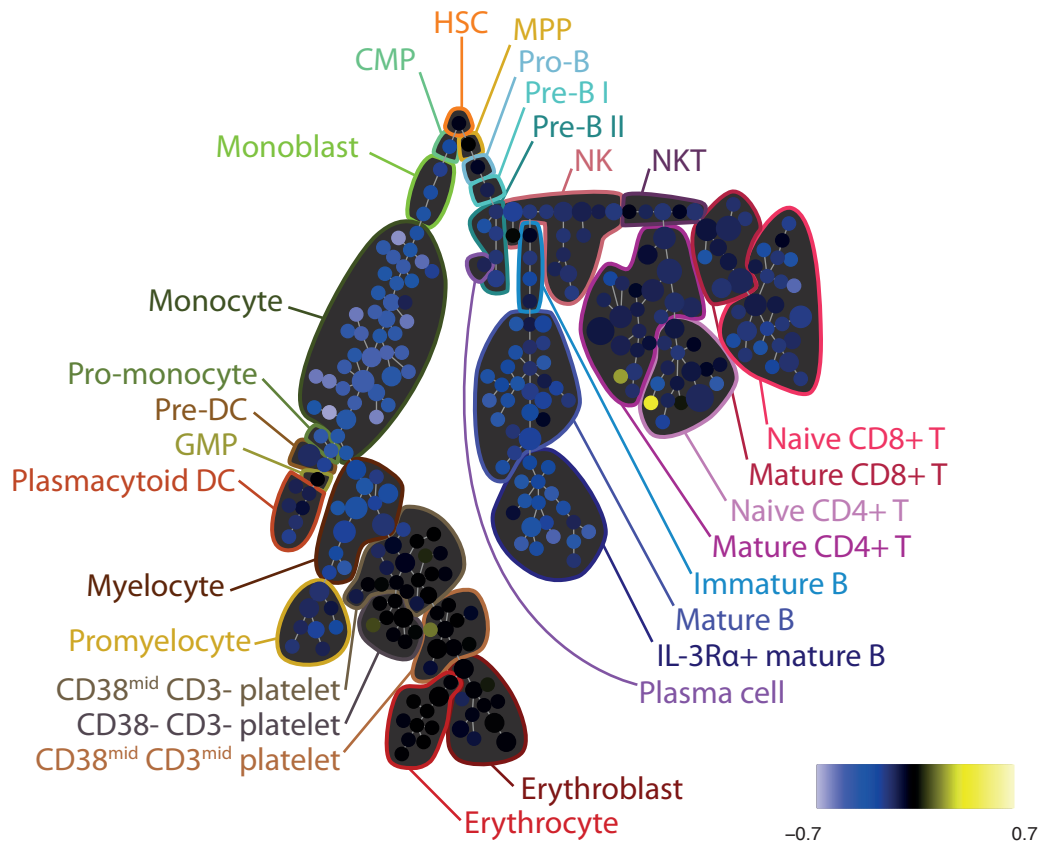


Figure S8B

175-pCrkL ---- Dasatinib+IL7 vs Ref Ratio

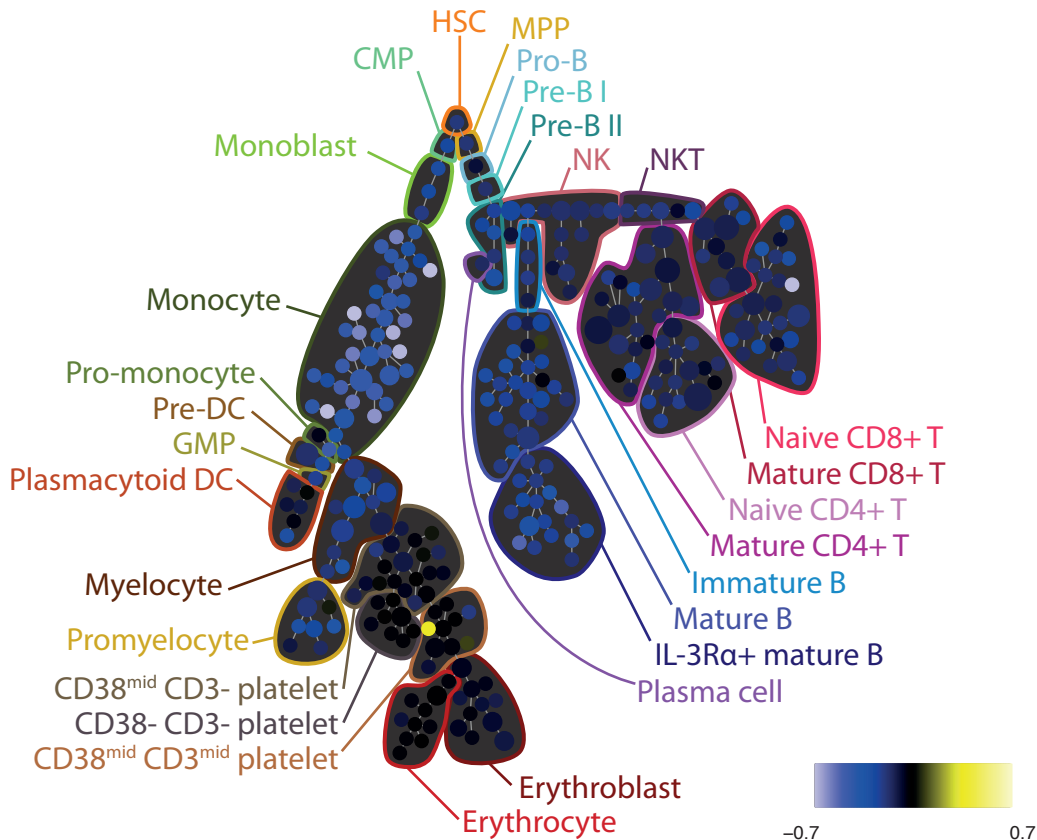


Figure S8B

175-pCrkL --- Dasatinib+PMAiono vs Ref Ratio

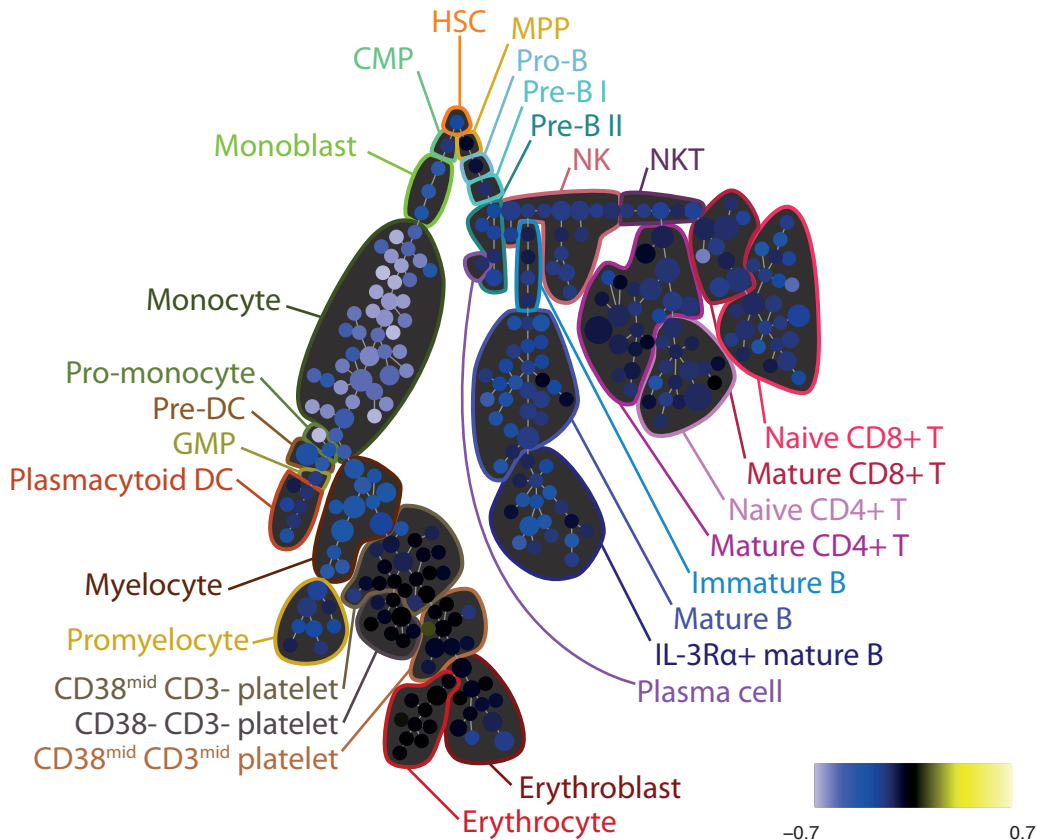


Figure S8B

175-pCrkL ---- Dasatinib+PVO4 vs Ref Ratio

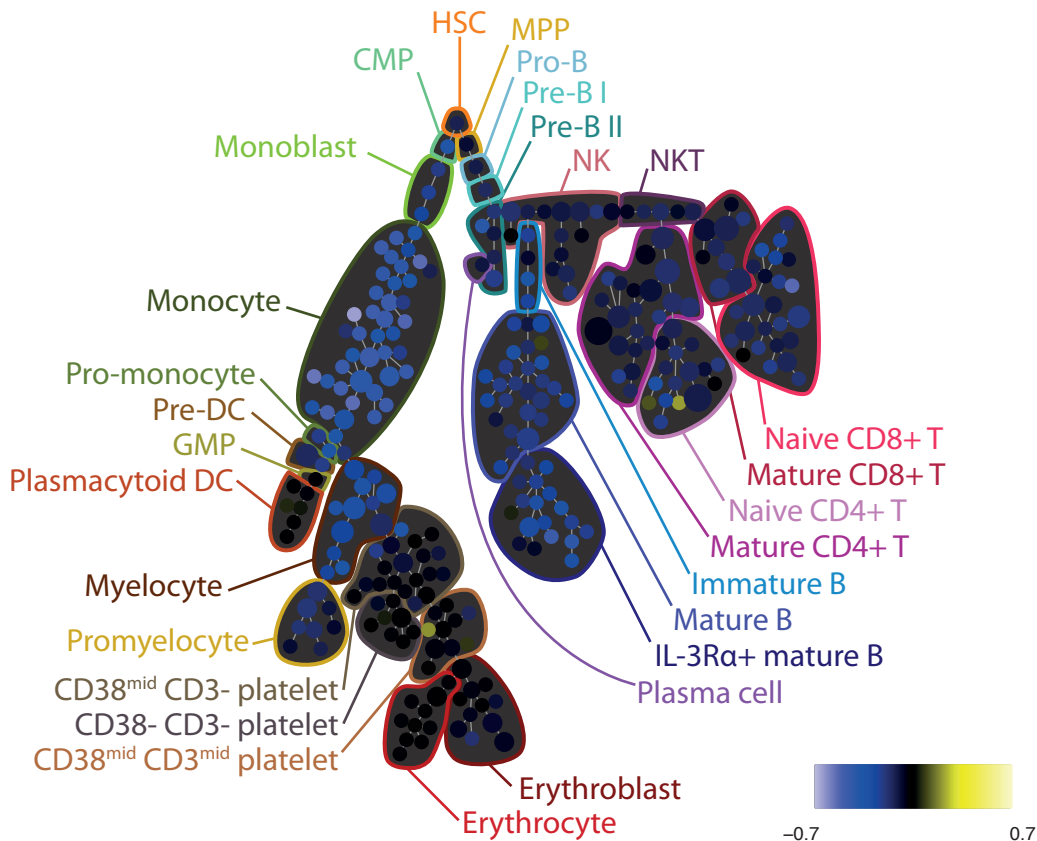


Figure S8B

175-pCrkL ---- Dasatinib+Unstim vs Ref Ratio

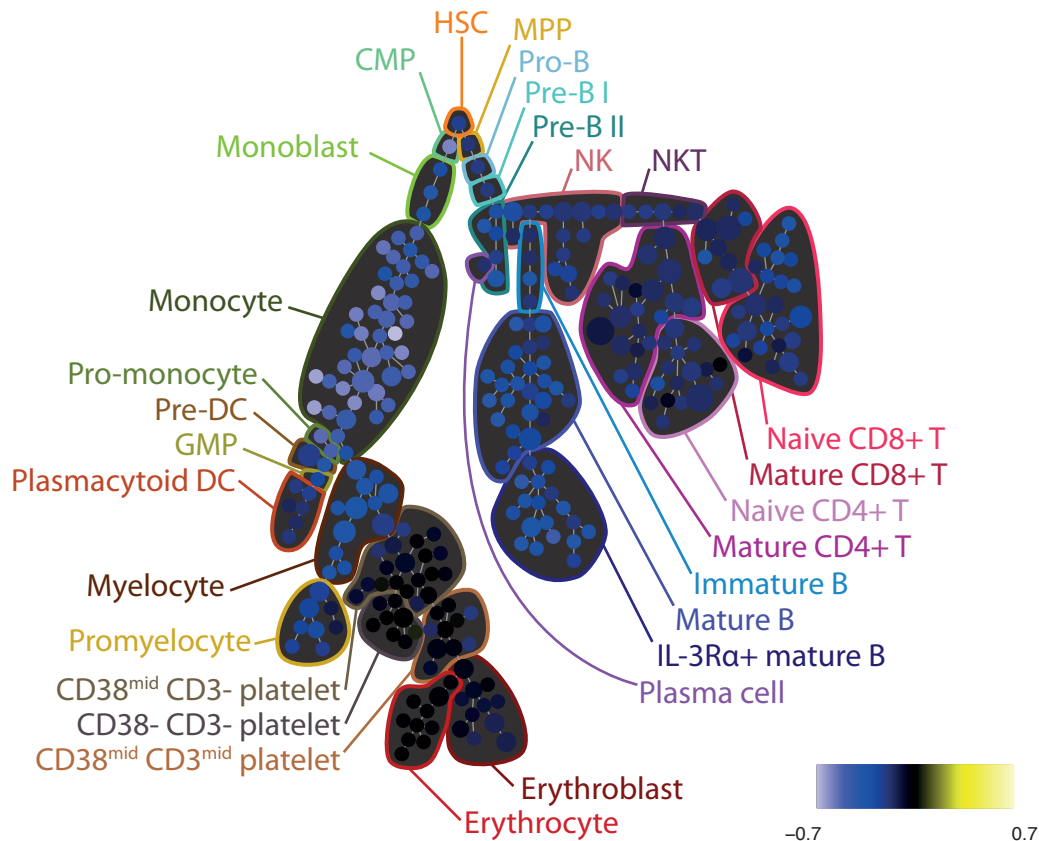


Figure S8B

176-pCREB ---- Dasatinib+BCR vs Ref Ratio

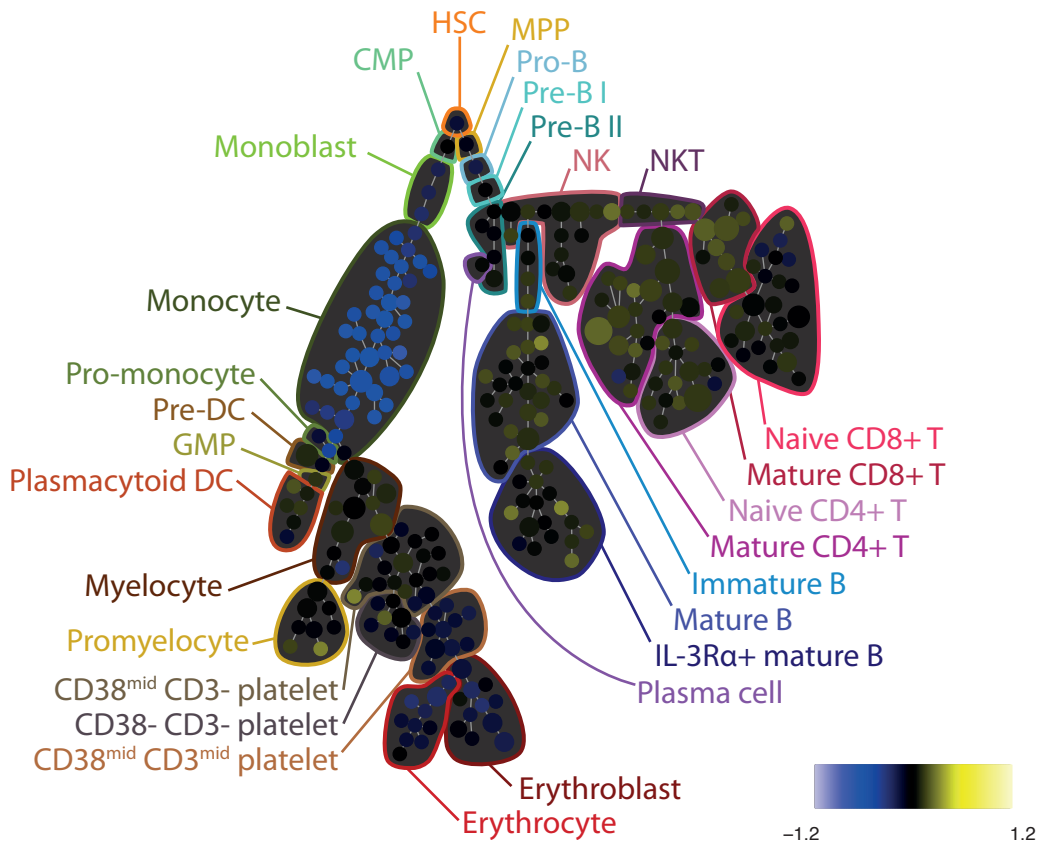


Figure S8B

176-pCREB ---- Dasatinib+Flt3L vs Ref Ratio

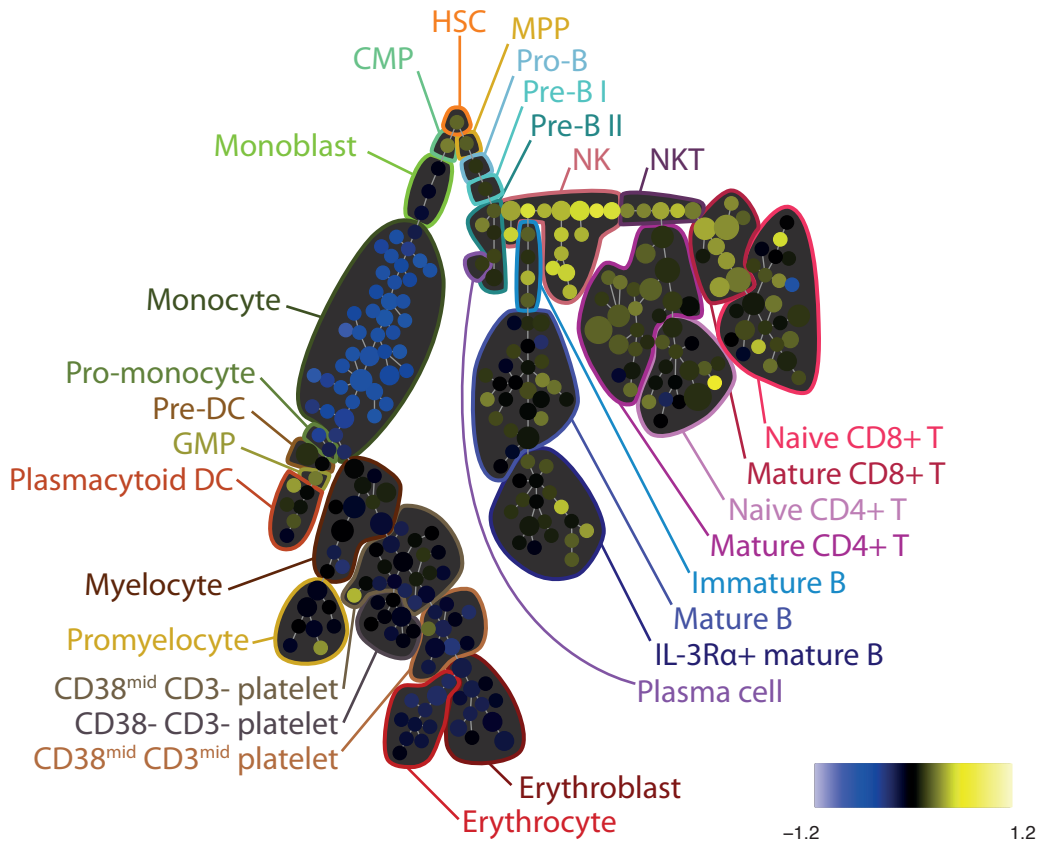


Figure S8B

176-pCREB — Dasatinib+IL7 vs Ref Ratio

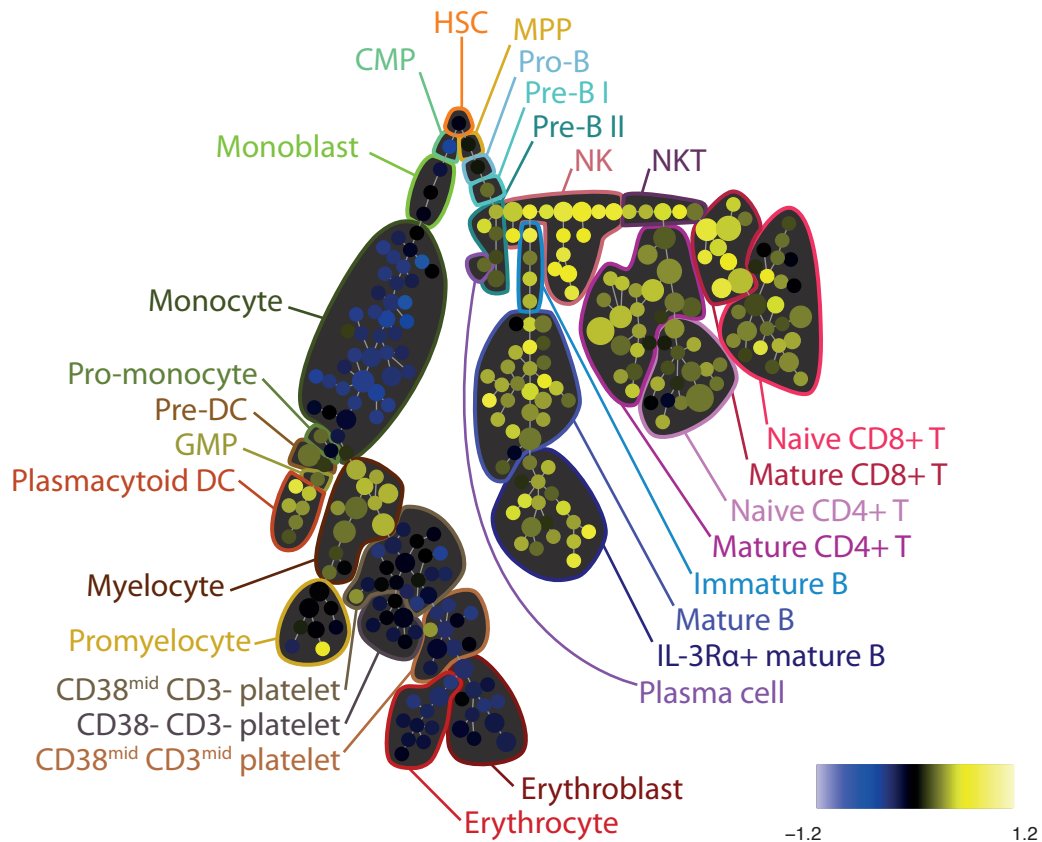


Figure S8B

176-pCREB ---- Dasatinib+PMAiono vs Ref Ratio

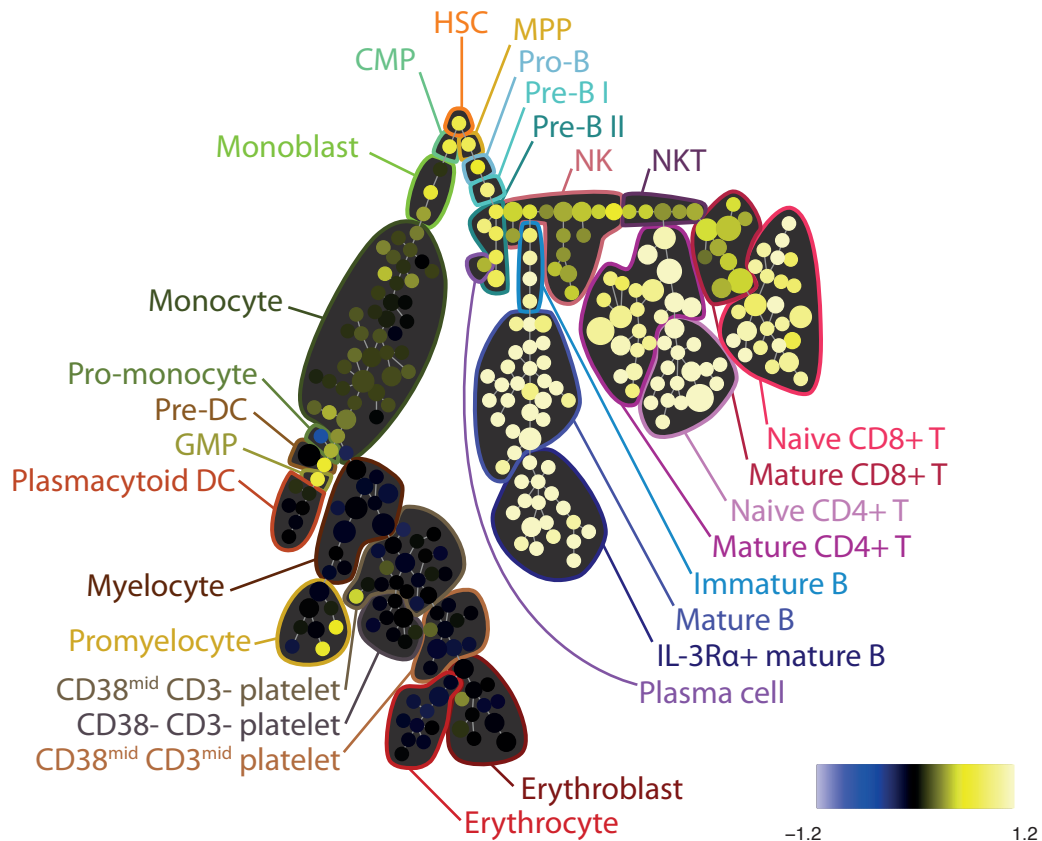


Figure S8B

176-pCREB — Dasatinib+PVO4 vs Ref Ratio

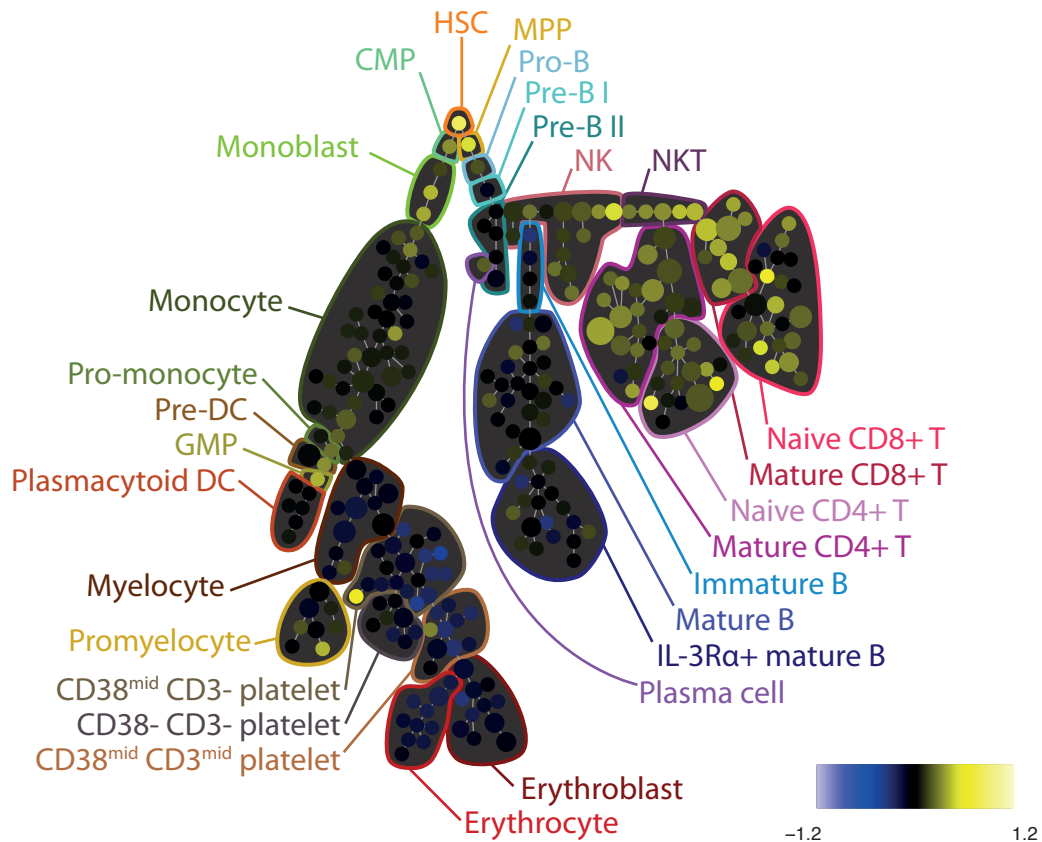


Figure S8B

176-pCREB ---- Dasatinib+Unstim vs Ref Ratio

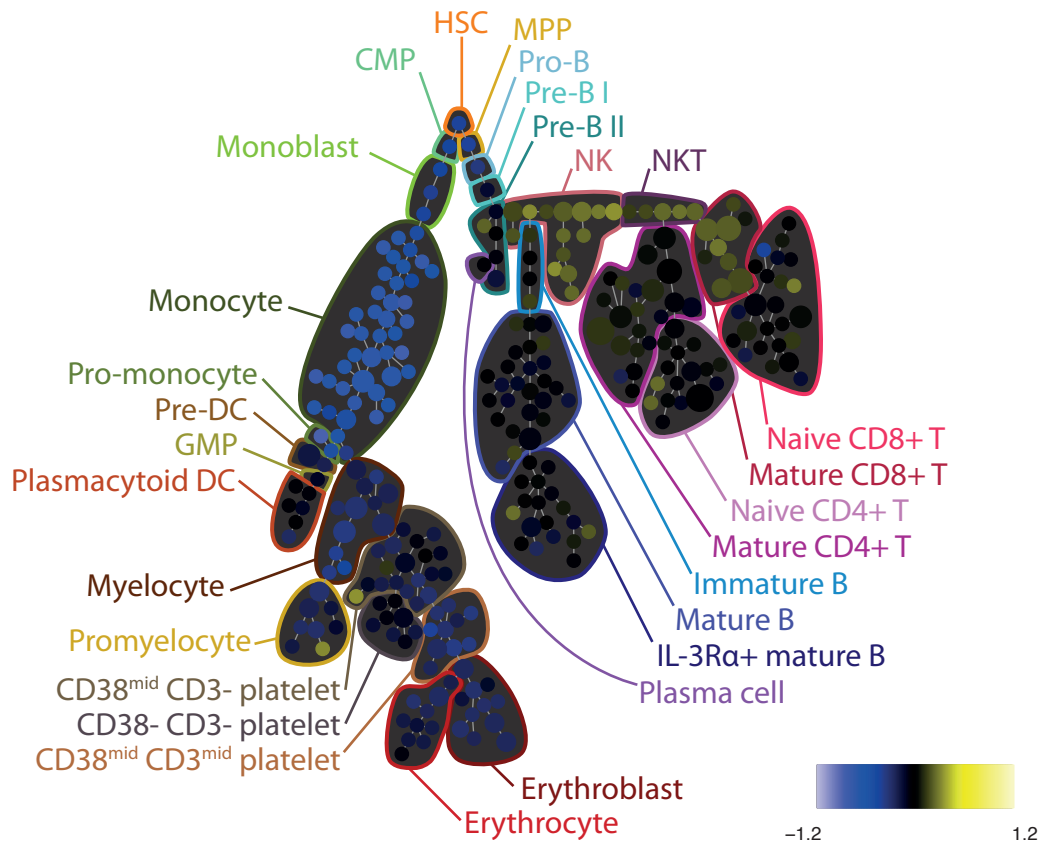


Figure S8C

141-pPLCgamma2 ---- JAKi+GCSF vs Ref Ratio

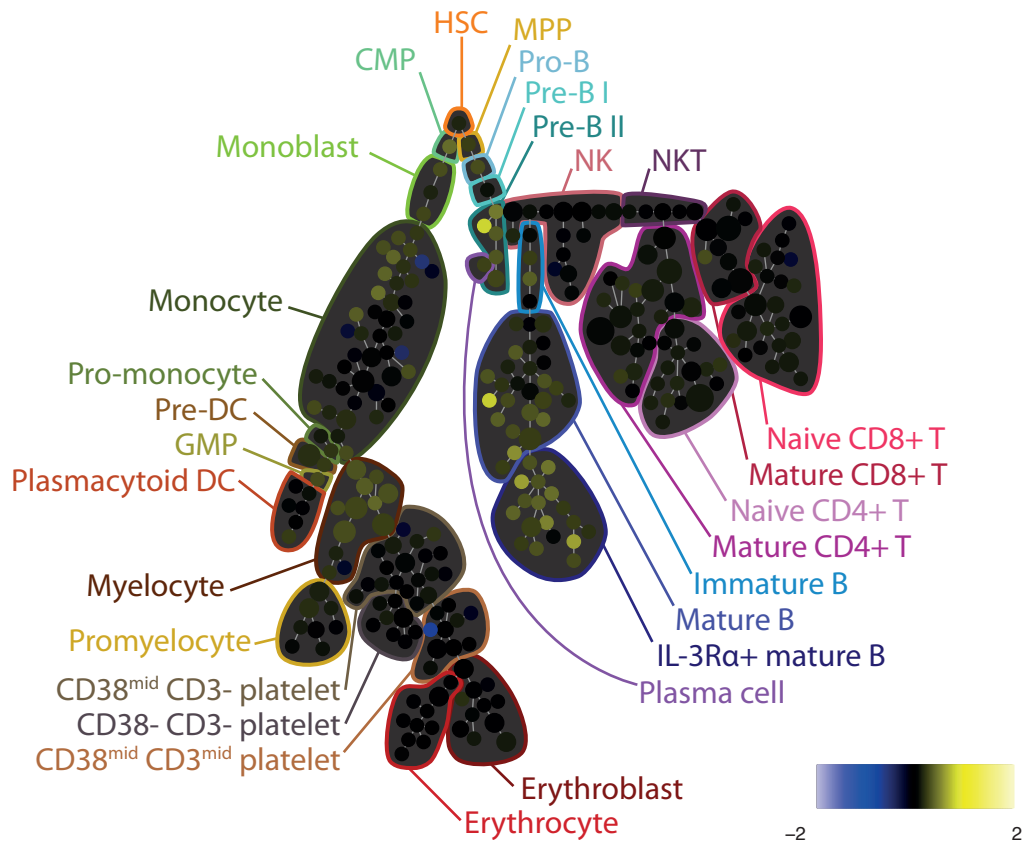


Figure S8C

141-pPLCgamma2 ---- JAKi+Unstim vs Ref Ratio

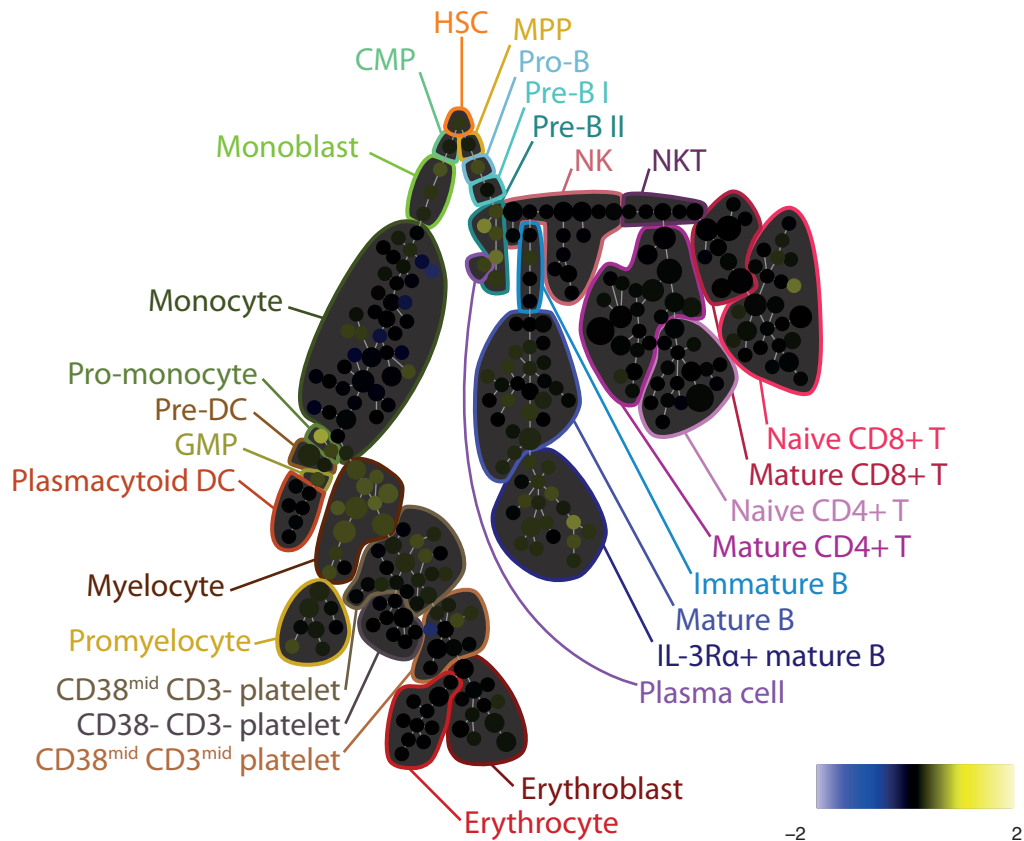


Figure S8C

150-pSTAT5 ---- JAKi+GCSF vs Ref Ratio

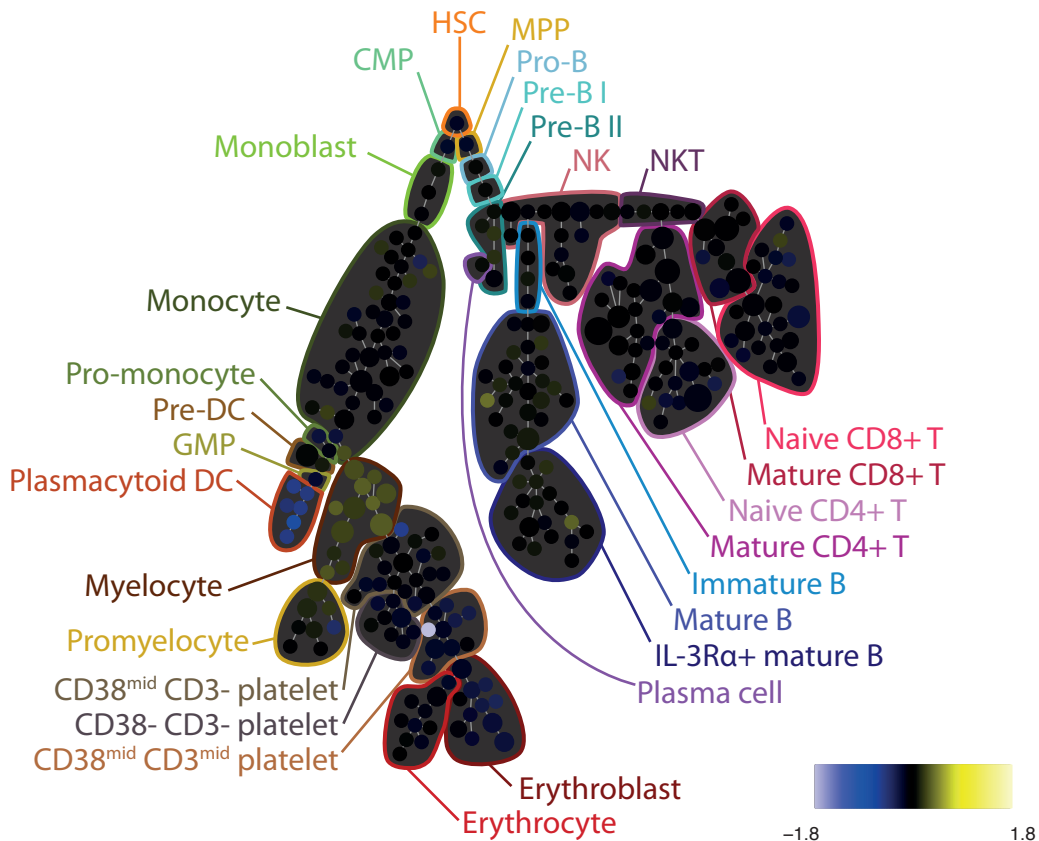


Figure S8C

150-pSTAT5 ---- JAKi+Unstim vs Ref Ratio

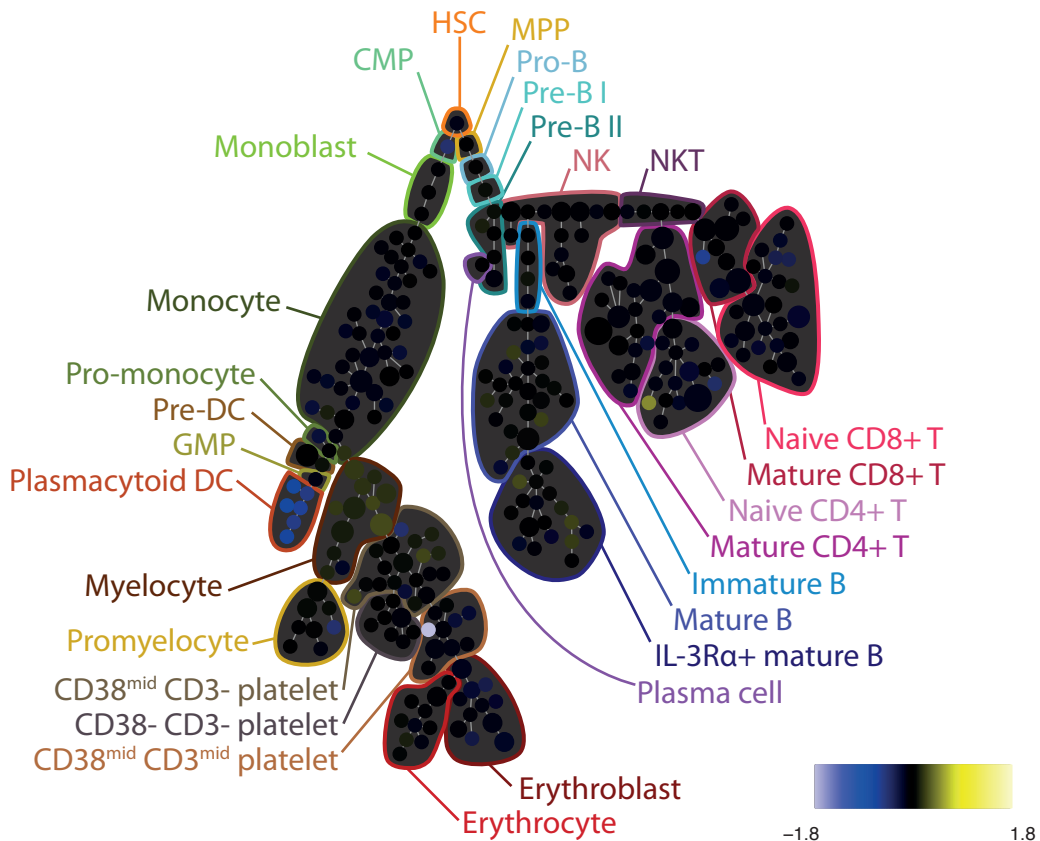


Figure S8C

151-pERK1/2 ---- JAKi+GCSF vs Ref Ratio

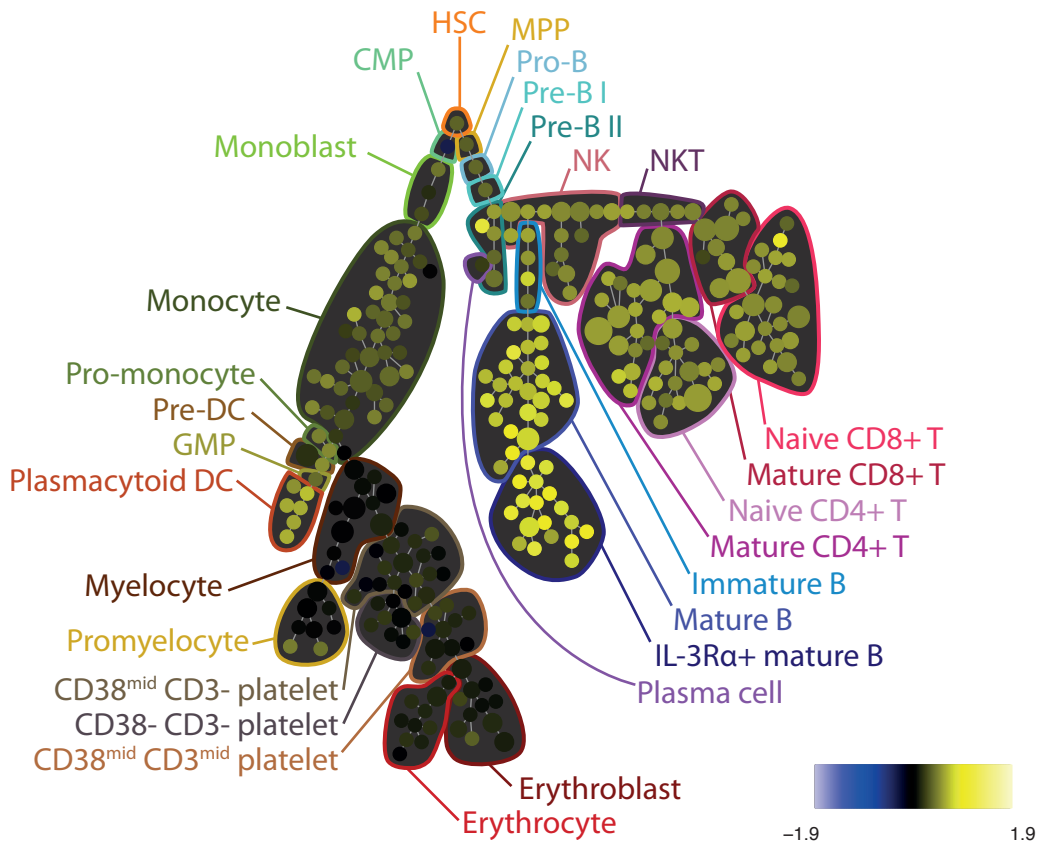


Figure S8C

151-pERK1/2 ---- JAKI+Unstim vs Ref Ratio

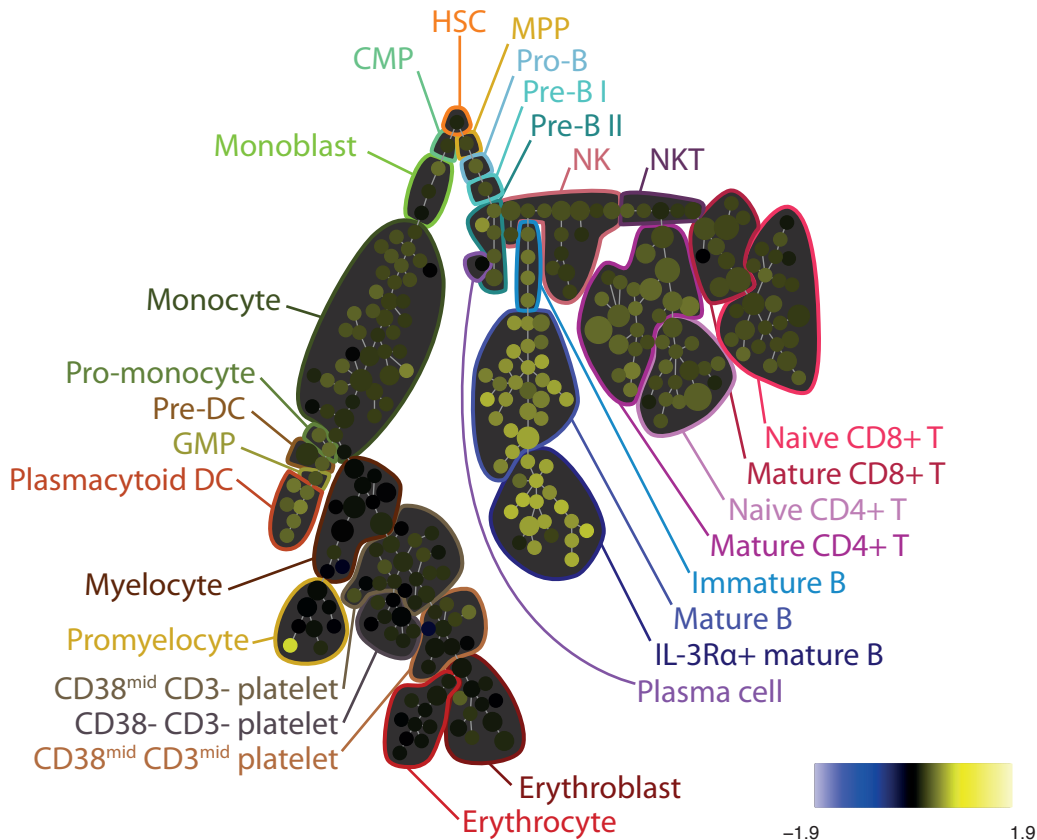


Figure S8C

152-Ki67 ---- JAKi+GCSF vs Ref Ratio

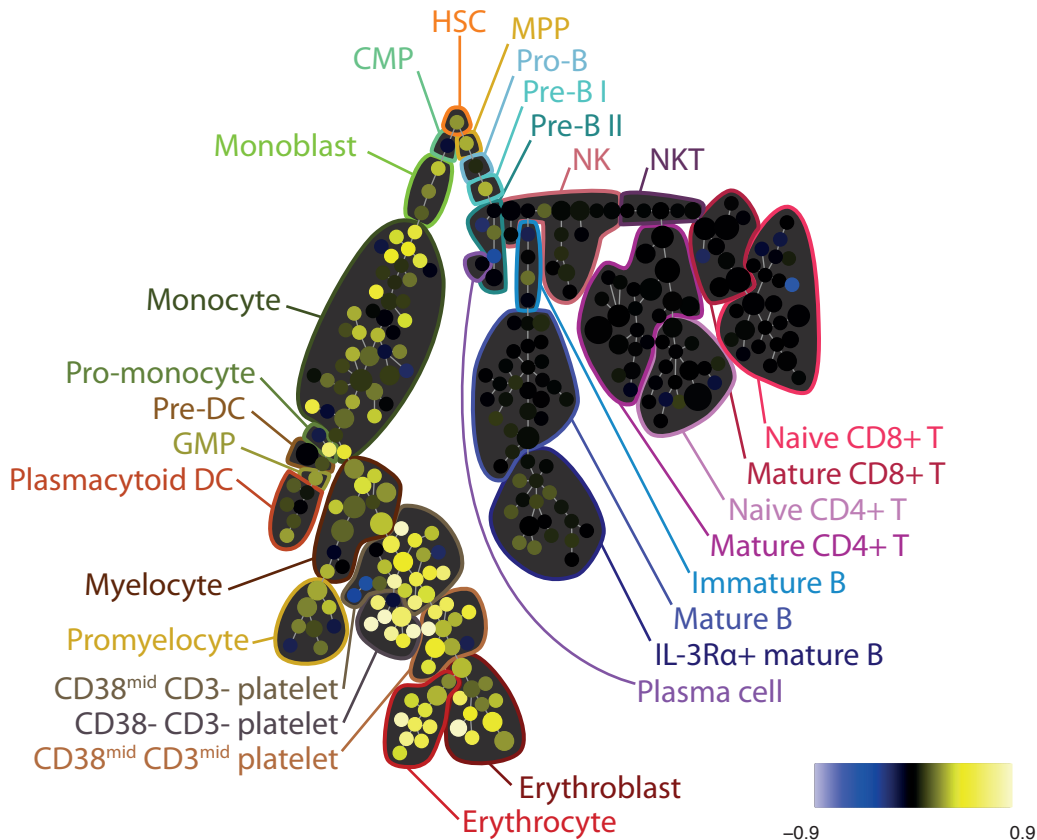


Figure S8C

152-Ki67 ---- JAKi+Unstim vs Ref Ratio

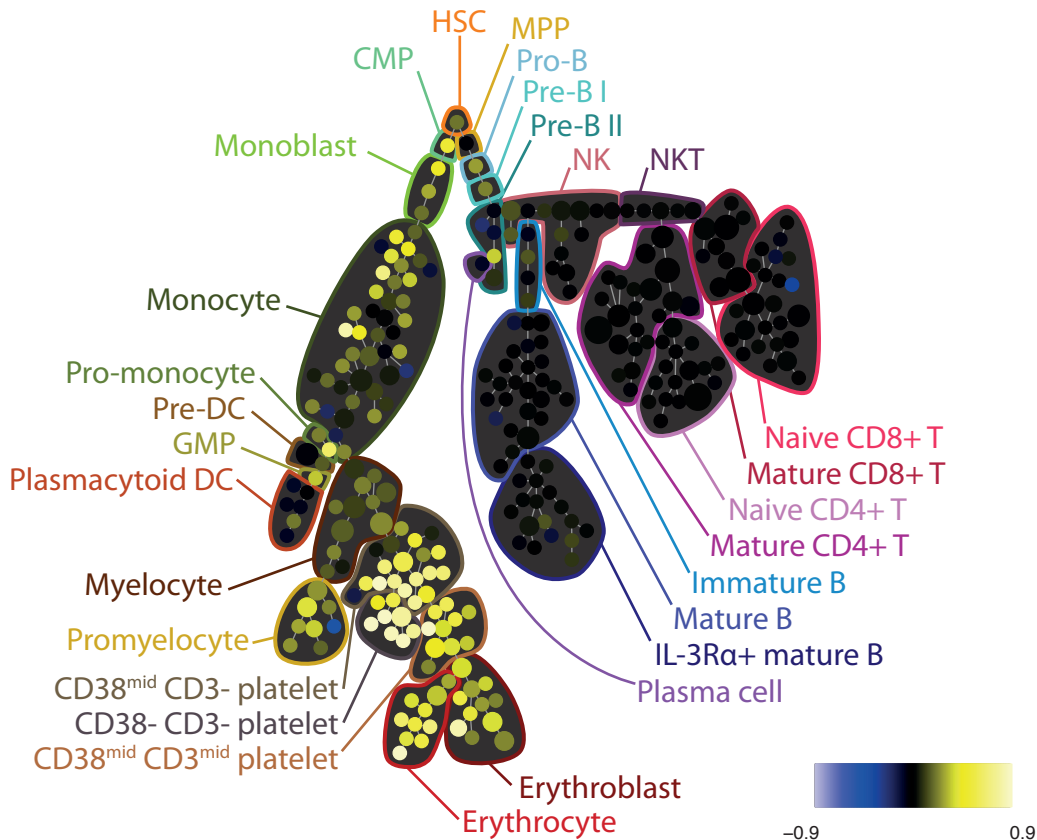


Figure S8C

153-pMAPKAPK2 ---- JAKi+GCSF vs Ref Ratio

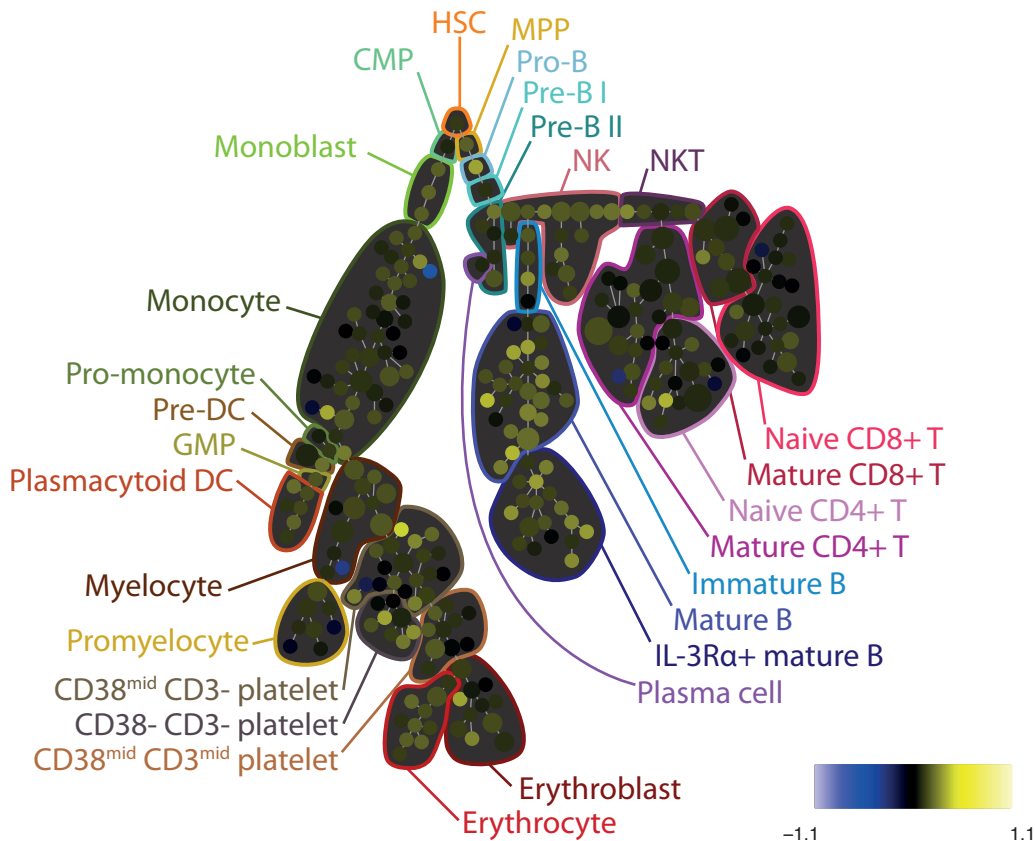


Figure S8C

153-pMAPKAPK2 ---- JAKi+Unstim vs Ref Ratio

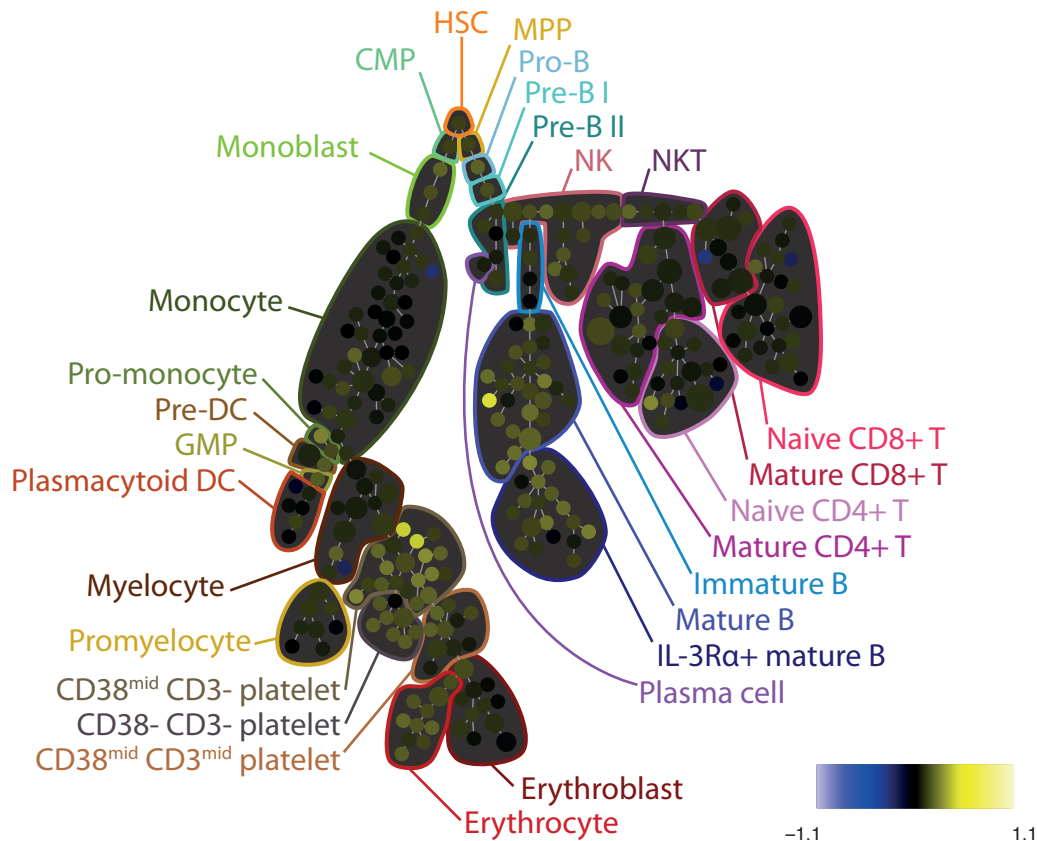


Figure S8C

154-pSHP2 ---- JAKi+GCSF vs Ref Ratio

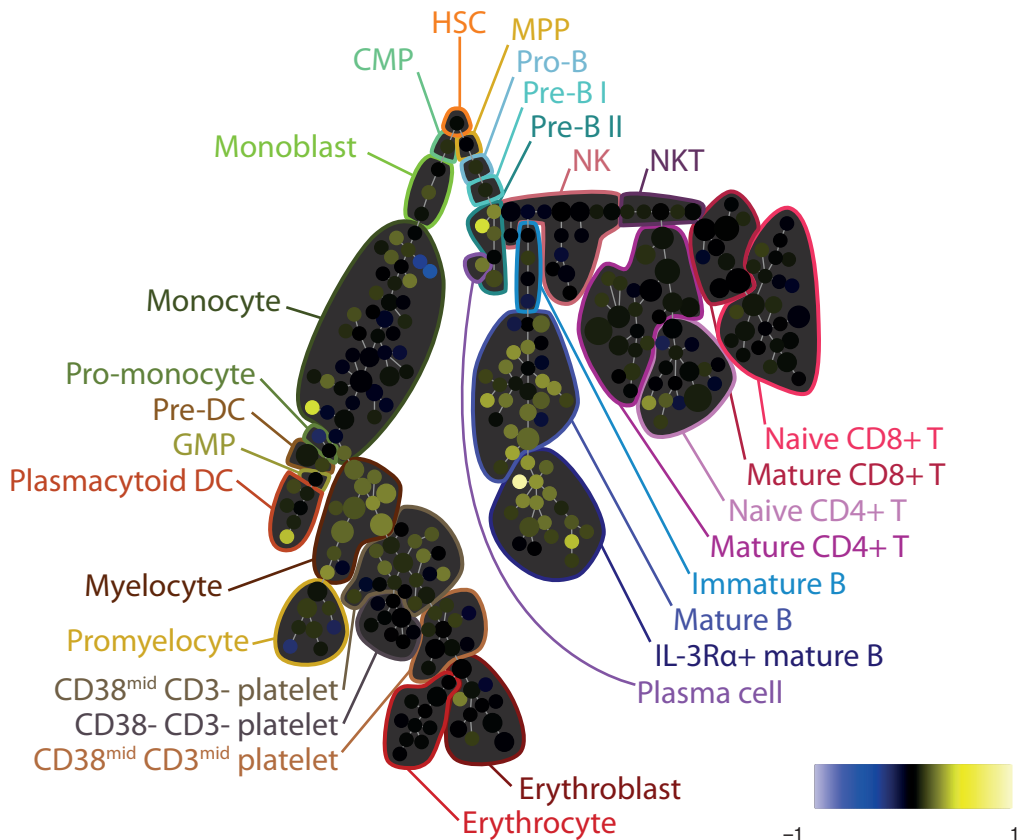


Figure S8C

154-pSHP2 ---- JAKi+Unstim vs Ref Ratio

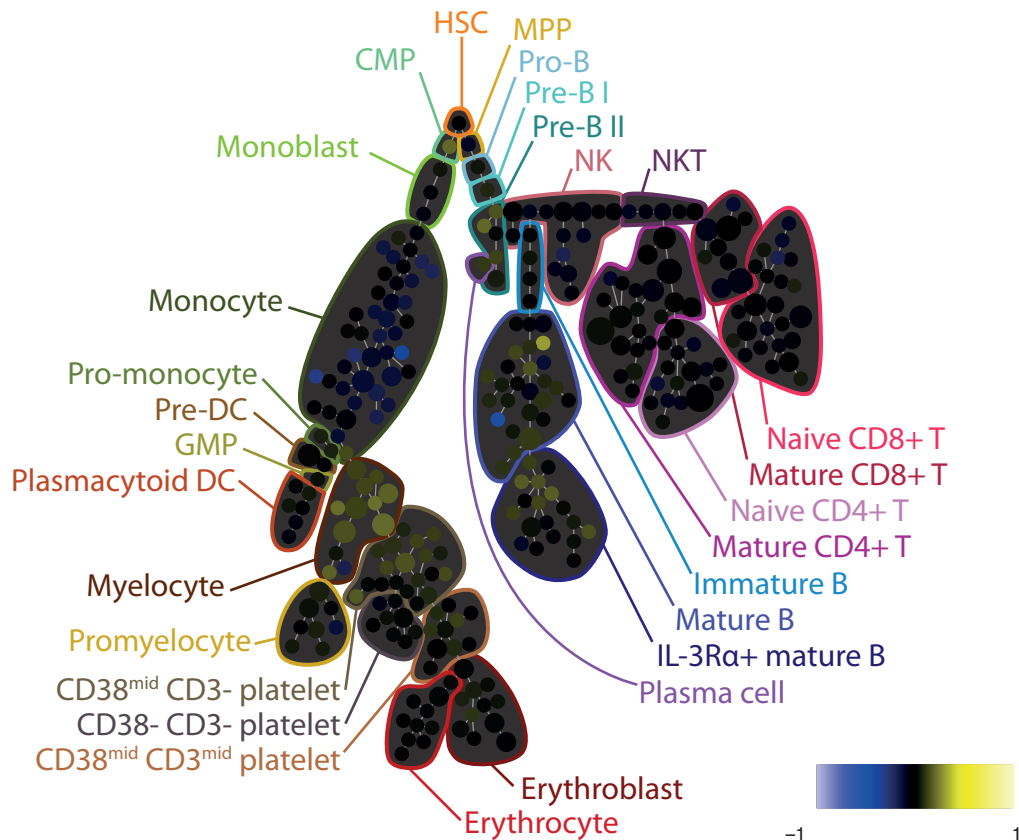


Figure S8C

156-pZAP70/Syk ---- JAKi+GCSF vs Ref Ratio

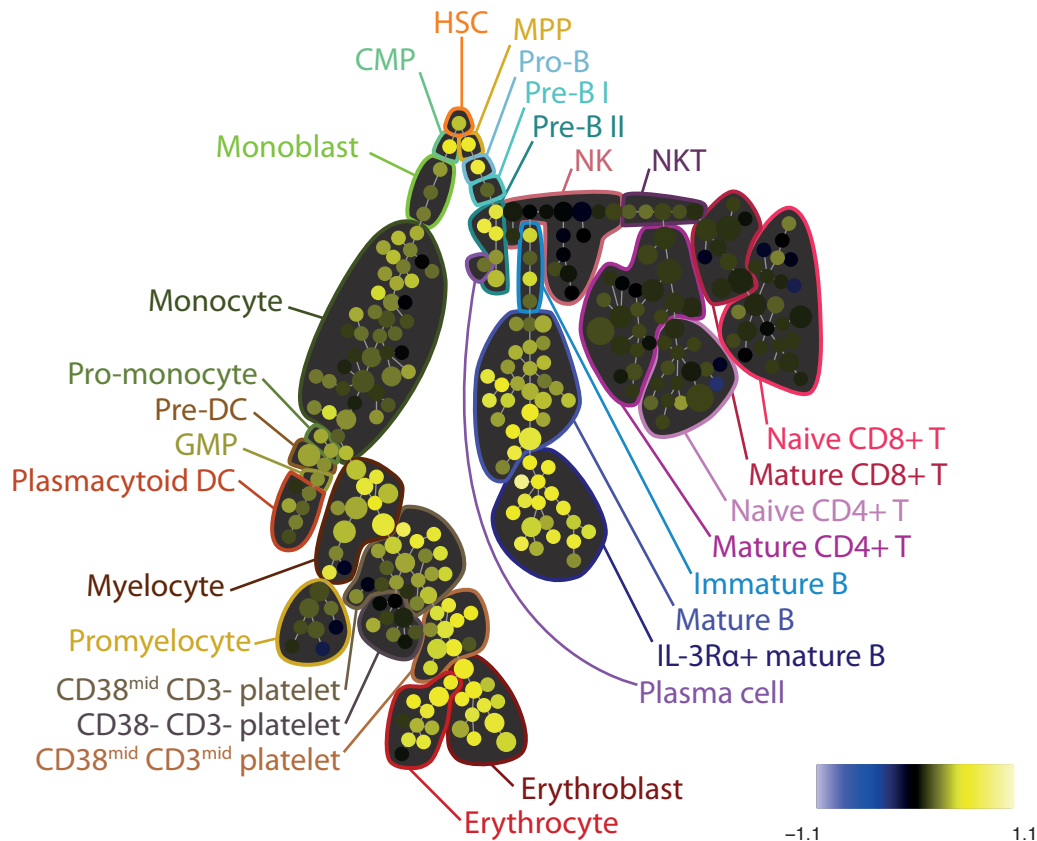


Figure S8C

156-pZAP70/Syk ---- JAKi+Unstim vs Ref Ratio

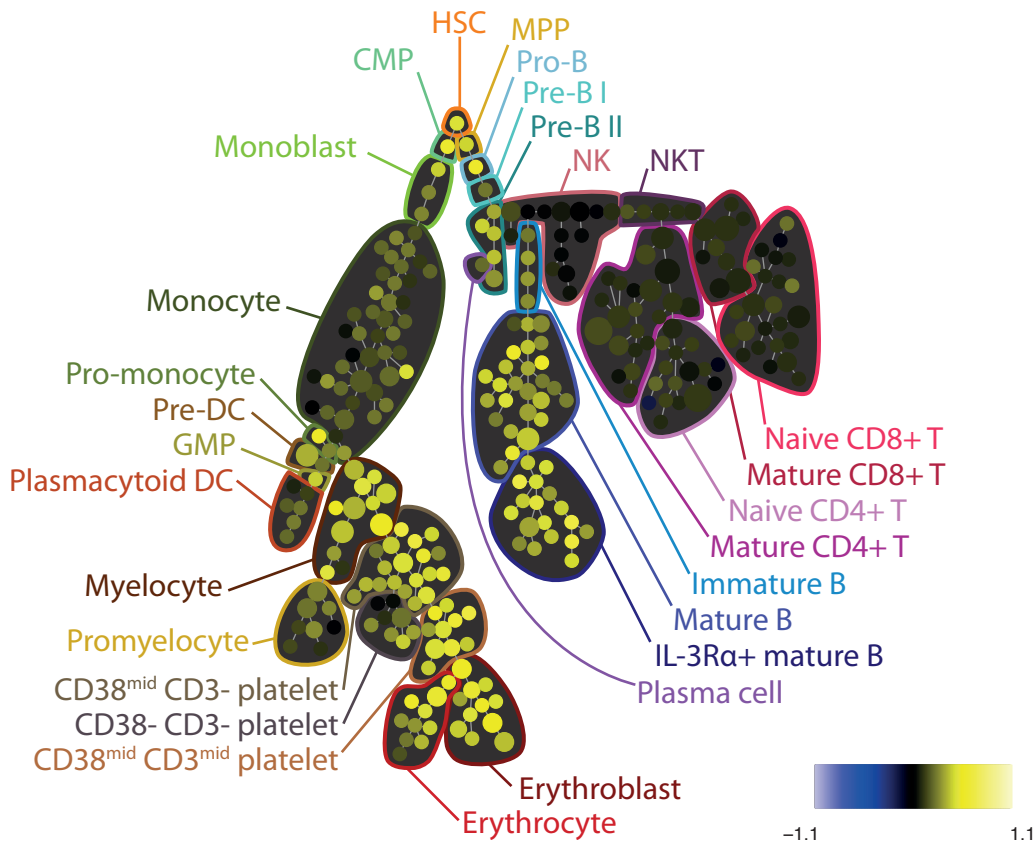


Figure S8C

159-pSTAT3 ---- JAKi+GCSF vs Ref Ratio

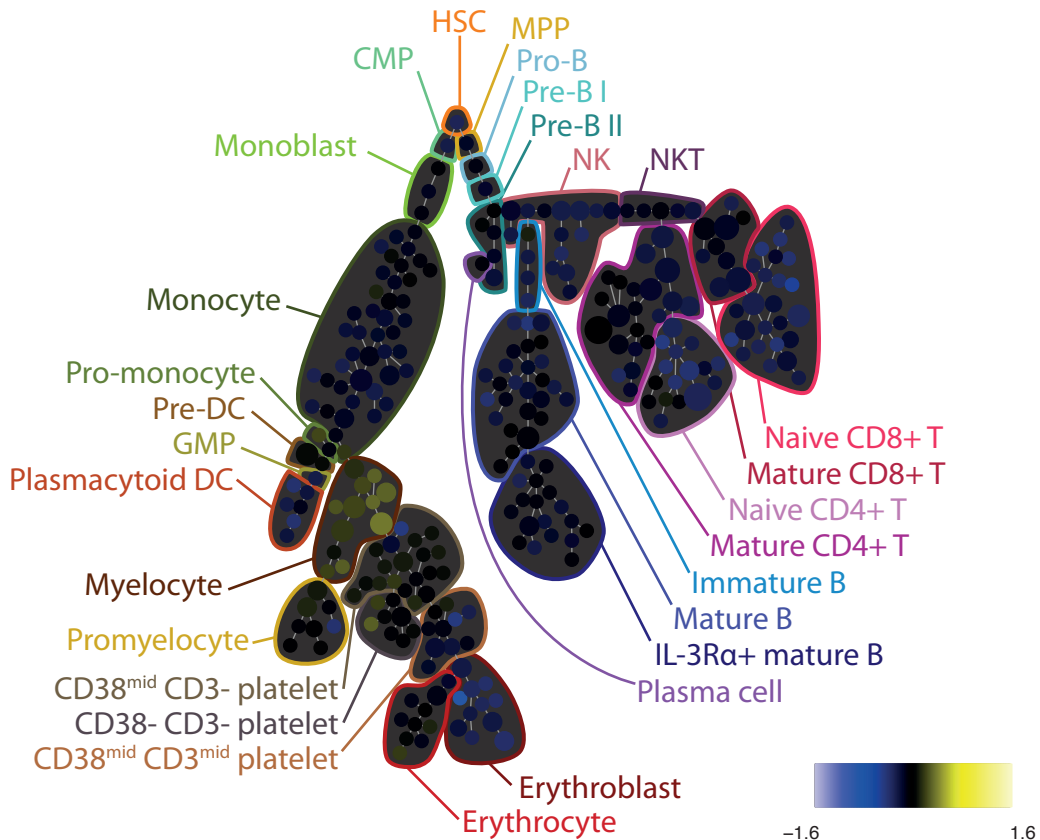


Figure S8C

159-pSTAT3 ---- JAKi+Unstim vs Ref Ratio

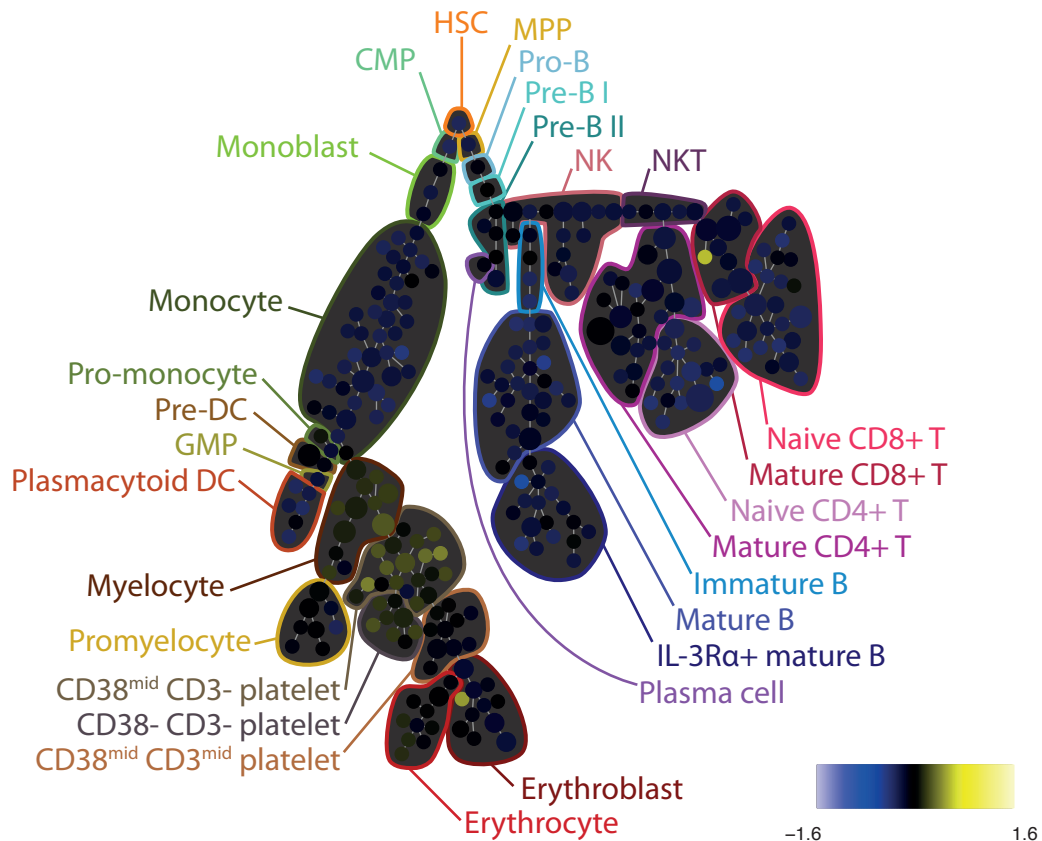


Figure S8C

164-pSLP-76 ---- JAKi+GCSF vs Ref Ratio

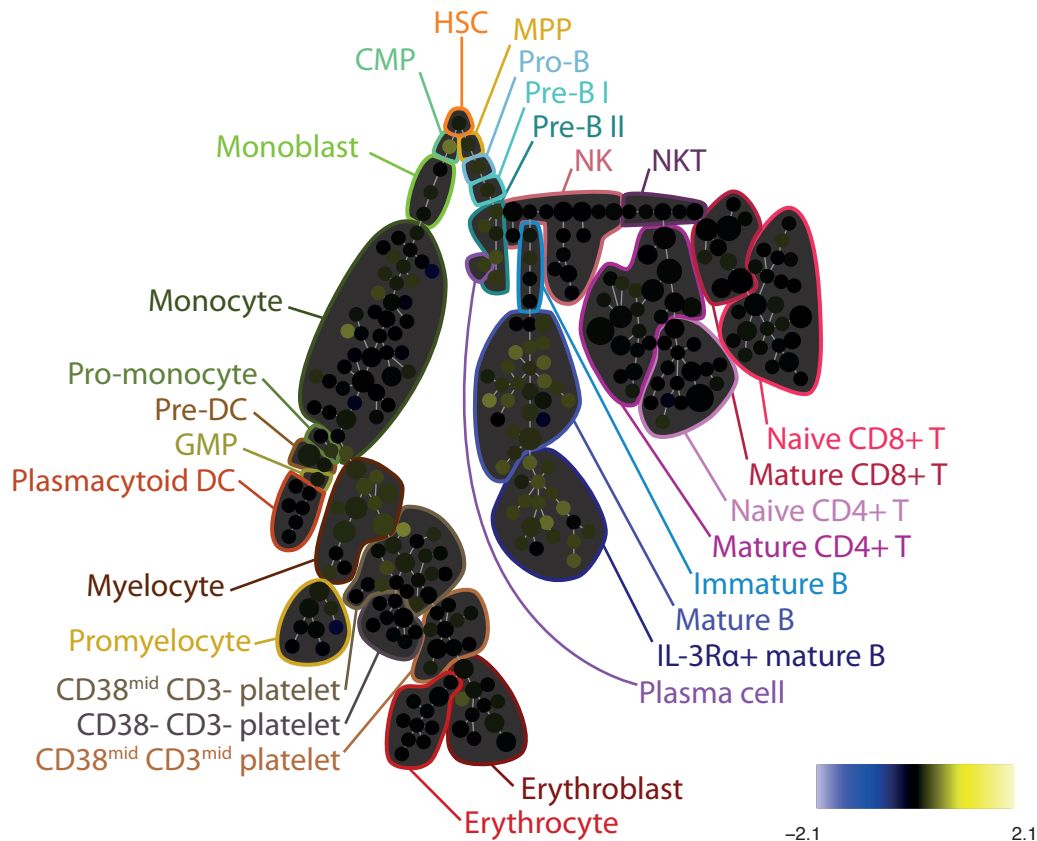


Figure S8C

164-pSLP-76 ---- JAKi+Unstim vs Ref Ratio

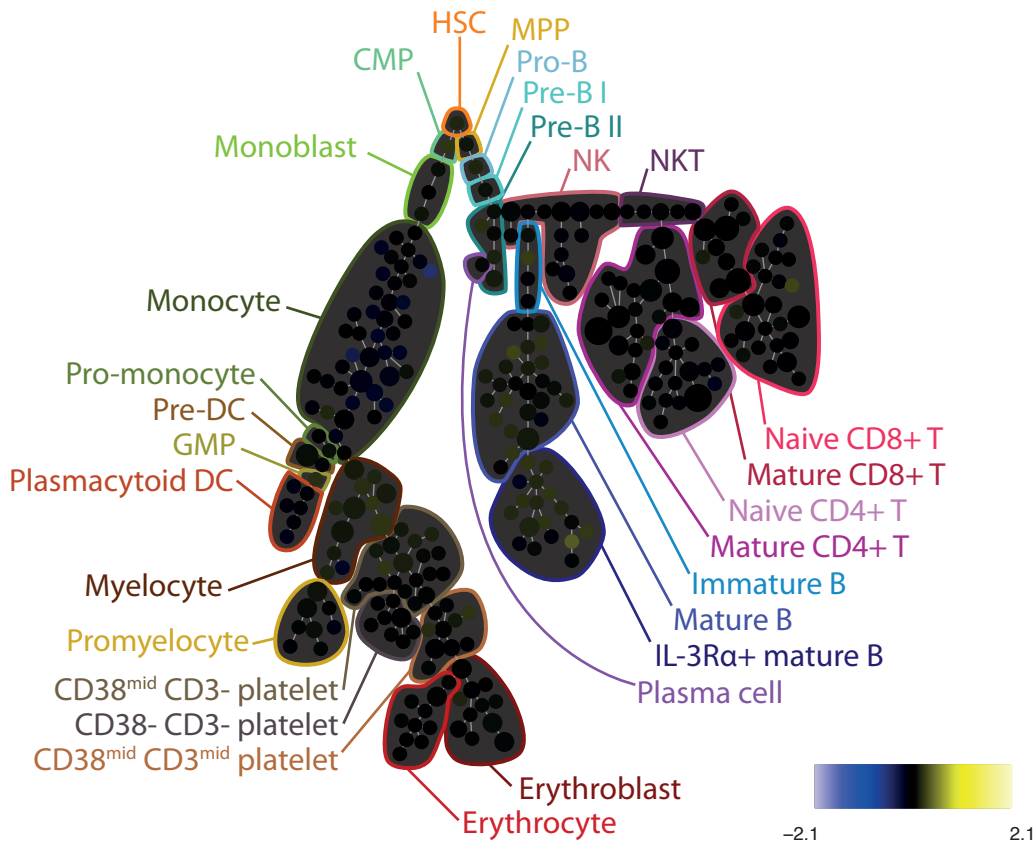


Figure S8C

165-pNFkB ---- JAKi+GCSF vs Ref Ratio

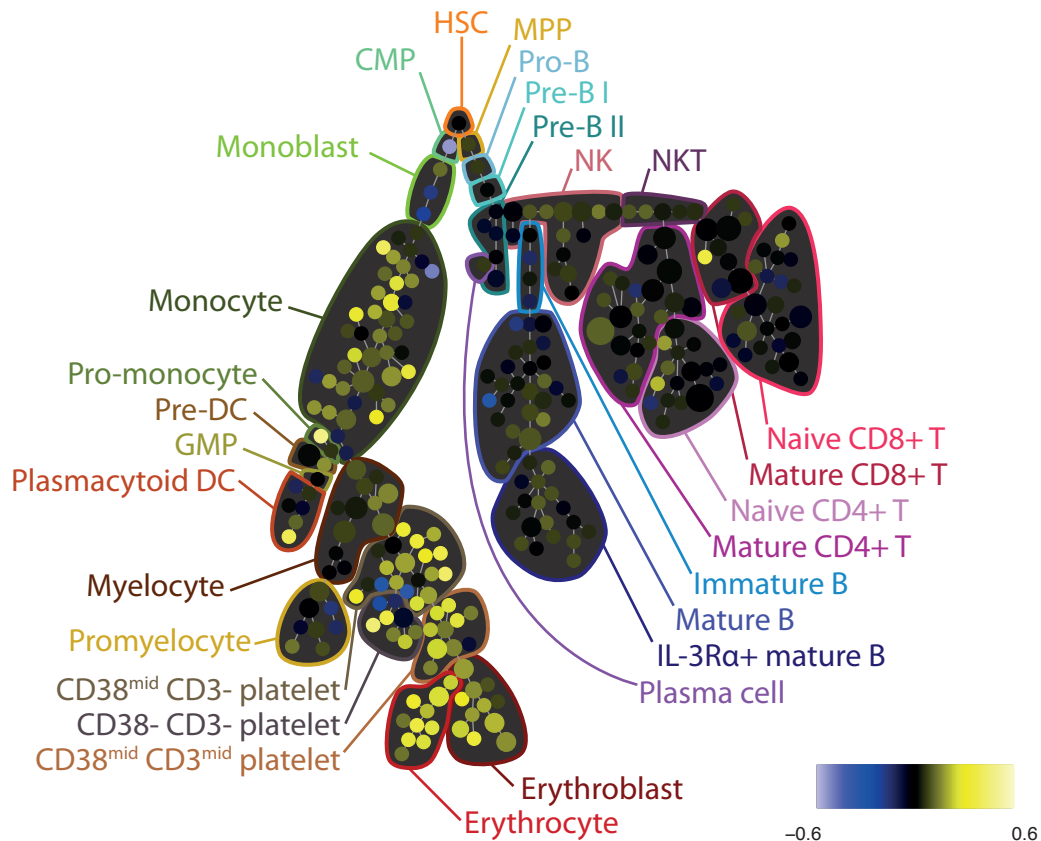


Figure S8C

165-pNFkB ---- JAKi+Unstim vs Ref Ratio

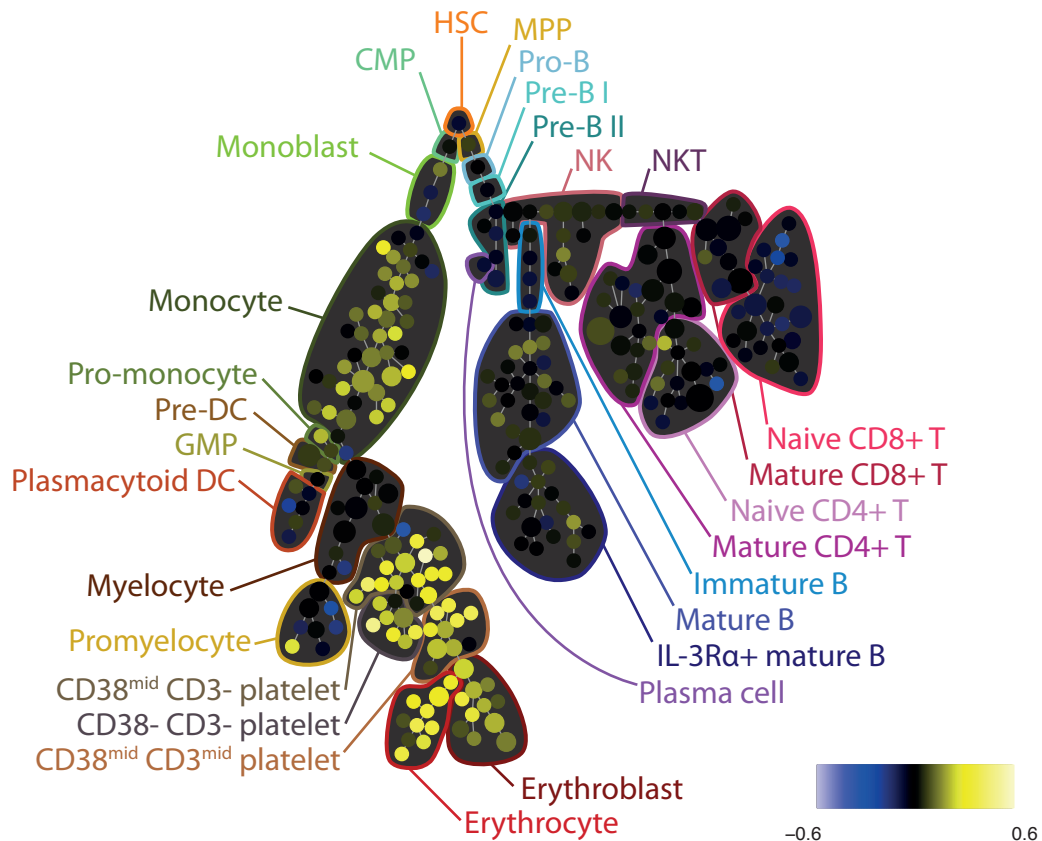


Figure S8C

166-IkBalpha ---- JAKi+GCSF vs Ref Ratio

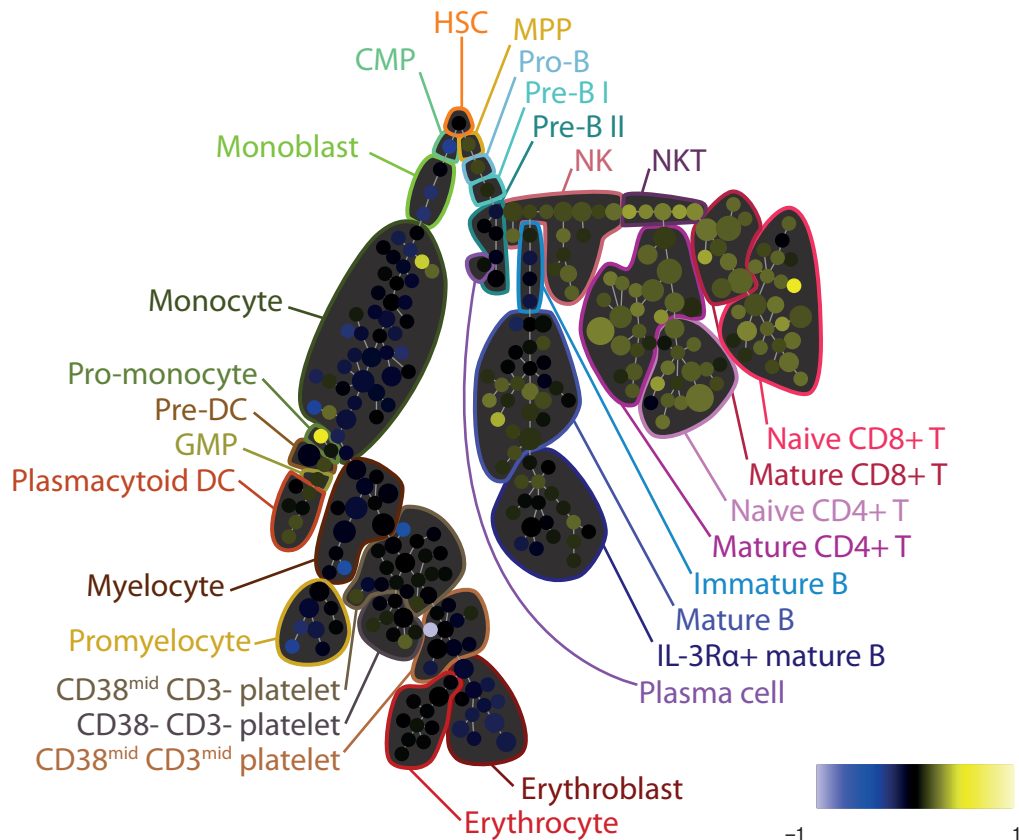


Figure S8C

166-IkBalpna ---- JAKi+Unstim vs Ref Ratio

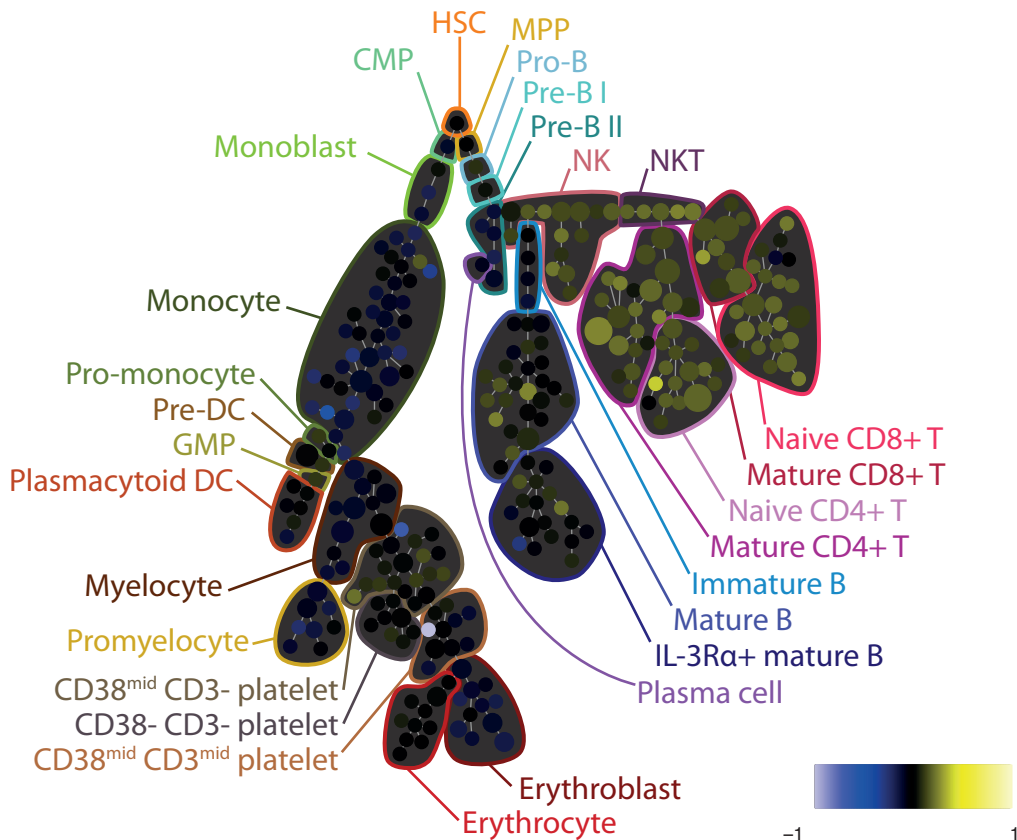


Figure S8C

168-pH3 ---- JAKi+GCSF vs Ref Ratio

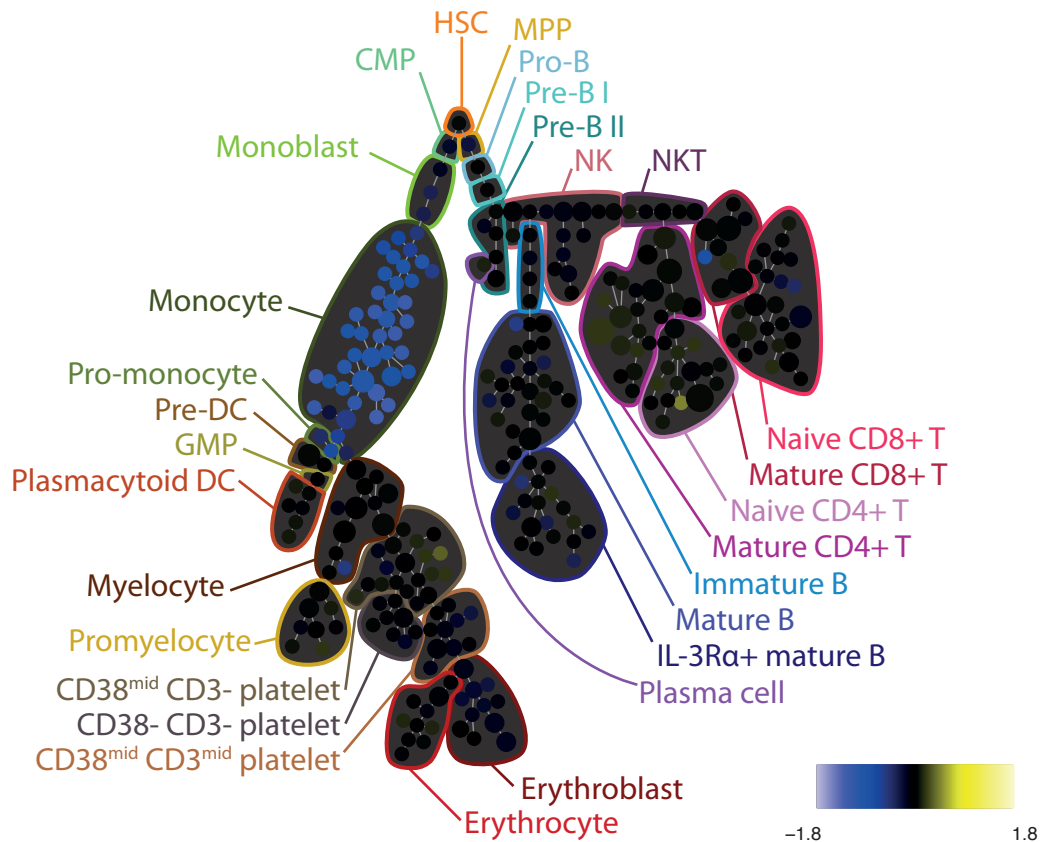


Figure S8C

168-pH3 ---- JAKi+Unstim vs Ref Ratio

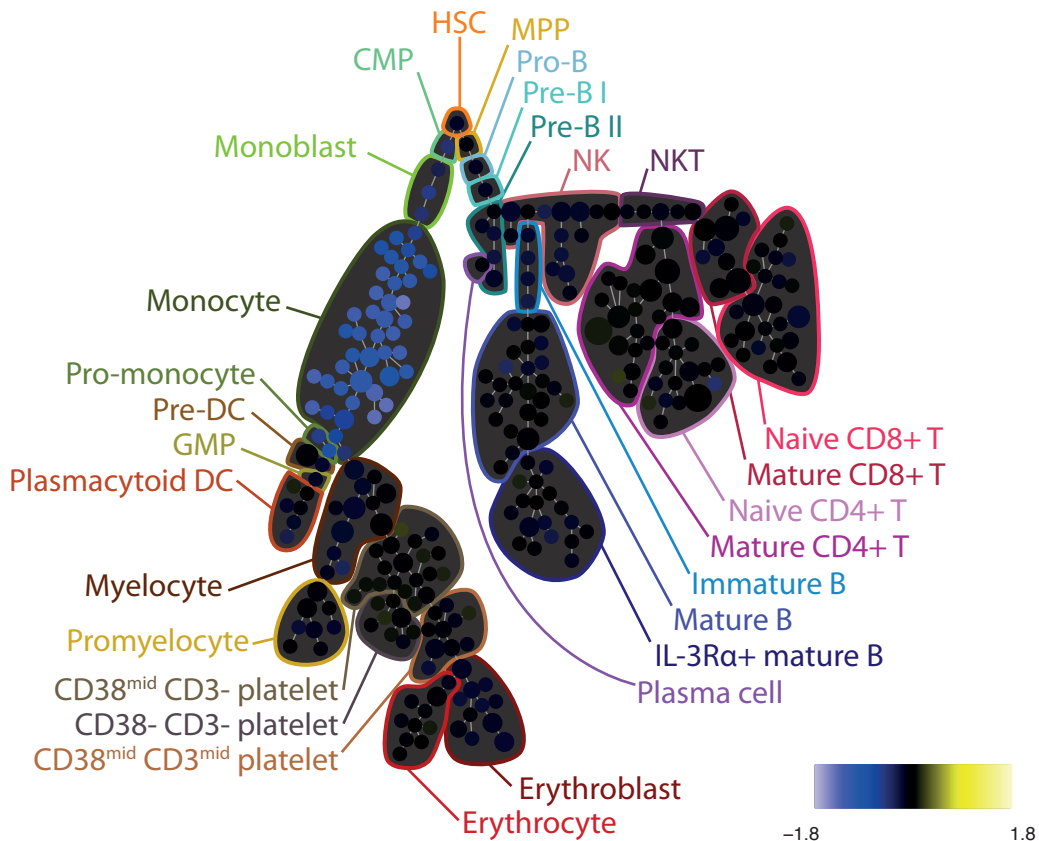


Figure S8C

169-pP38 ---- JAKi+GCSF vs Ref Ratio

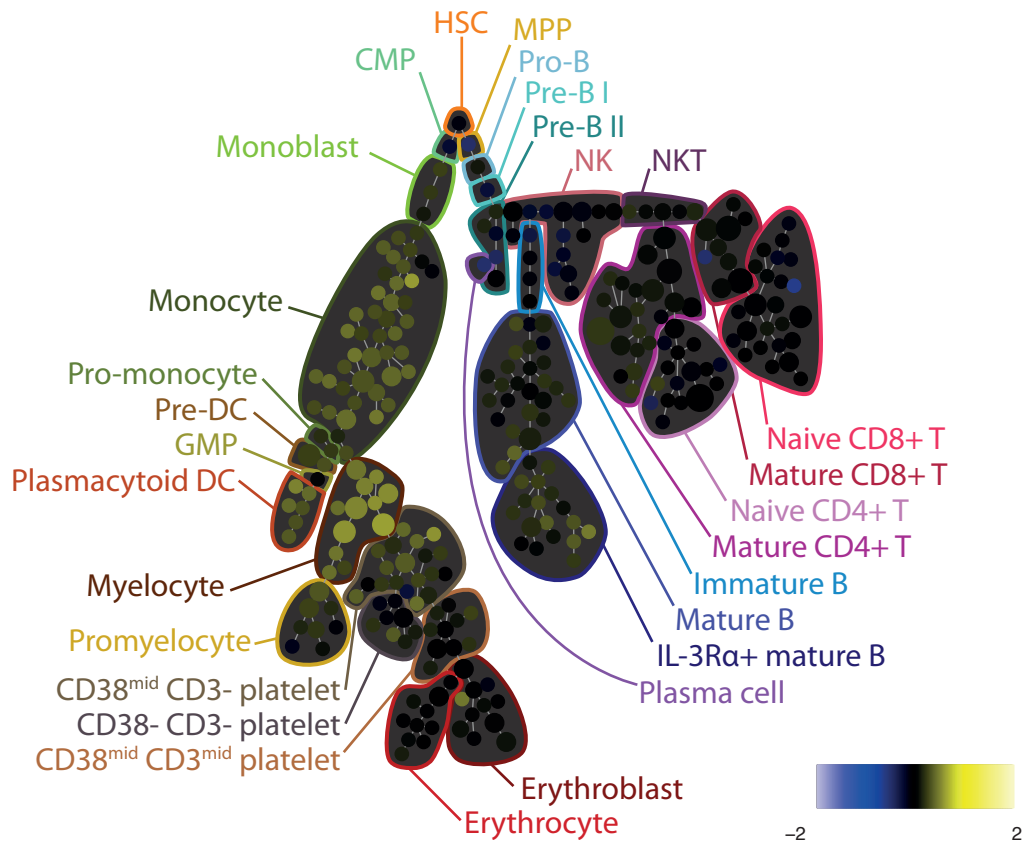


Figure S8C

169-pP38 ---- JAKi+Unstim vs Ref Ratio

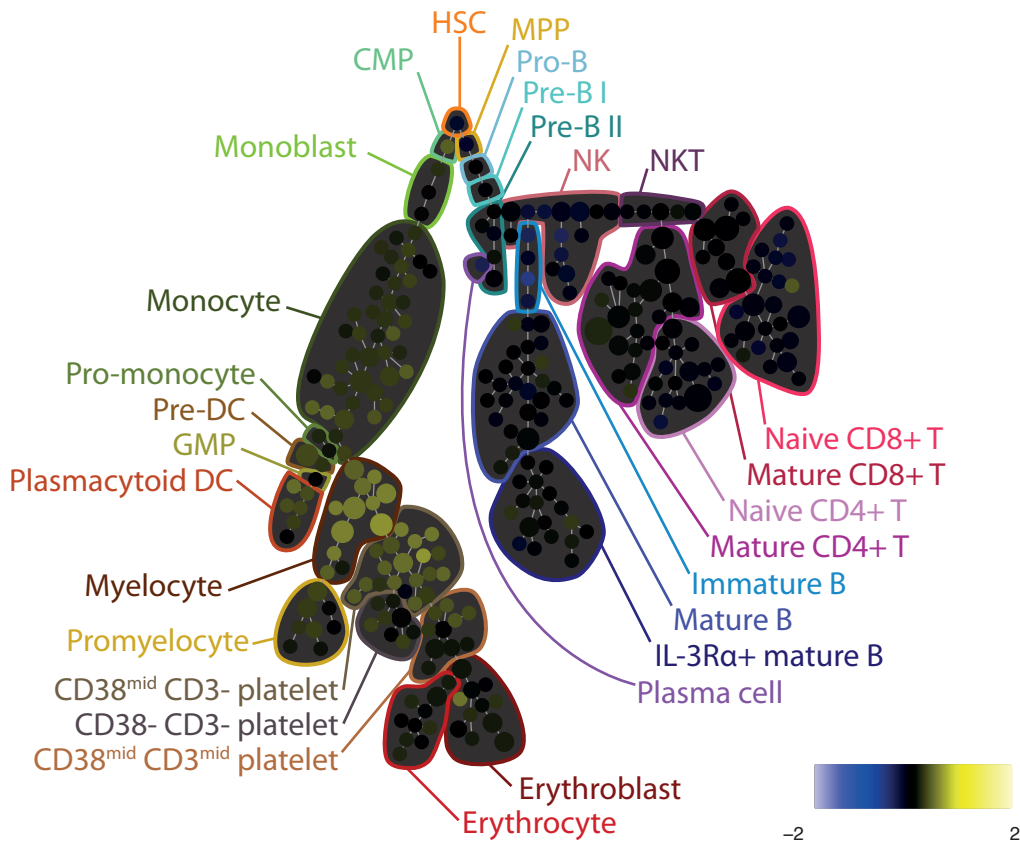


Figure S8C

171-pBtk/Itk ---- JAKi+GCSF vs Ref Ratio

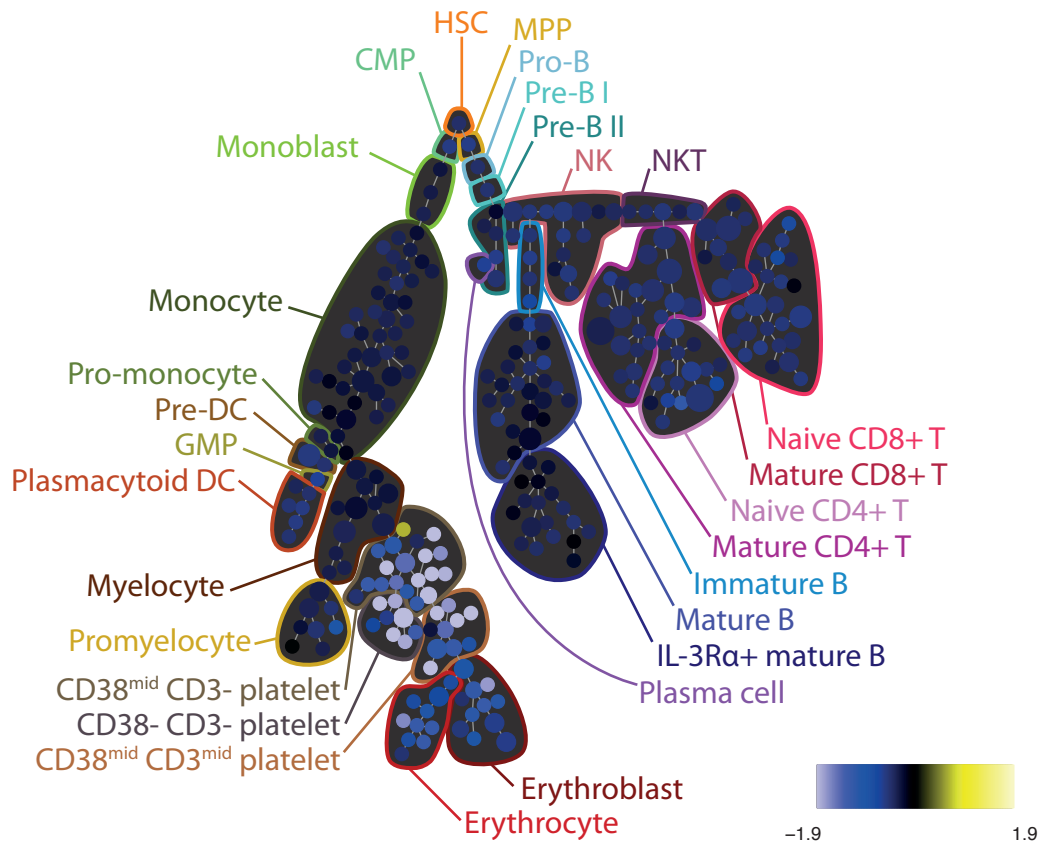


Figure S8C

171-pBtk/ltk ---- JAKi+Unstim vs Ref Ratio

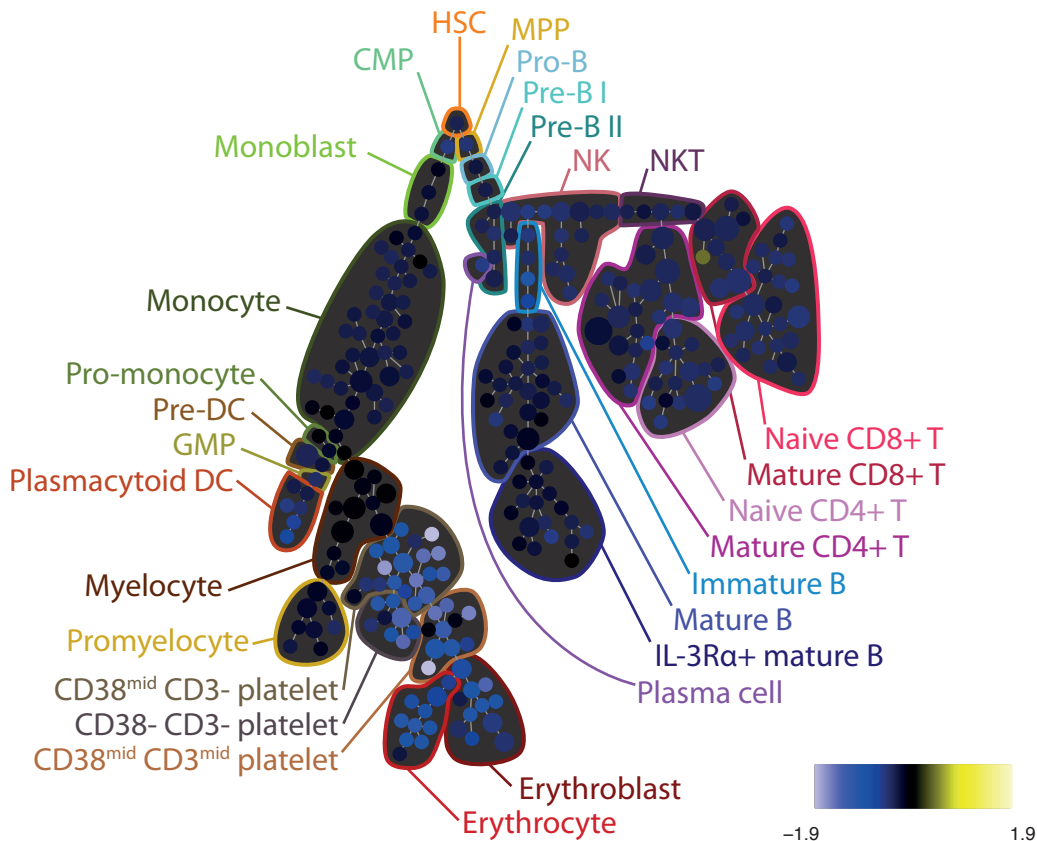


Figure S8C

172-pS6 ---- JAKi+GCSF vs Ref Ratio

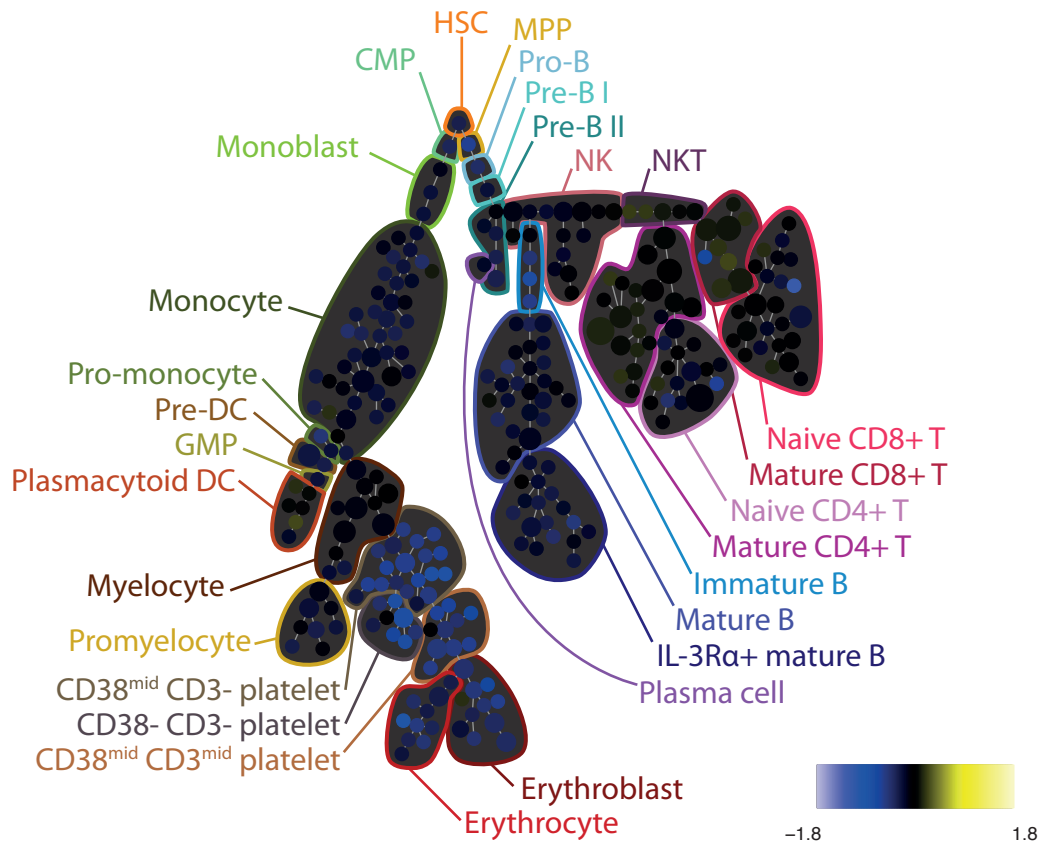


Figure S8C

172-pS6 ---- JAKi+Unstim vs Ref Ratio

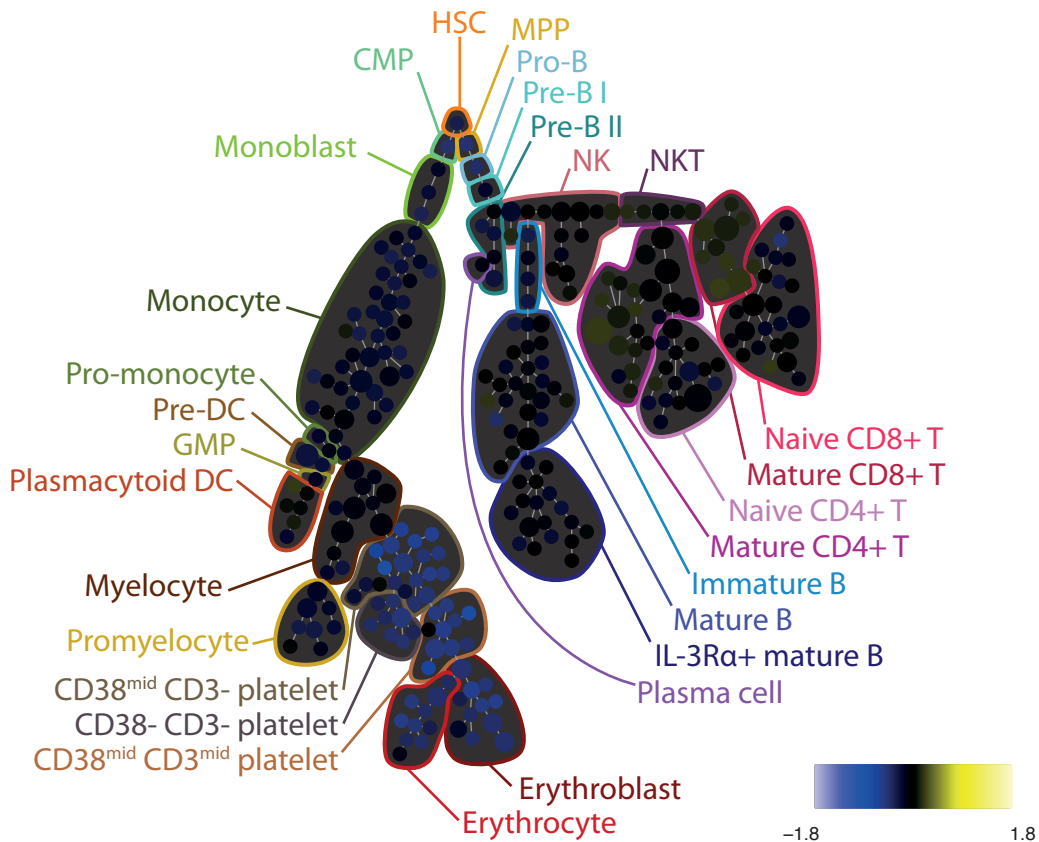


Figure S8C

174-pSrcFK ---- JAKi+GCSF vs Ref Ratio

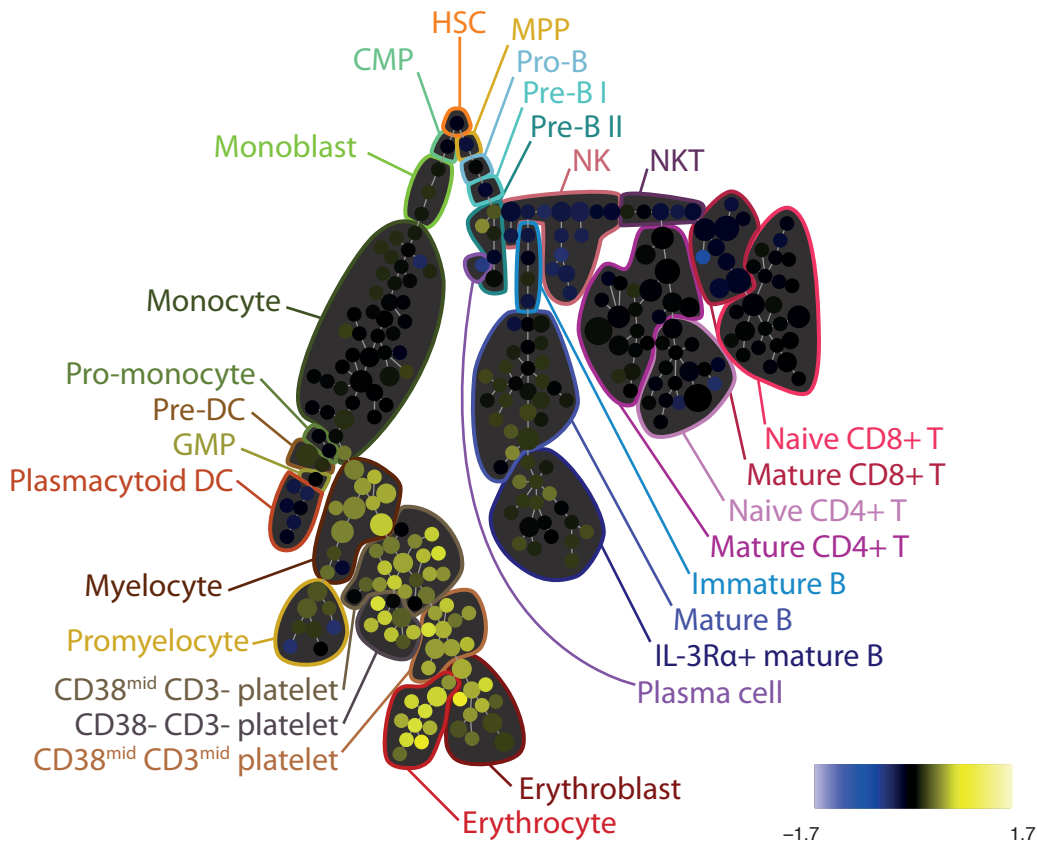


Figure S8C

174-pSrcFK ---- JAKi+Unstim vs Ref Ratio

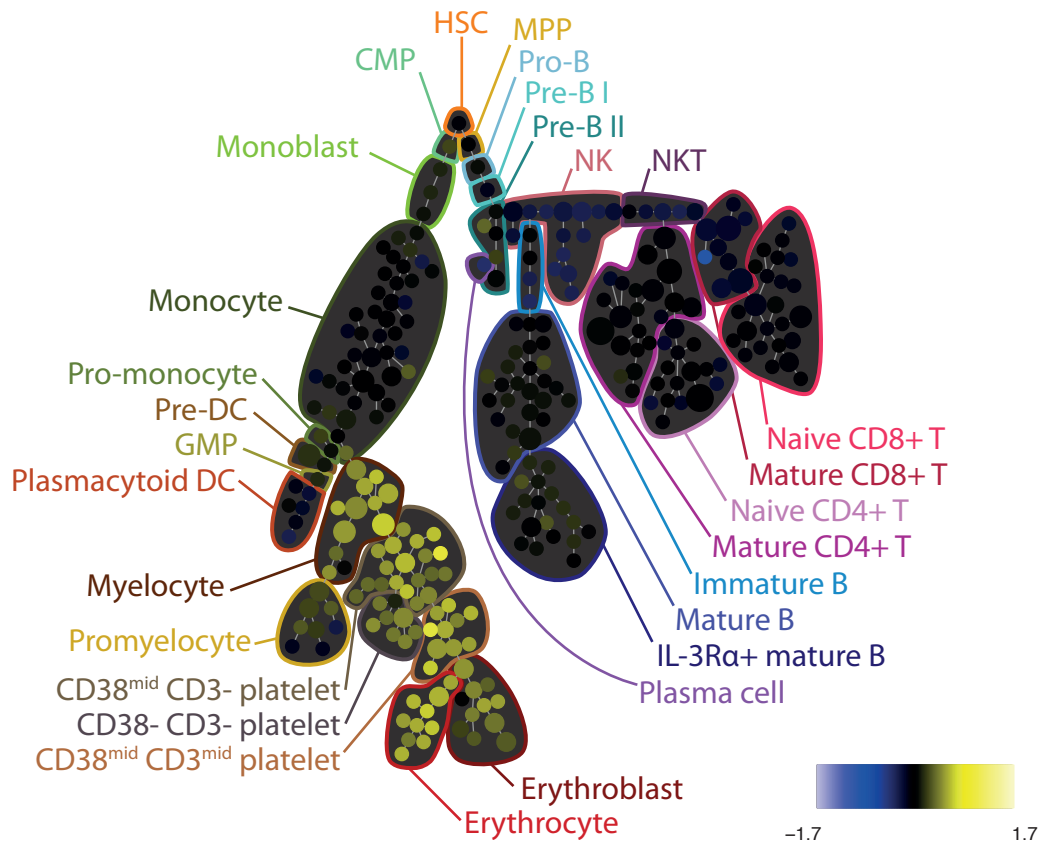


Figure S8C

175-pCrkL ---- JAKi+GCSF vs Ref Ratio

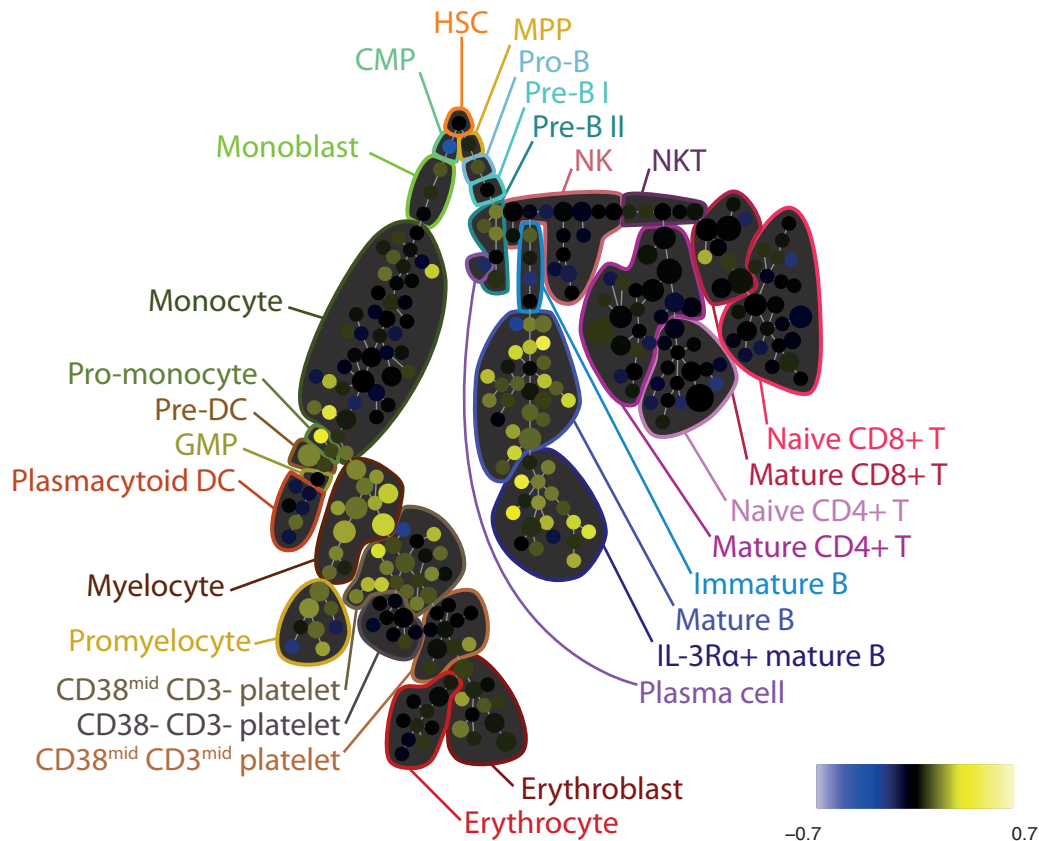


Figure S8C

175-pCrkL ---- JAKi+Unstim vs Ref Ratio

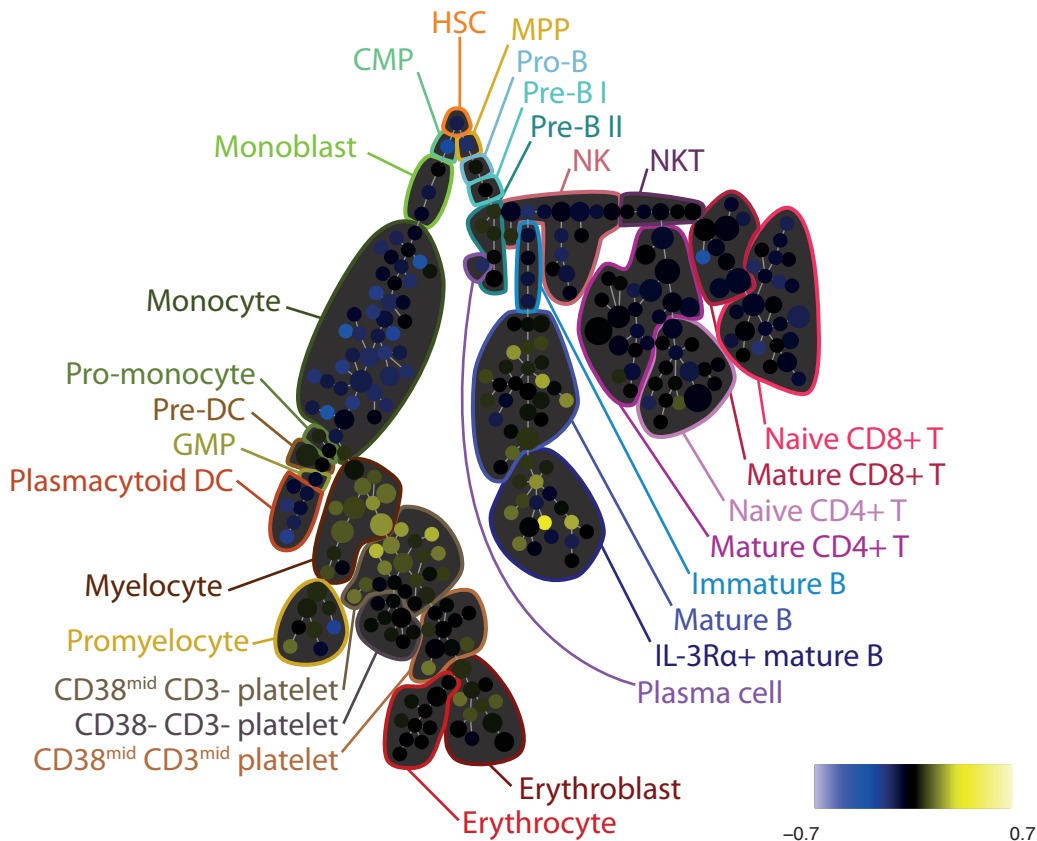


Figure S8C

176-pCREB ---- JAKi+GCSF vs Ref Ratio

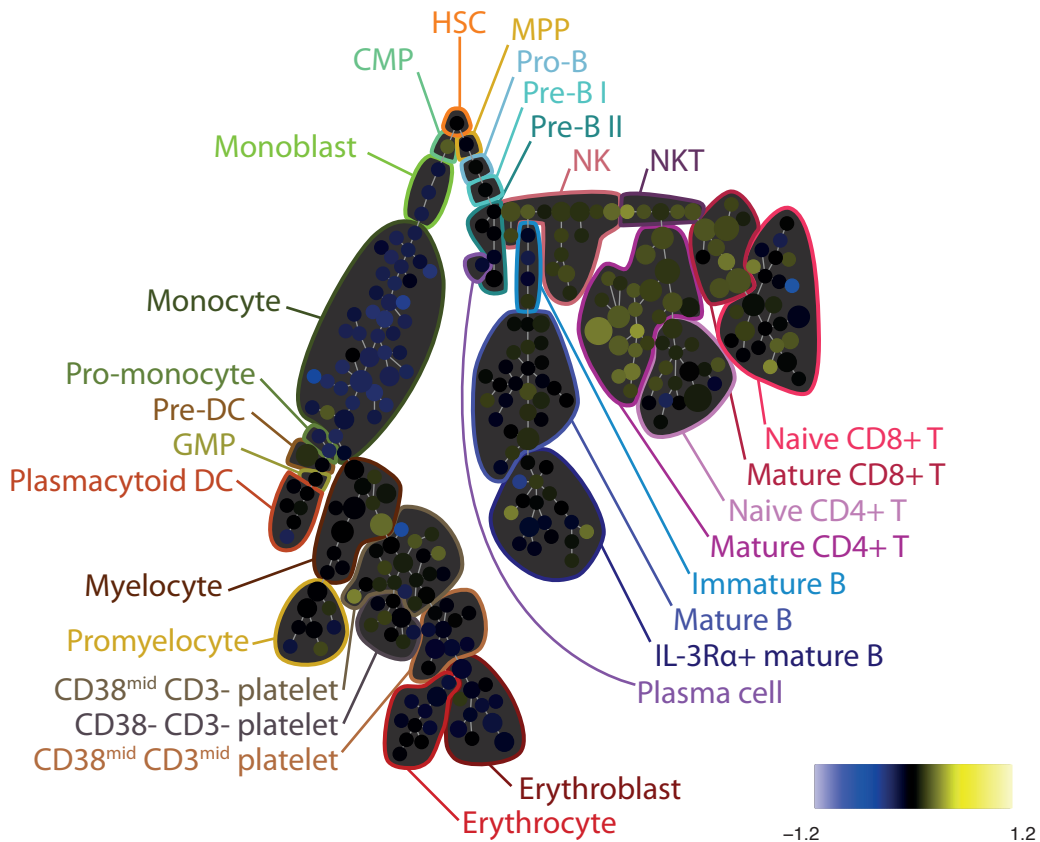


Figure S8C

176-pCREB ---- JAKi+Unstim vs Ref Ratio

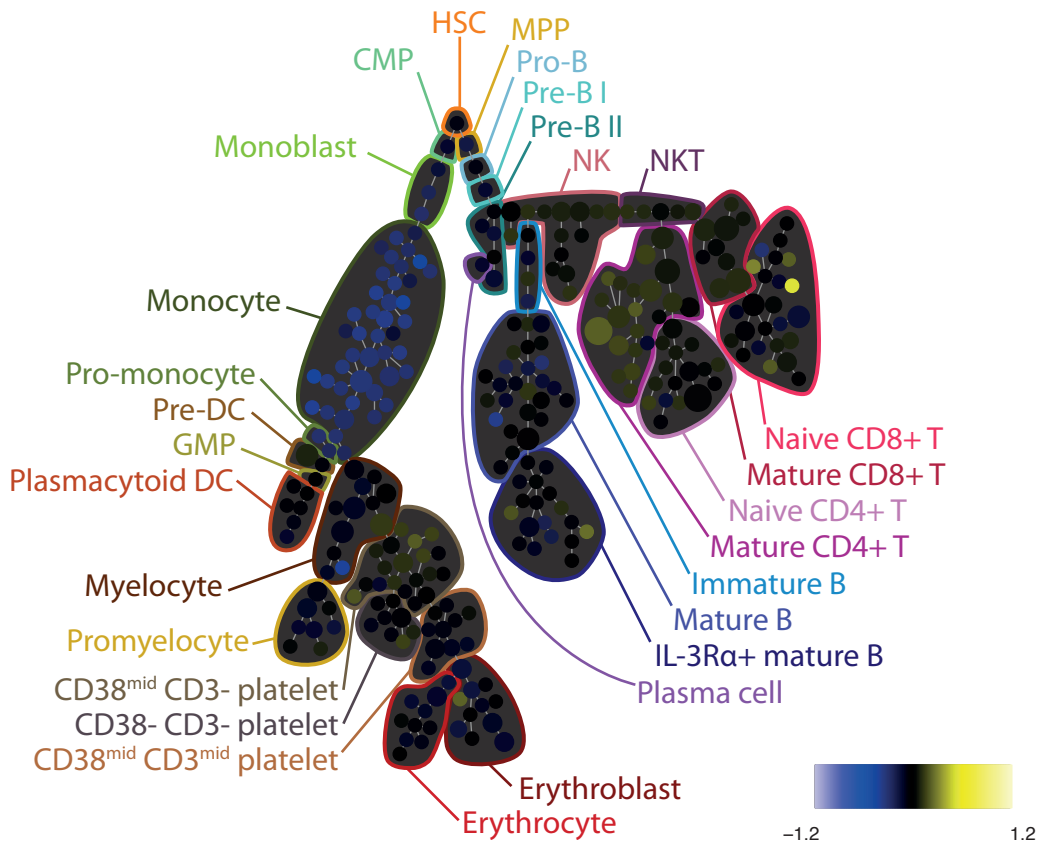


Figure S9A

141-pPLCgamma2 ---- BCR vs Ref Ratio

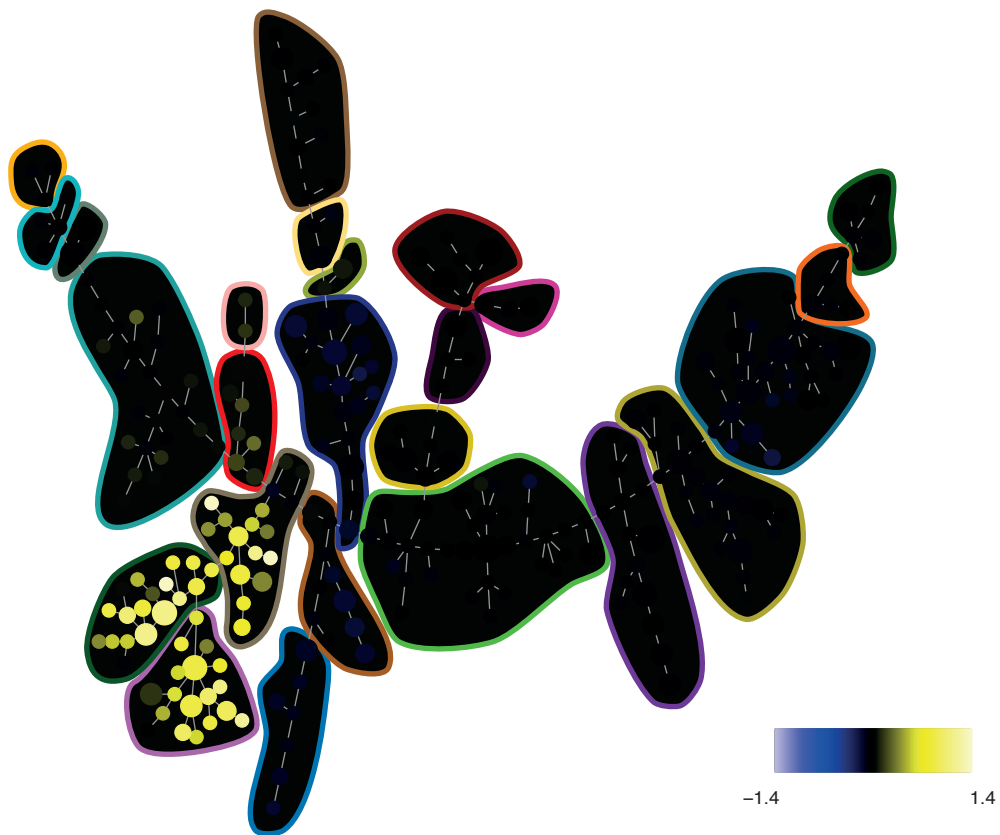


Figure S9A

141-pPLCgamma2 --- DMSO vs Ref Ratio

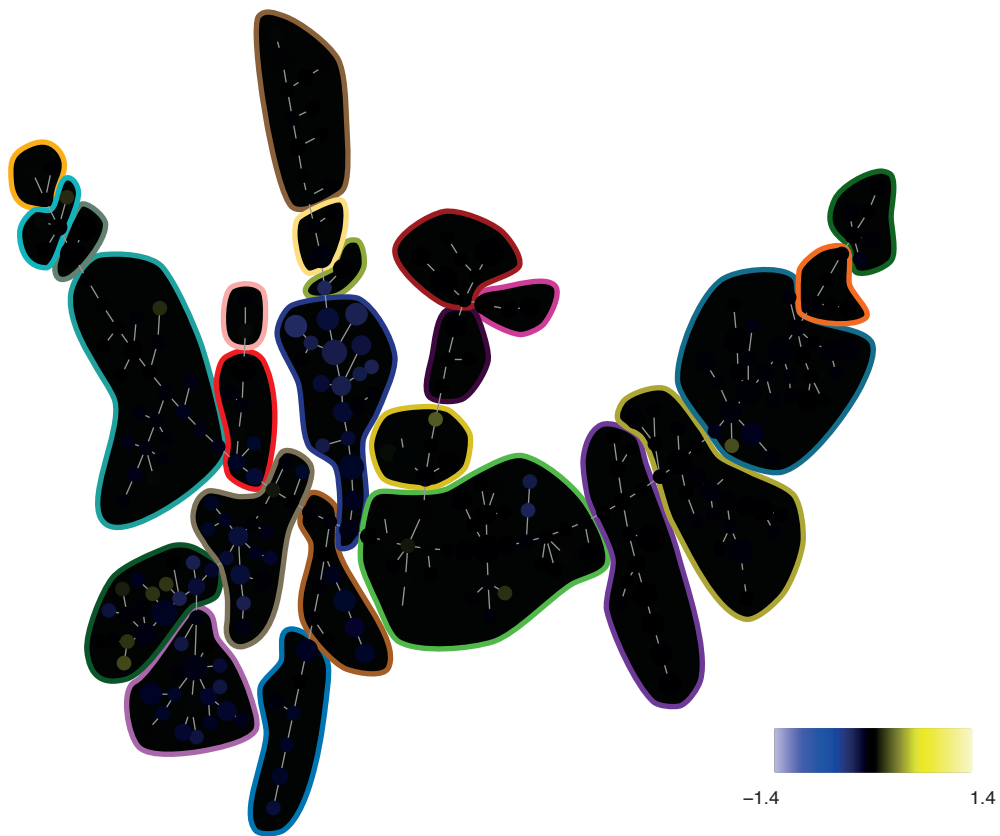


Figure S9A

141-pPLCgamma2 ---- Flt3L vs Ref Ratio

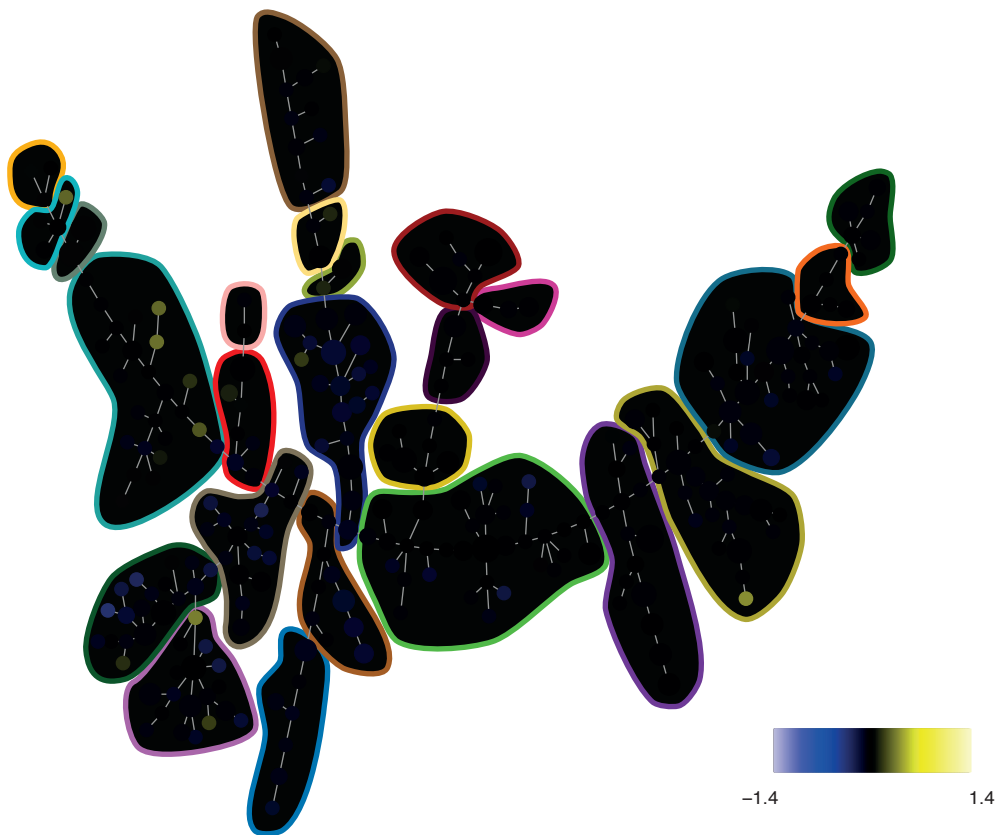


Figure S9A

141-pPLCgamma2 ---- GCSF vs Ref Ratio

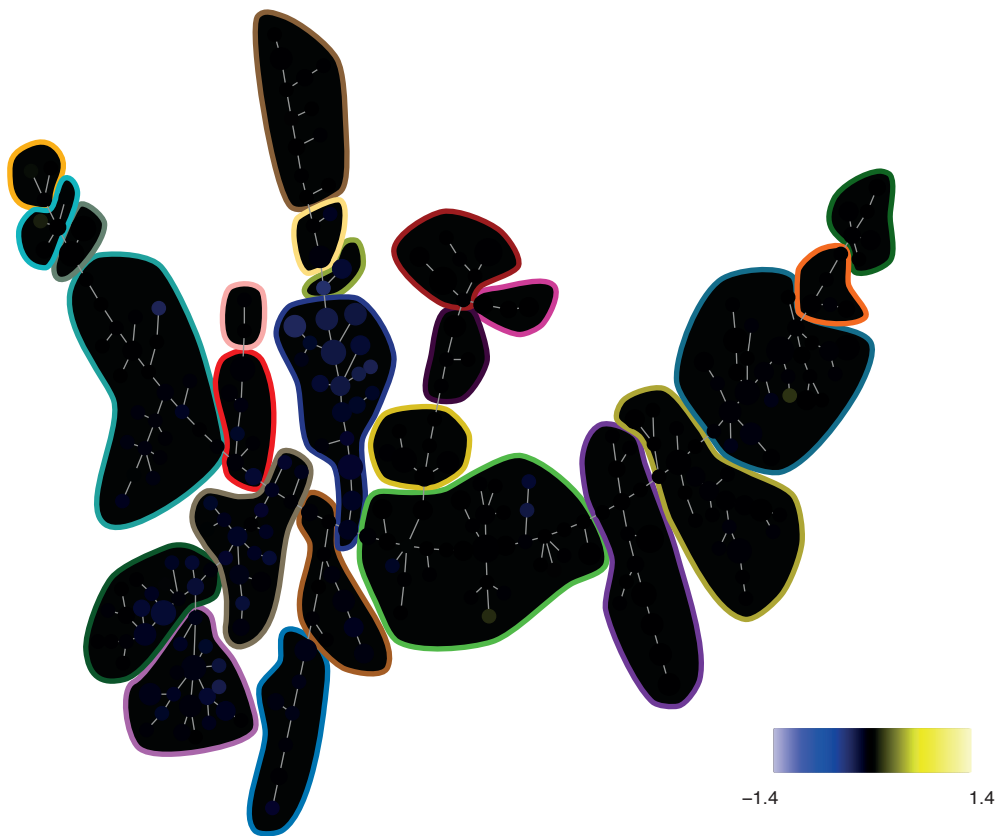


Figure S9A

141-pPLCgamma2 ---- GMCSF vs Ref Ratio

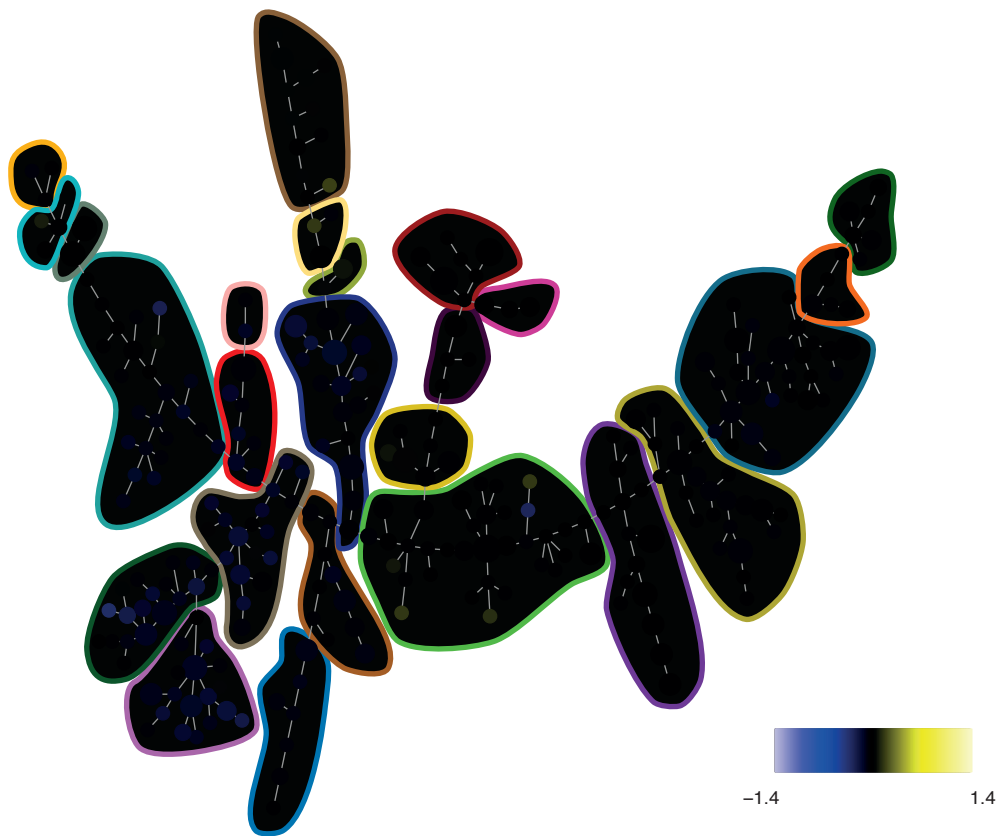


Figure S9A

141-pPLCgamma2 ---- IFNad vs Ref Ratio

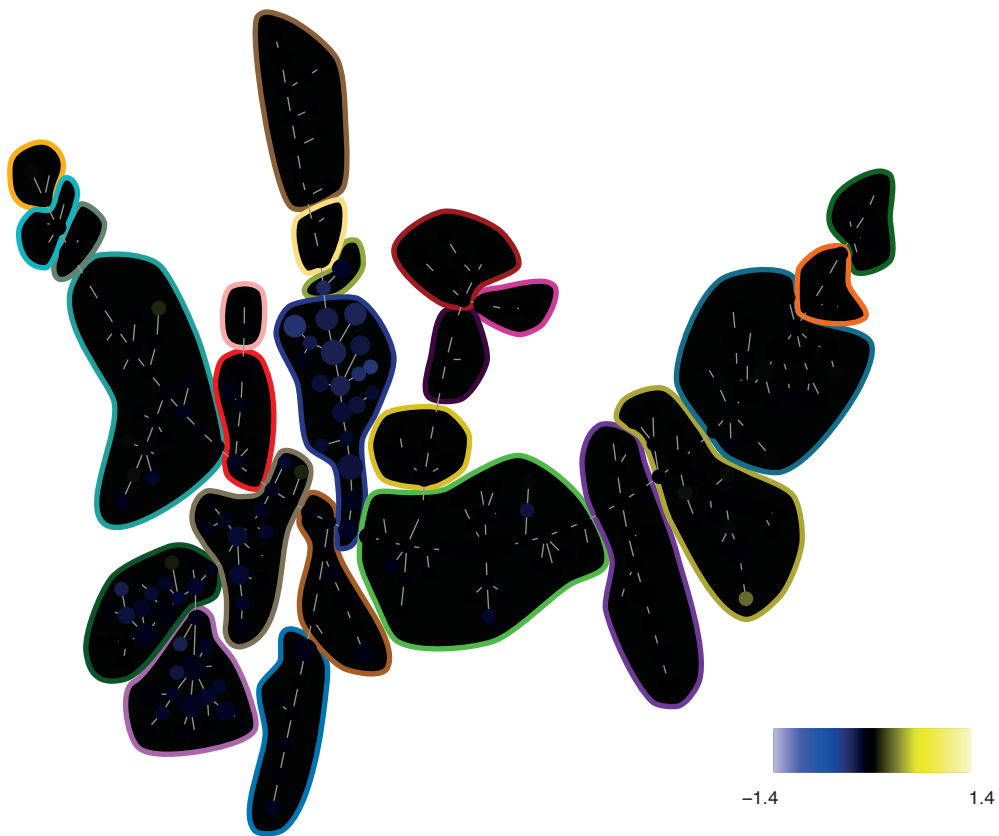


Figure S9A

141-pPLCgamma2 ---- IL3 vs Ref Ratio

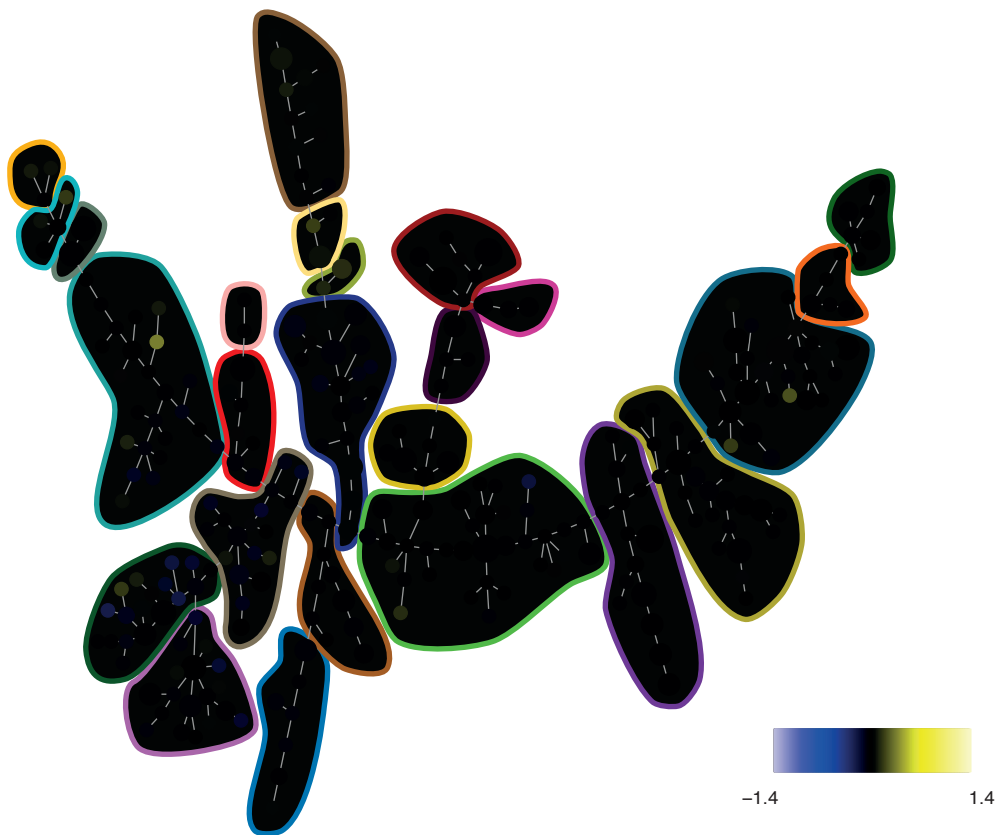


Figure S9A

141-pPLCgamma2 ---- IL7 vs Ref Ratio

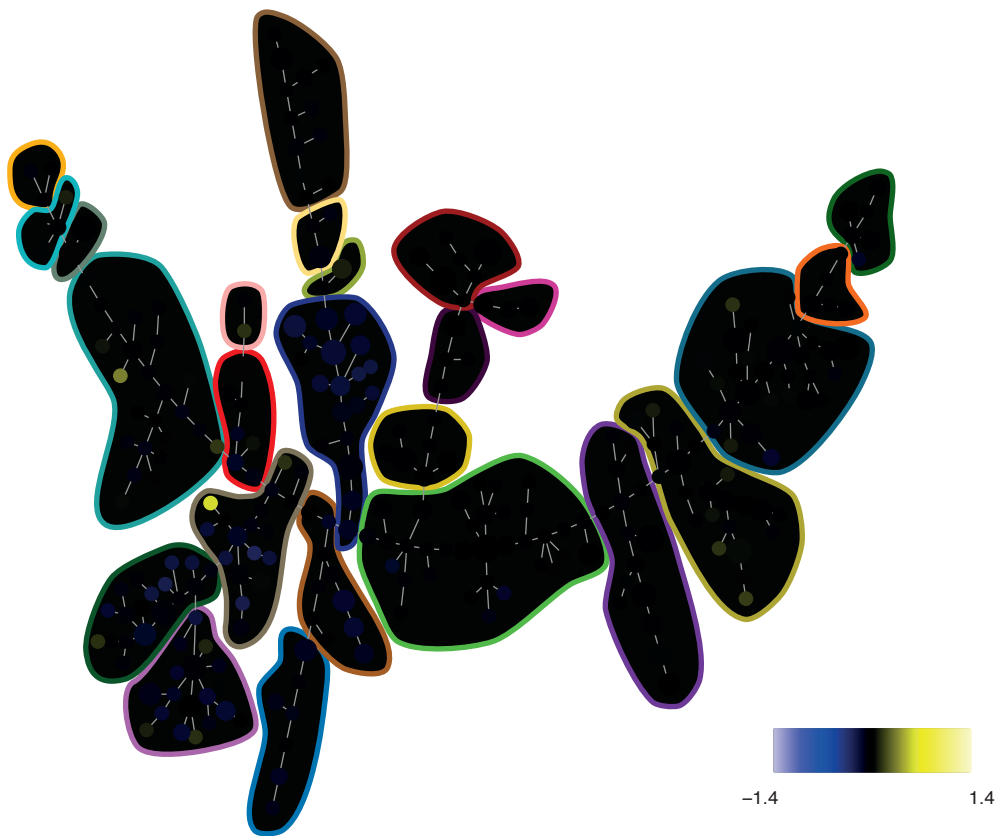


Figure S9A

141-pPLCgamma2 ---- LPS vs Ref Ratio

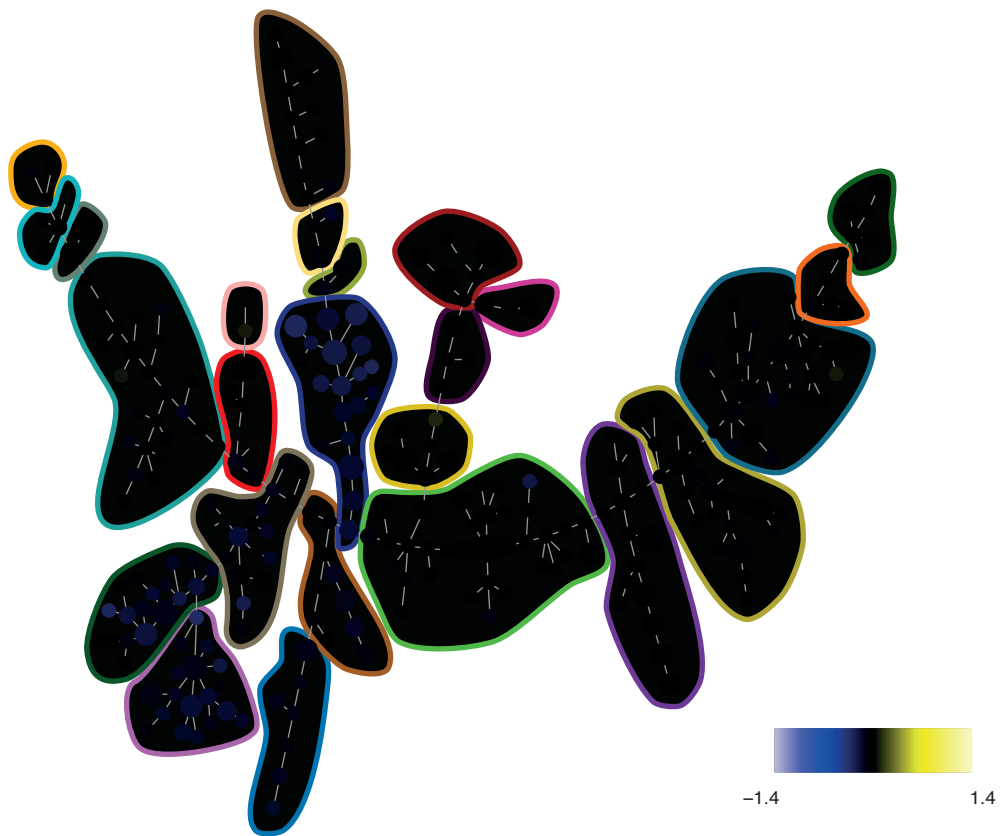


Figure S9A

141-pPLCgamma2 --- PMAiono vs Ref Ratio

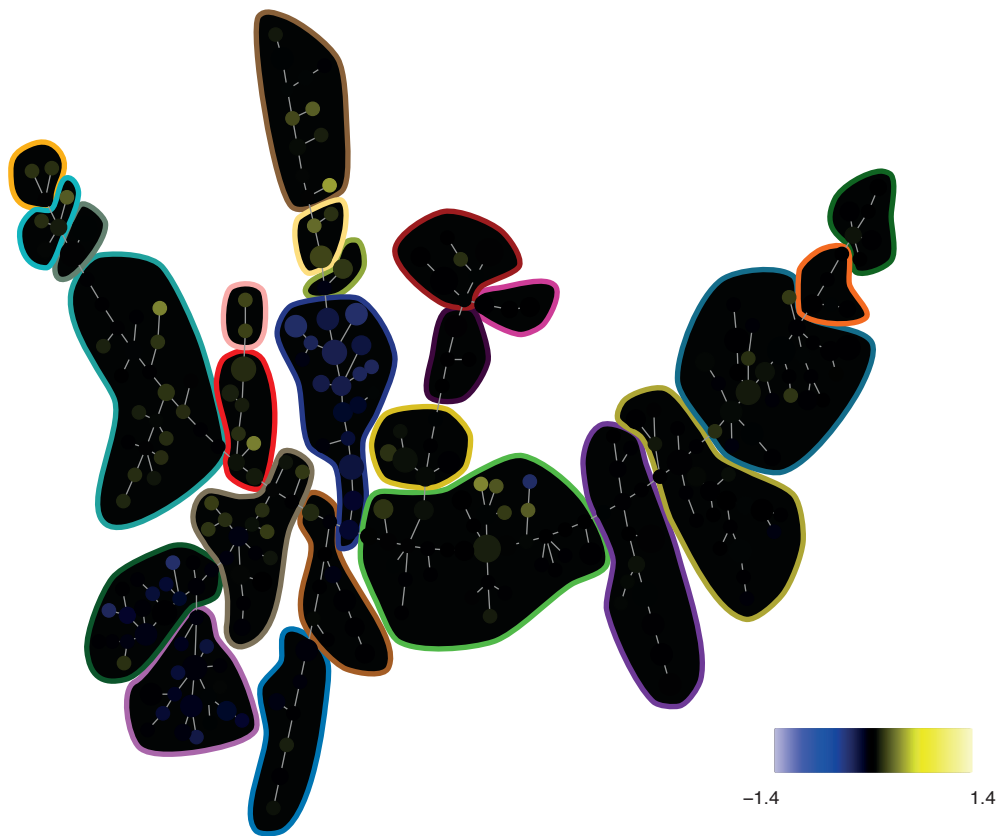


Figure S9A

141-pPLCgamma2 ---- PVO4 vs Ref Ratio

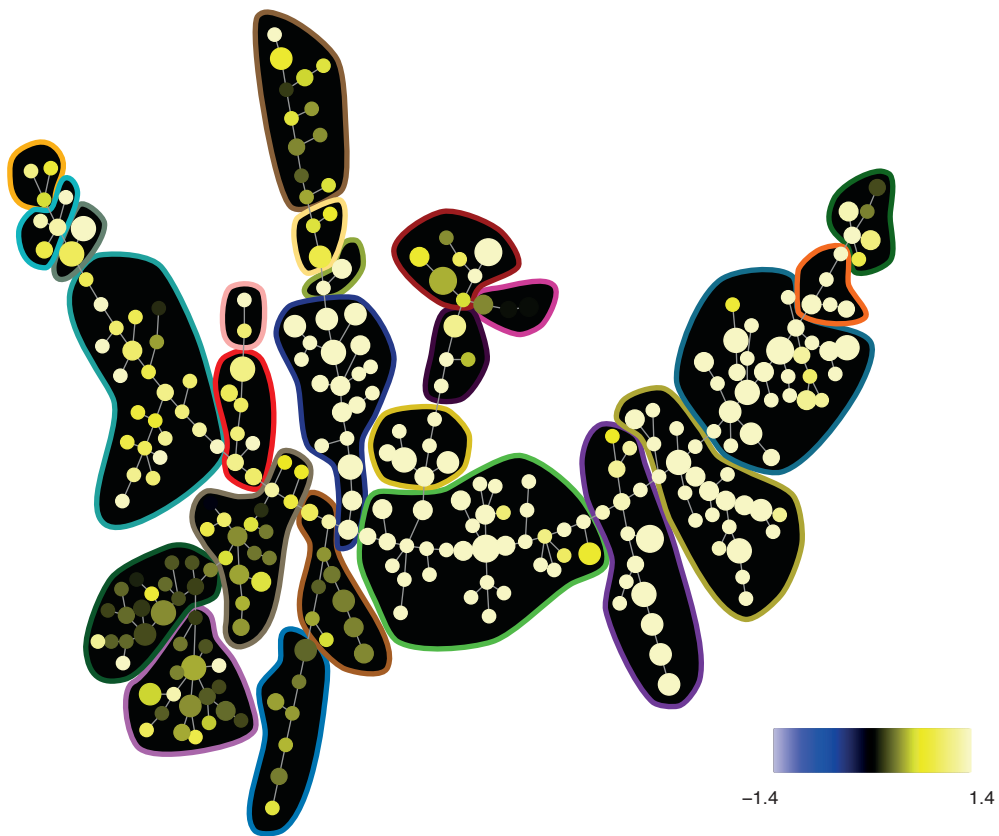


Figure S9A

141-pPLCgamma2 ---- SCF vs Ref Ratio

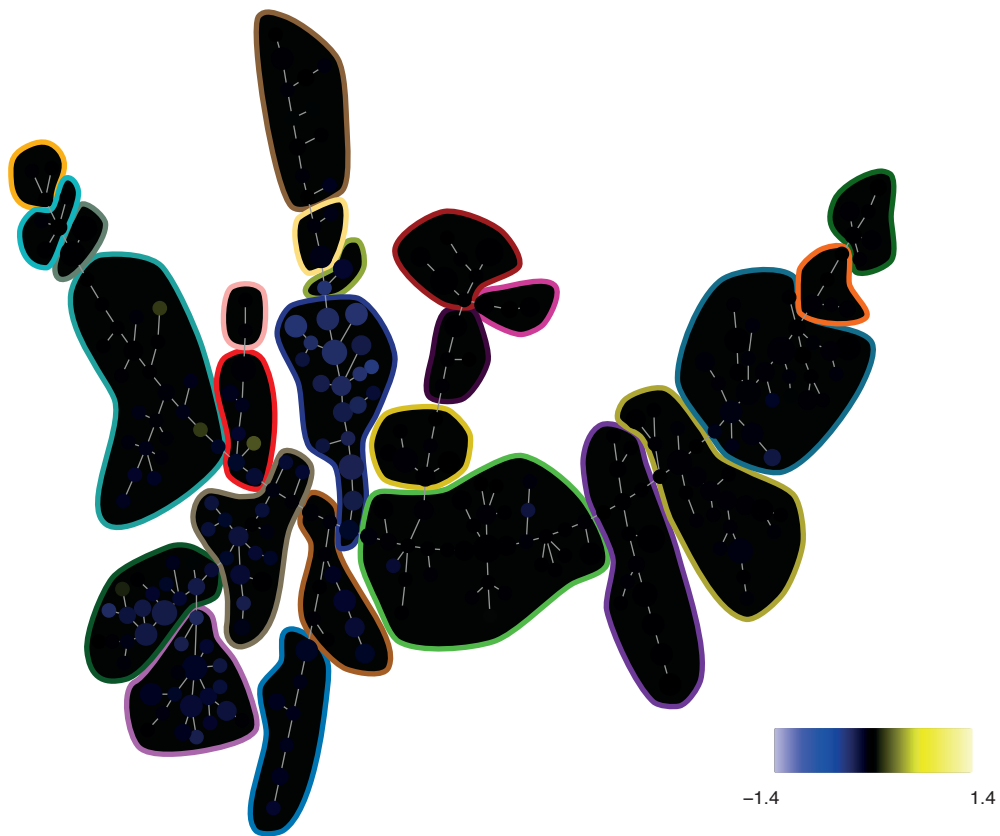


Figure S9A

141-pPLCgamma2 ---- TNFa vs Ref Ratio

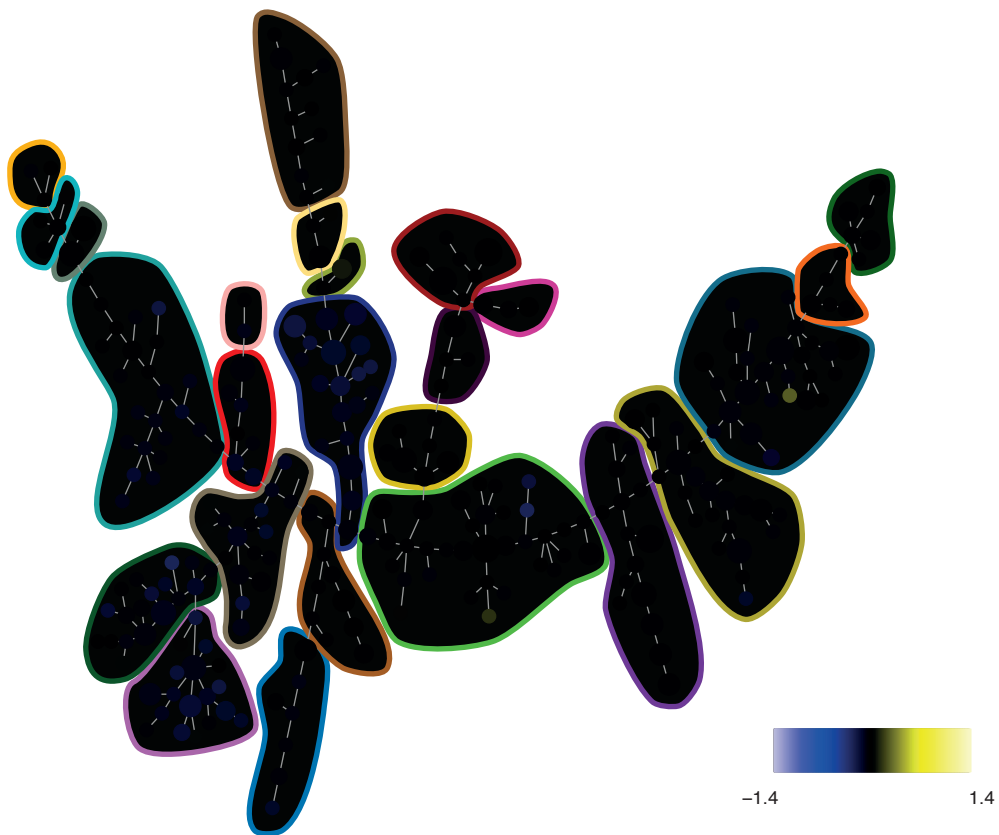


Figure S9A

141-pPLCgamma2 ---- TPO vs Ref Ratio

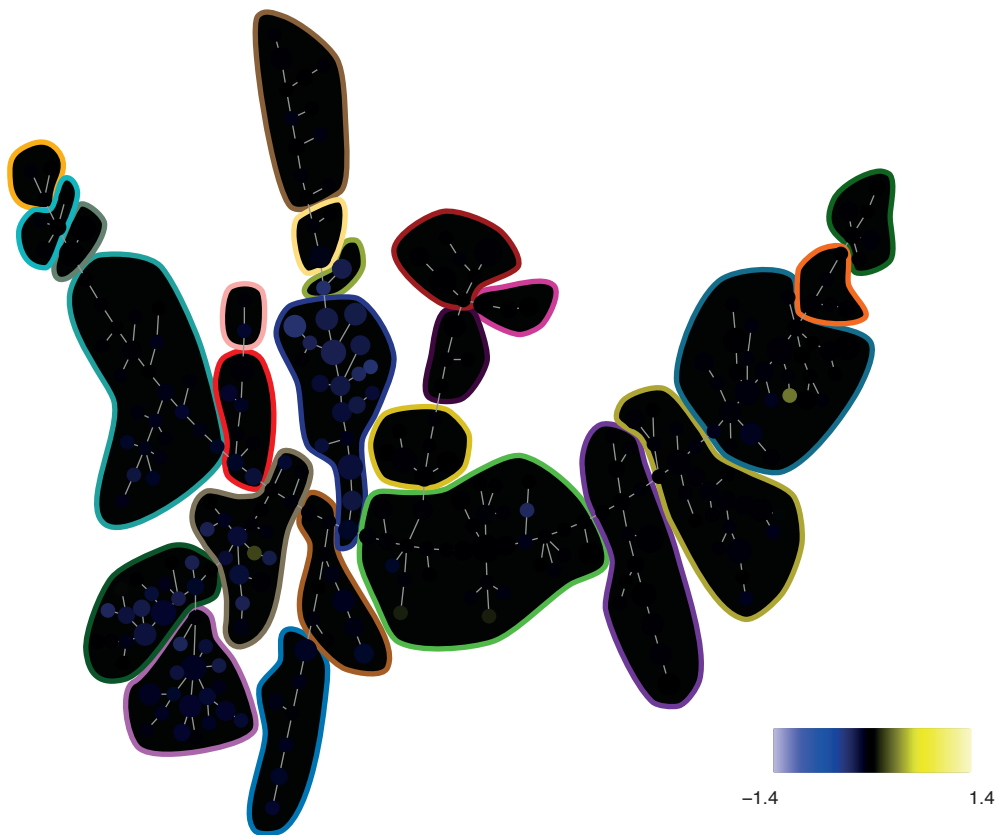


Figure S9A

150-pSTAT5 ---- BCR vs Ref Ratio

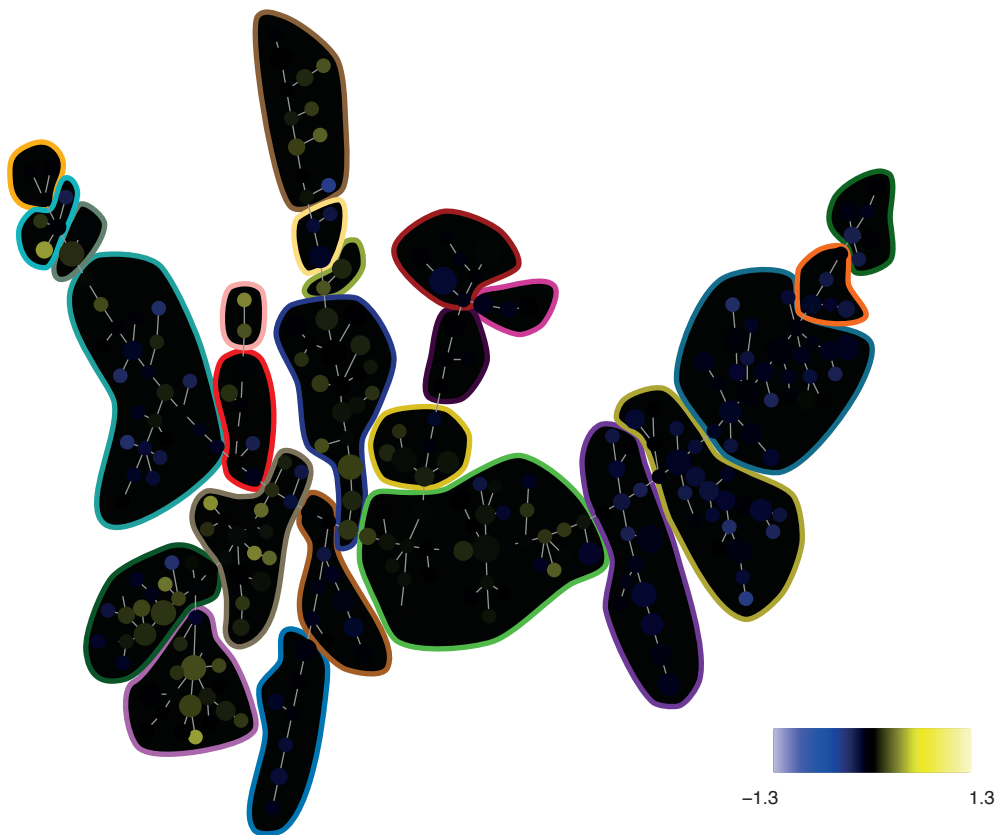


Figure S9A

150-pSTAT5 ---- DMSO vs Ref Ratio

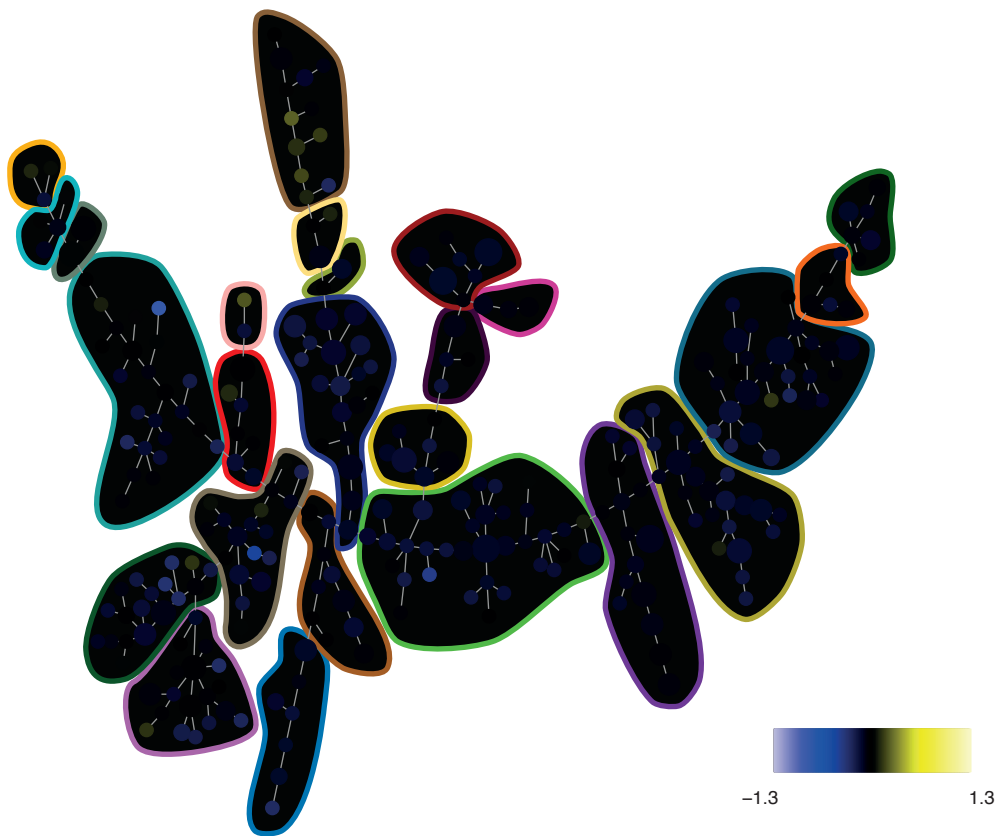


Figure S9A

150-pSTAT5 ---- Flt3L vs Ref Ratio

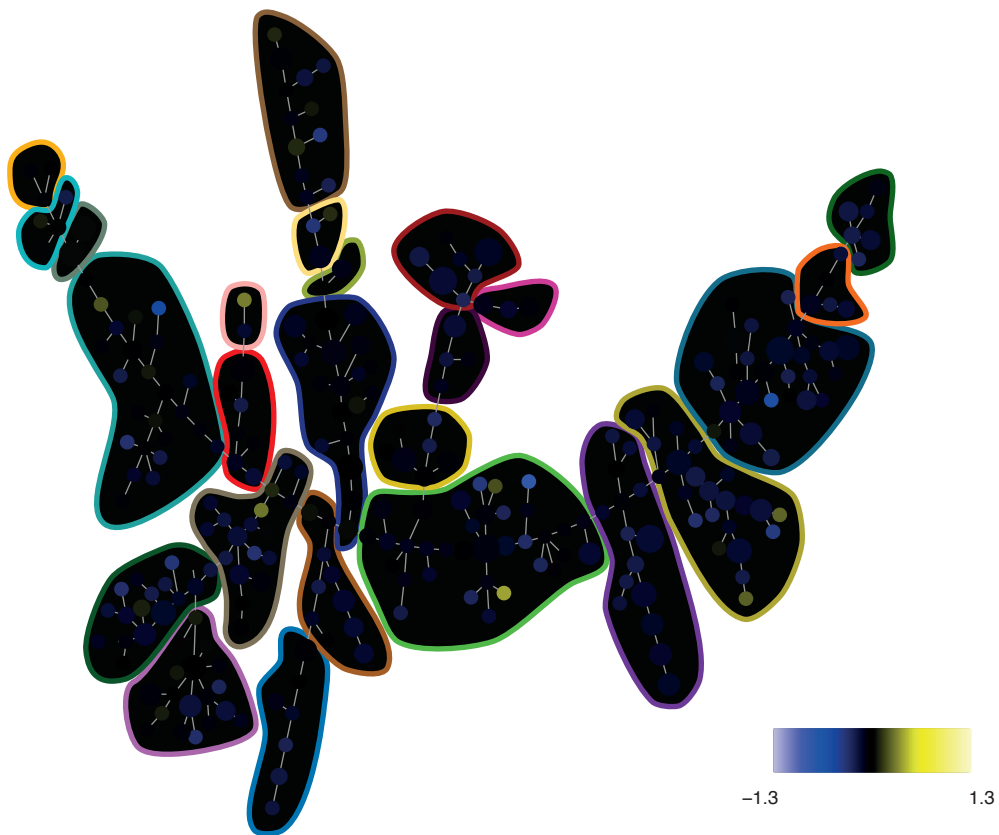


Figure S9A

150-pSTAT5 --- GCSF vs Ref Ratio

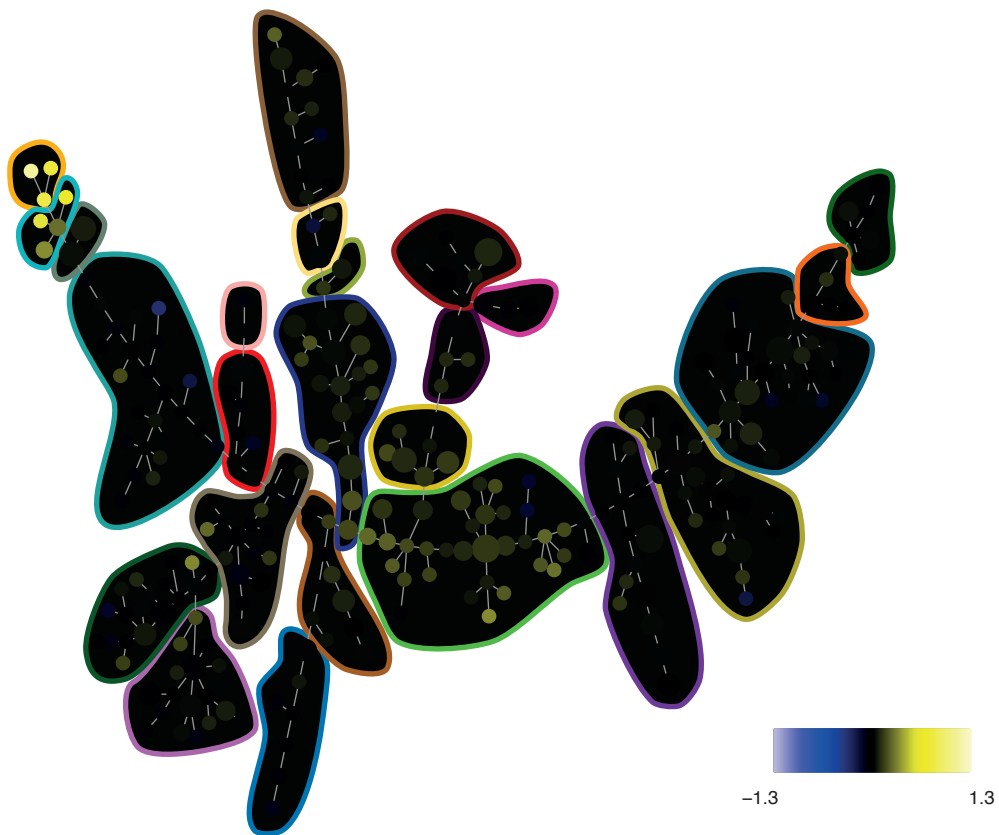


Figure S9A

150-pSTAT5 ---- GMCSF vs Ref Ratio



Figure S9A

150-pSTAT5 --- IFNad vs Ref Ratio

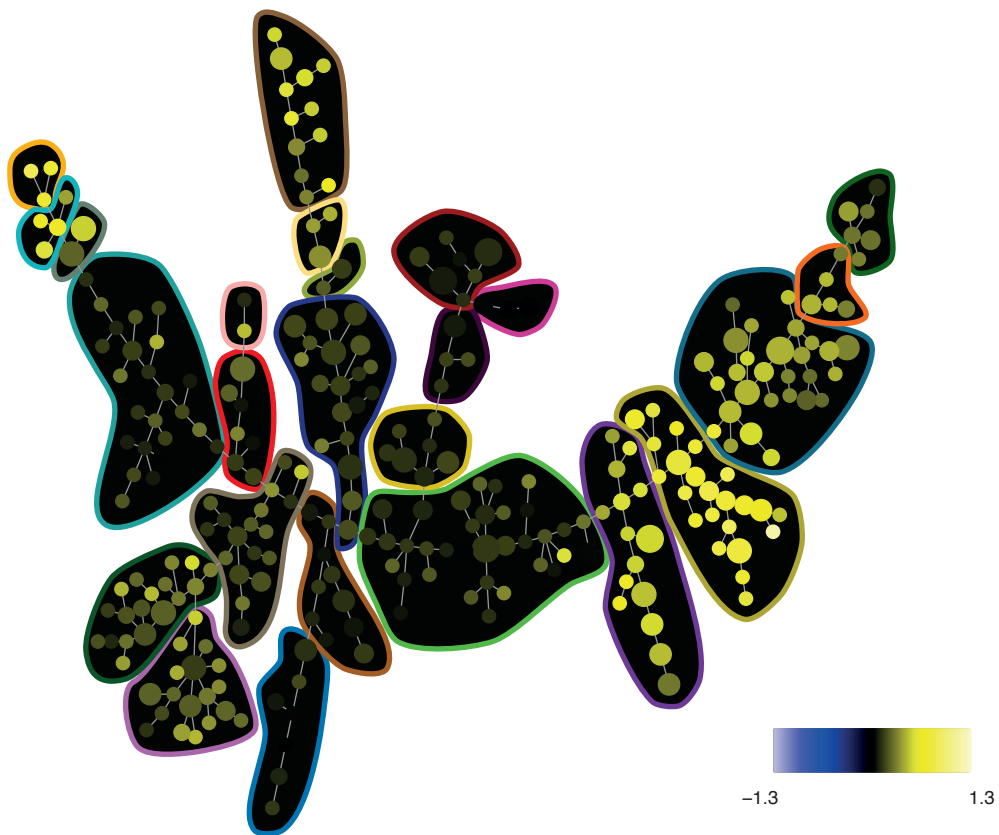


Figure S9A

150-pSTAT5 ---- IL3 vs Ref Ratio



Figure S9A

150-pSTAT5 ---- IL7 vs Ref Ratio

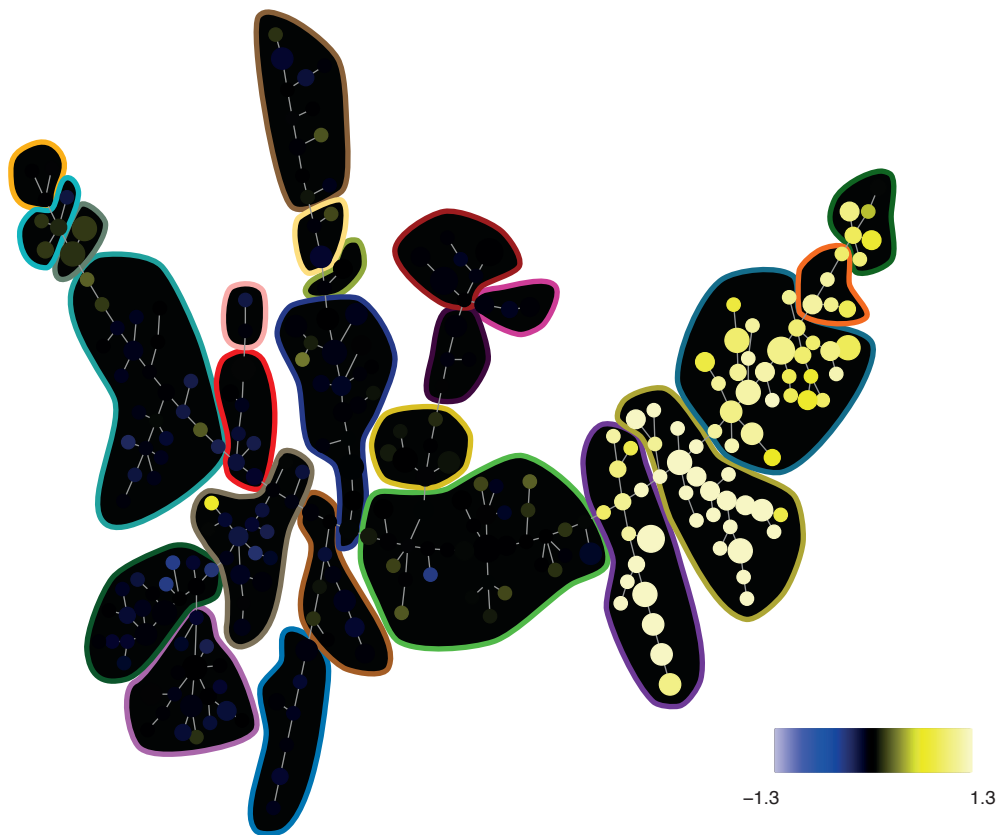


Figure S9A

150-pSTAT5 ---- LPS vs Ref Ratio

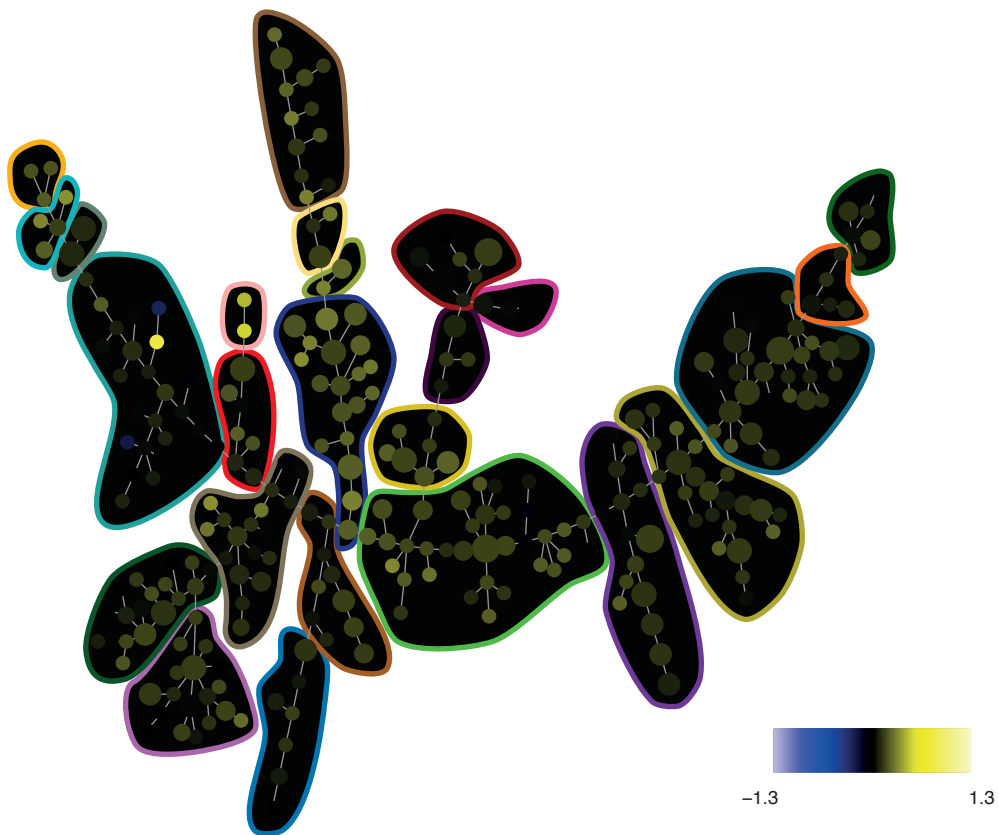


Figure S9A

150-pSTAT5 --- PMAiono vs Ref Ratio

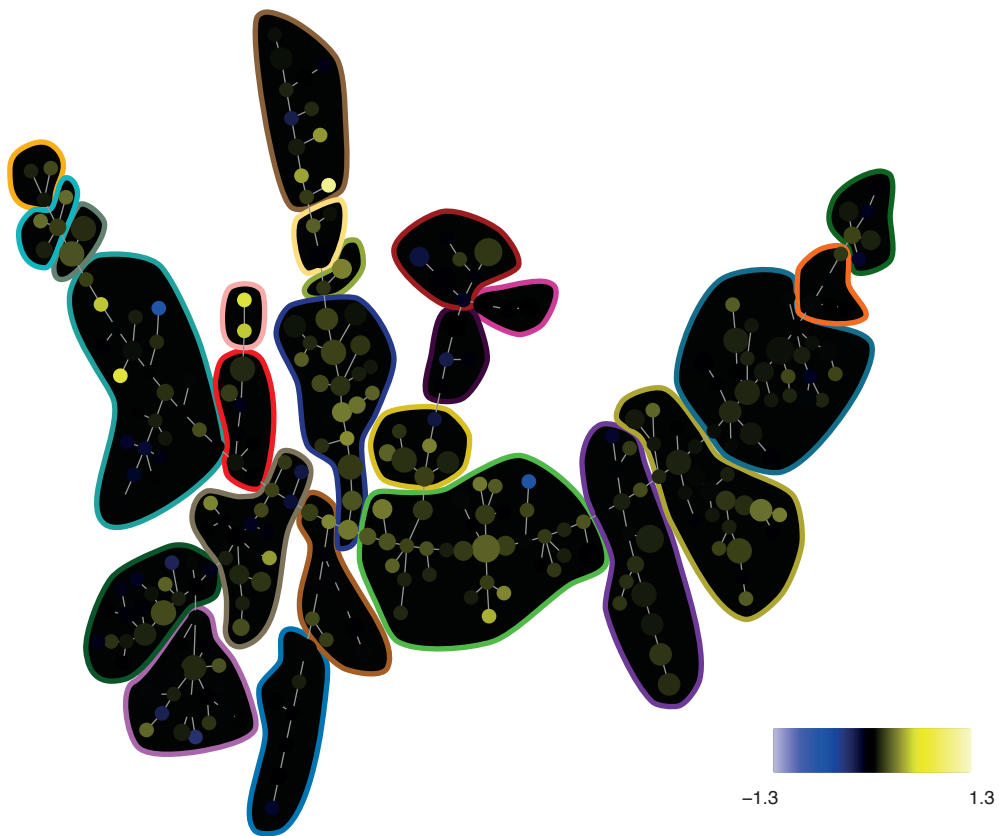


Figure S9A

150-pSTAT5 ---- PVO4 vs Ref Ratio



Figure S9A

150-pSTAT5 ---- SCF vs Ref Ratio

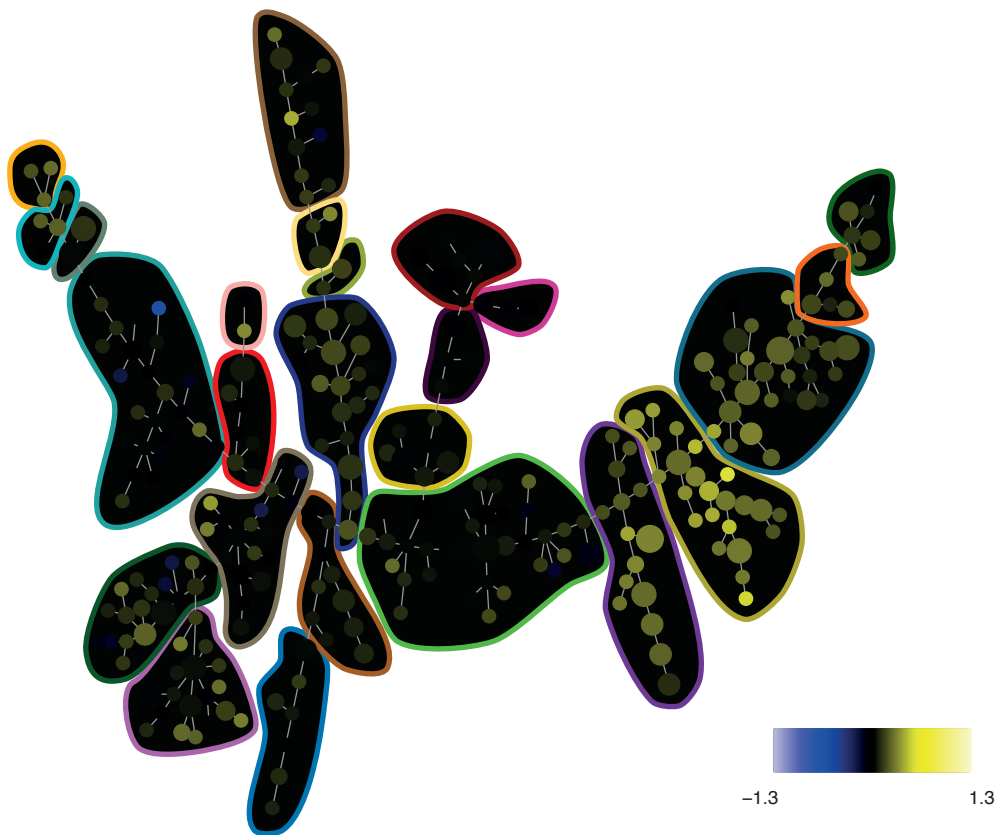


Figure S9A

150-pSTAT5 ---- TNFa vs Ref Ratio

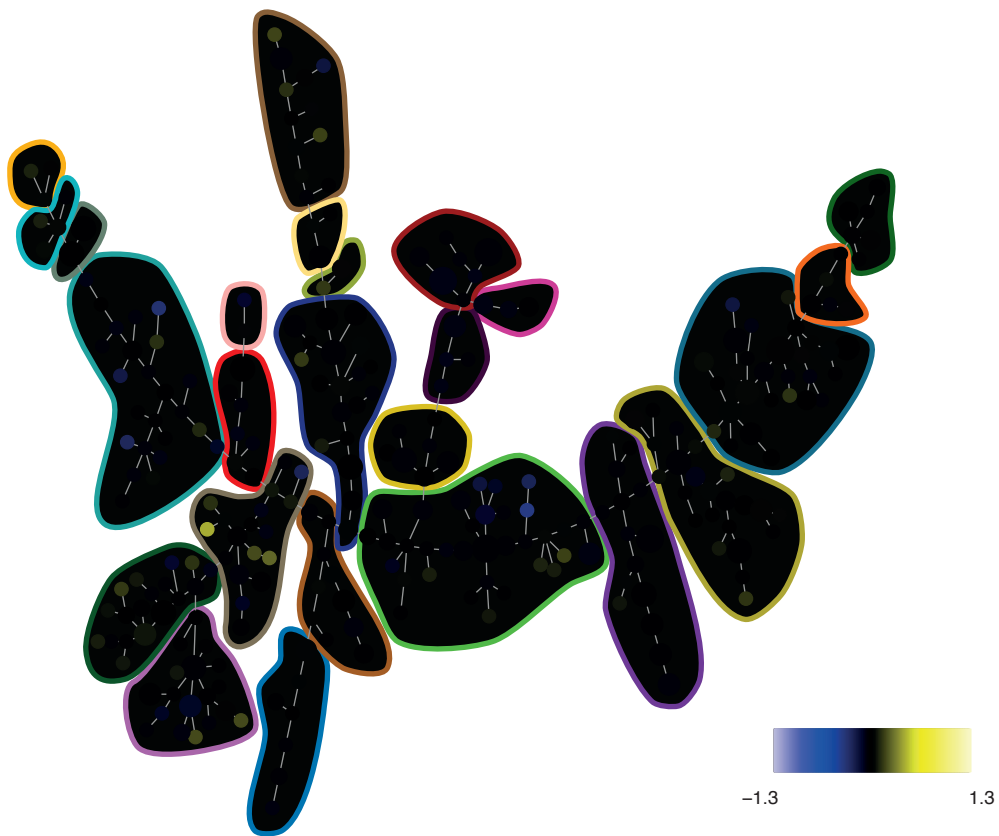


Figure S9A

150-pSTAT5 ---- TPO vs Ref Ratio

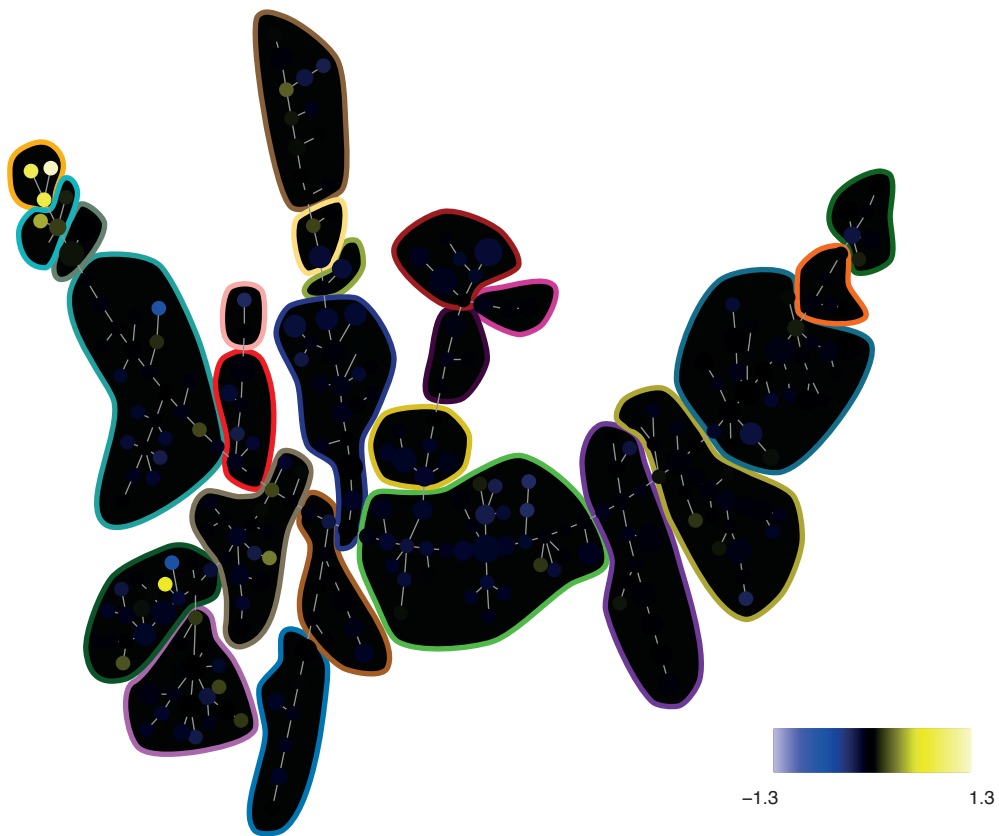


Figure S9A

151-pERK1/2 ---- BCR vs Ref Ratio

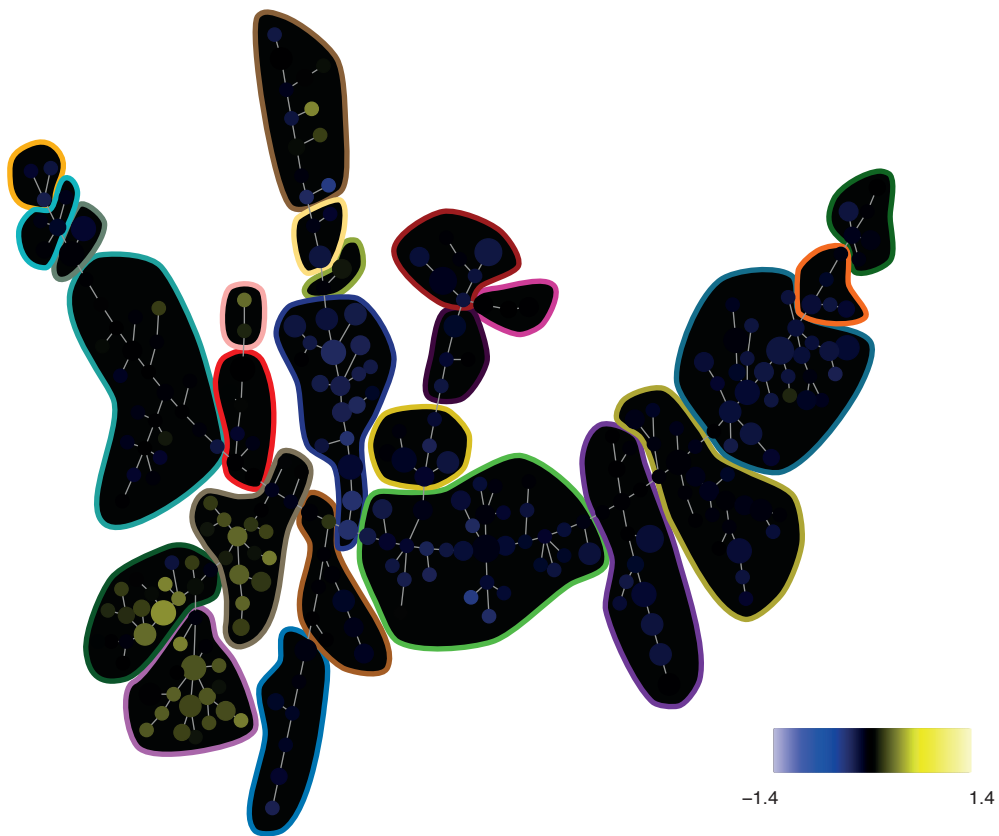


Figure S9A

151-pERK1/2 --- DMSO vs Ref Ratio

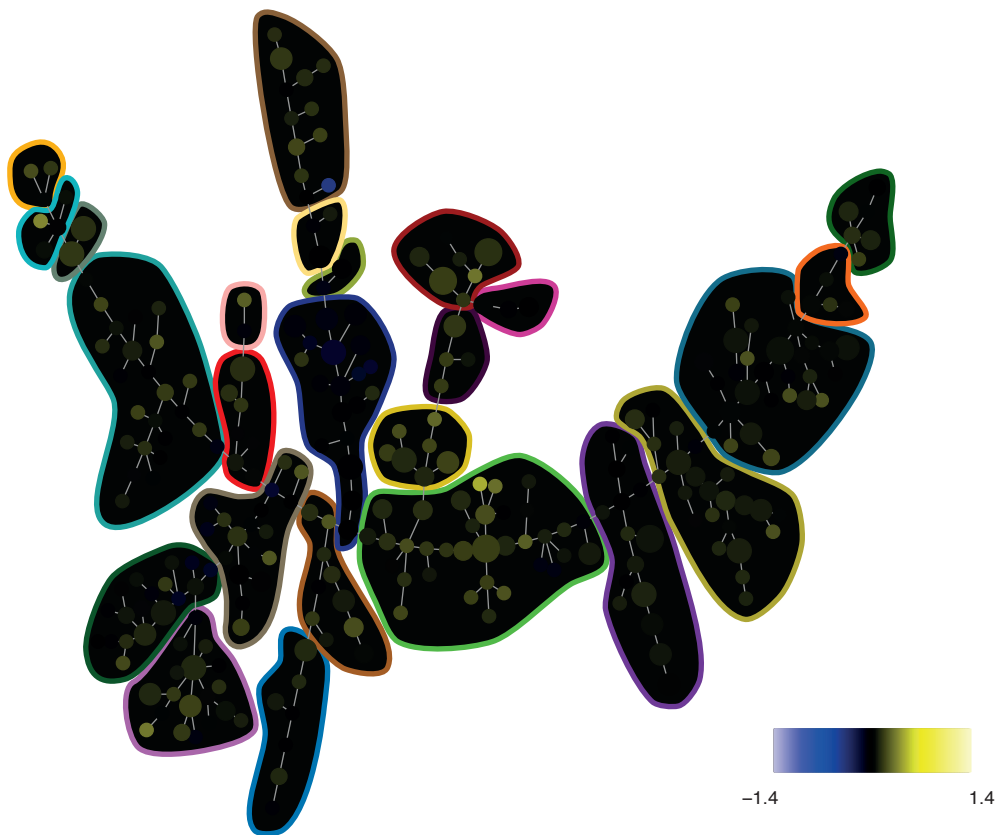


Figure S9A

151-pERK1/2 ---- Flt3L vs Ref Ratio

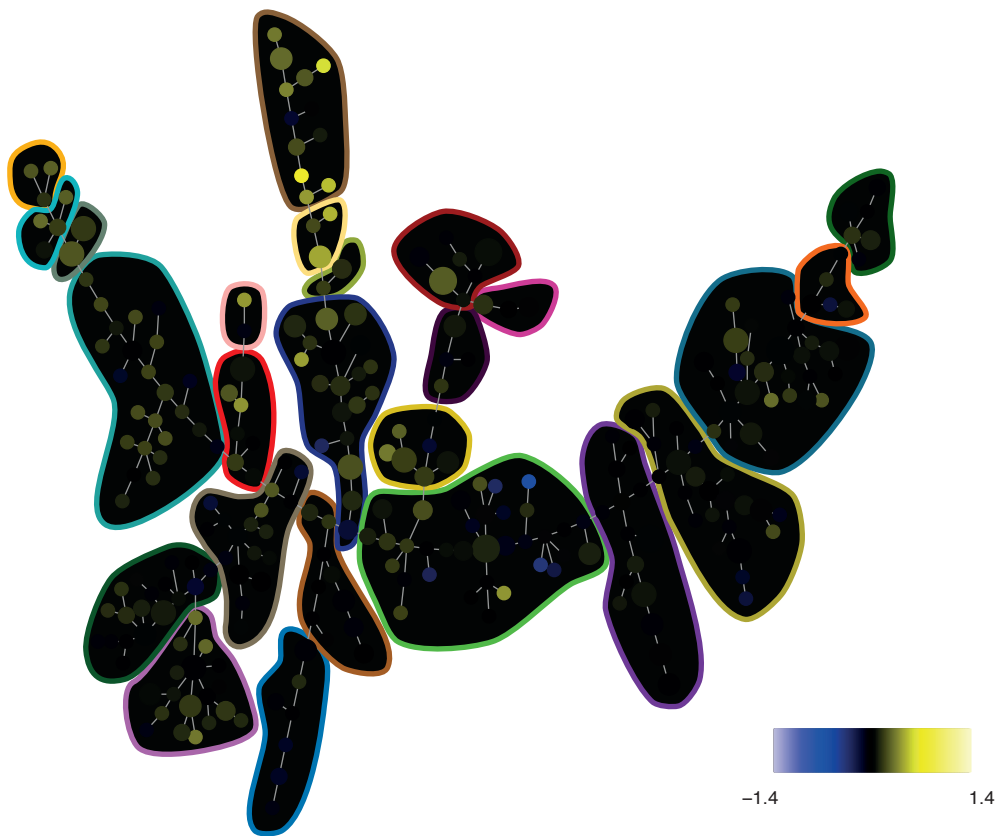


Figure S9A

151-pERK1/2 ---- GCSF vs Ref Ratio

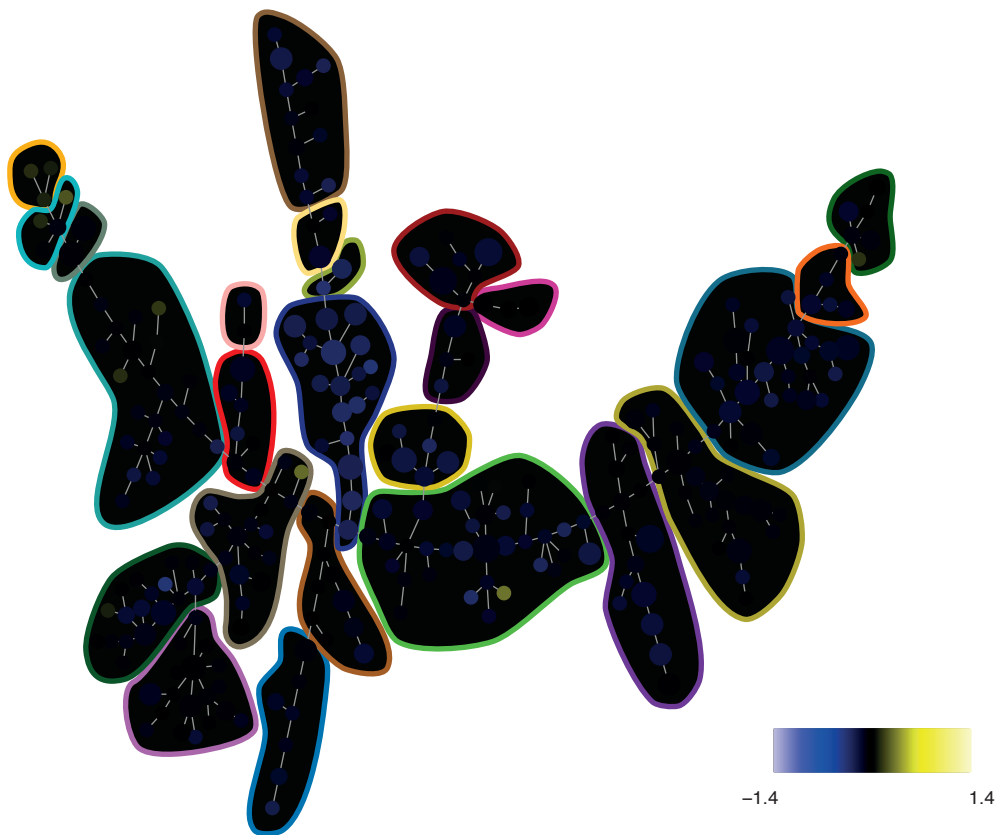


Figure S9A

151-pERK1/2 ---- GMCSF vs Ref Ratio

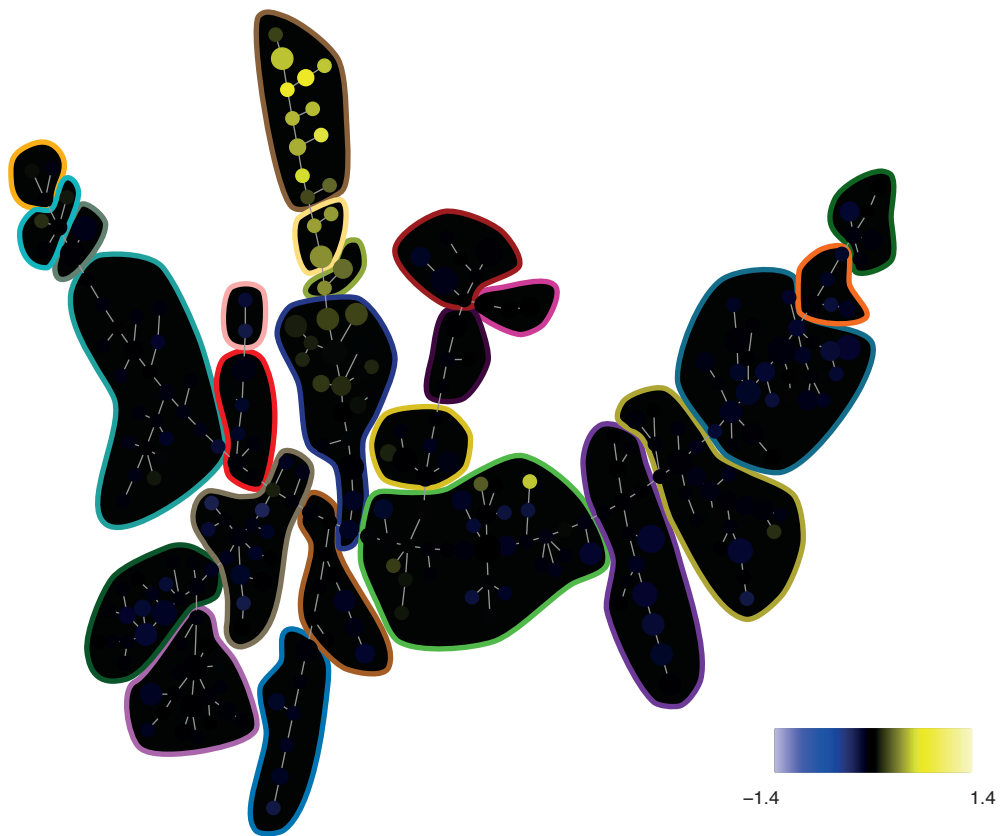


Figure S9A

151-pERK1/2 ---- IFNad vs Ref Ratio

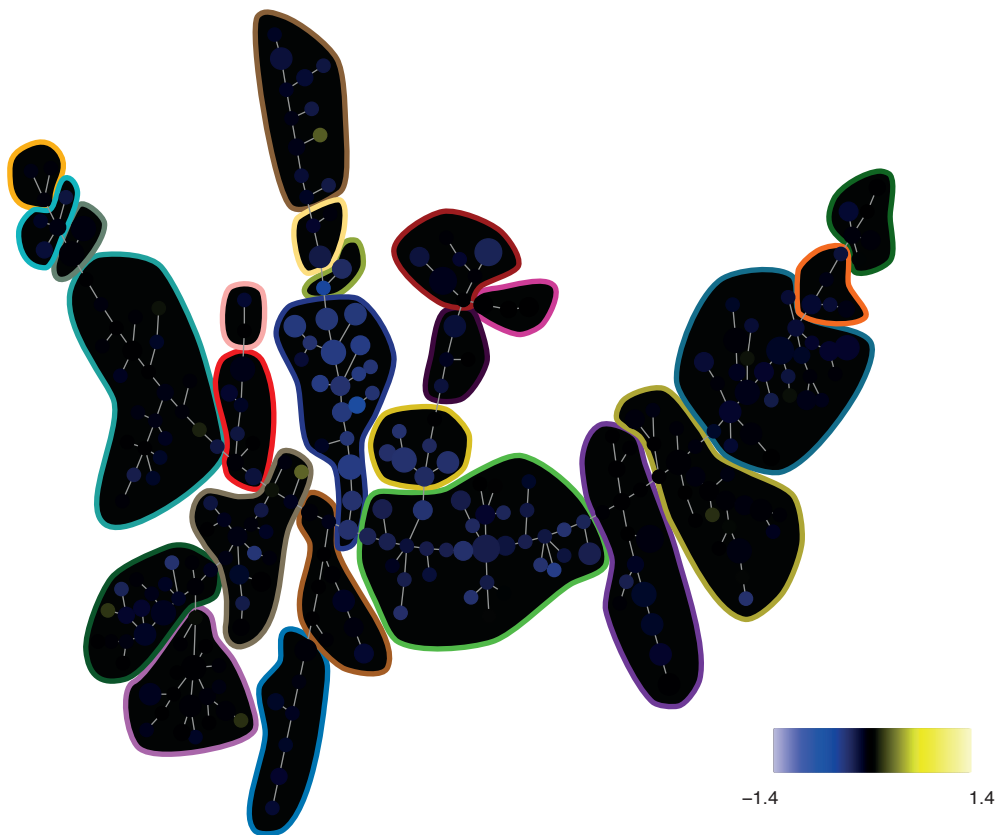


Figure S9A

151-pERK1/2 ---- IL3 vs Ref Ratio



Figure S9A

151-pERK1/2 ---- IL7 vs Ref Ratio

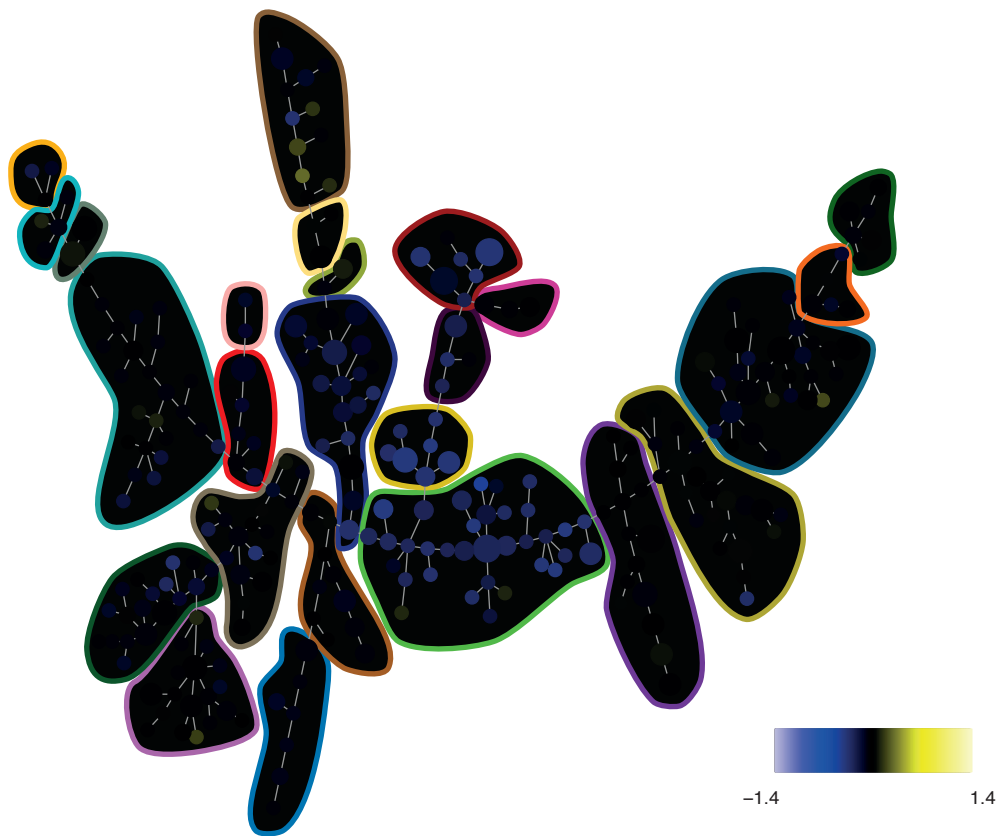


Figure S9A

151-pERK1/2 ---- LPS vs Ref Ratio

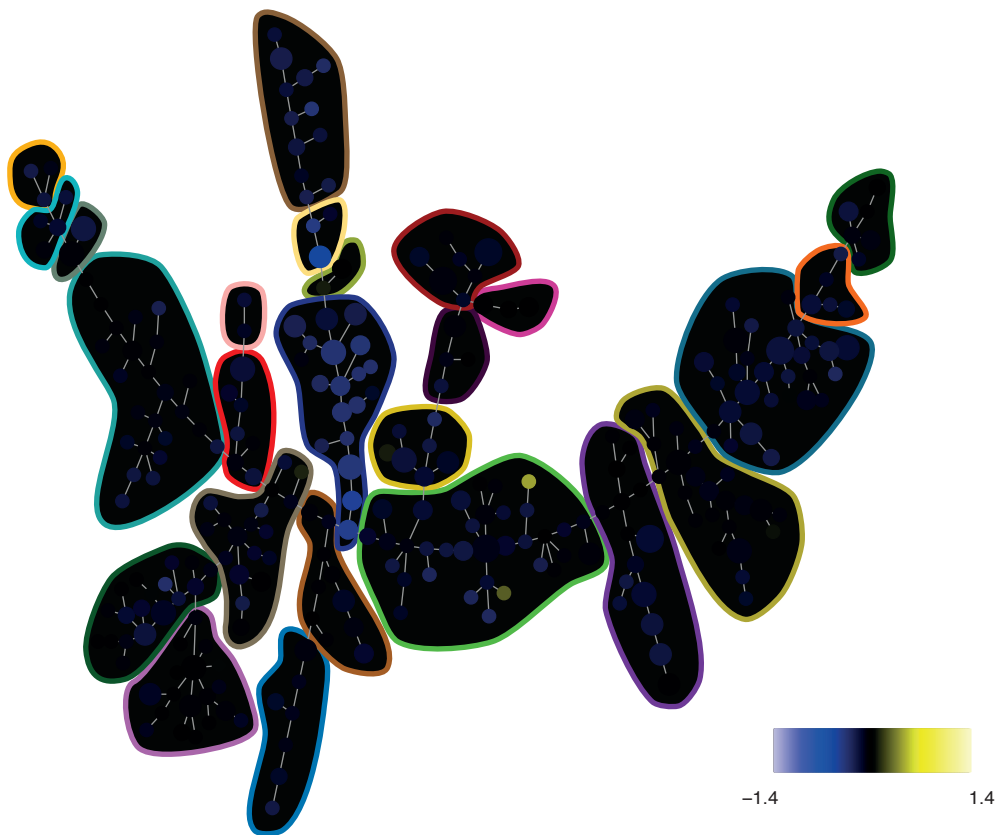


Figure S9A

151-pERK1/2 --- PMAiono vs Ref Ratio



Figure S9A

151-pERK1/2 ---- PVO4 vs Ref Ratio

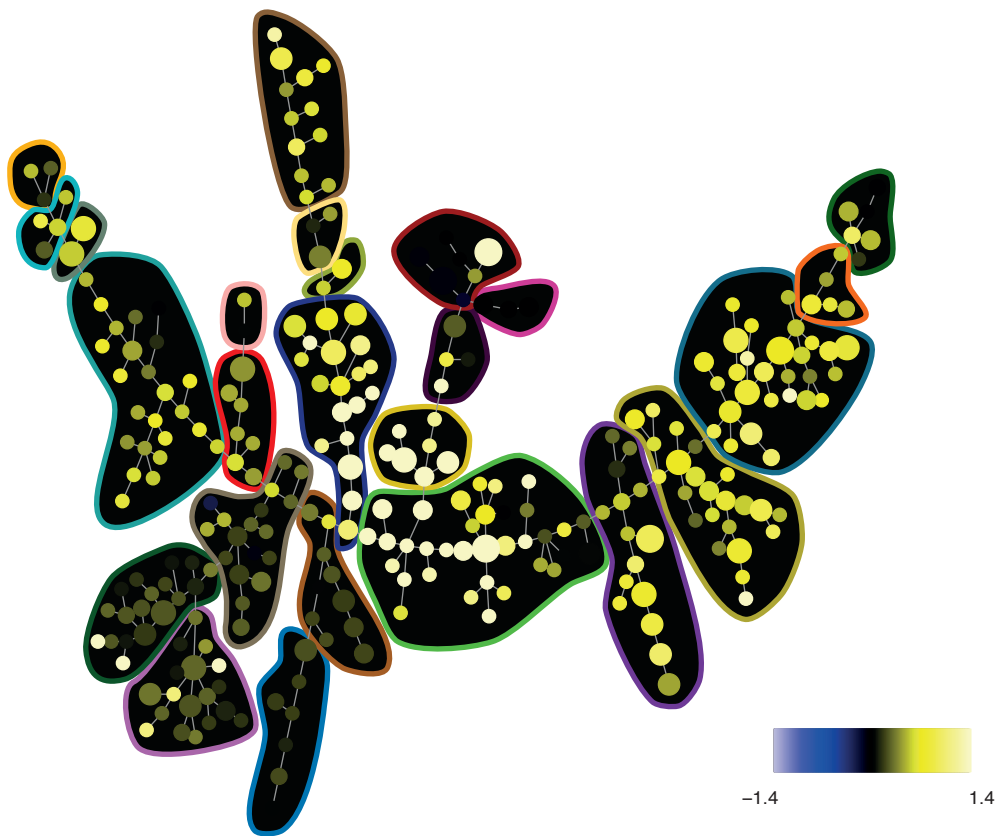


Figure S9A

151-pERK1/2 ---- SCF vs Ref Ratio

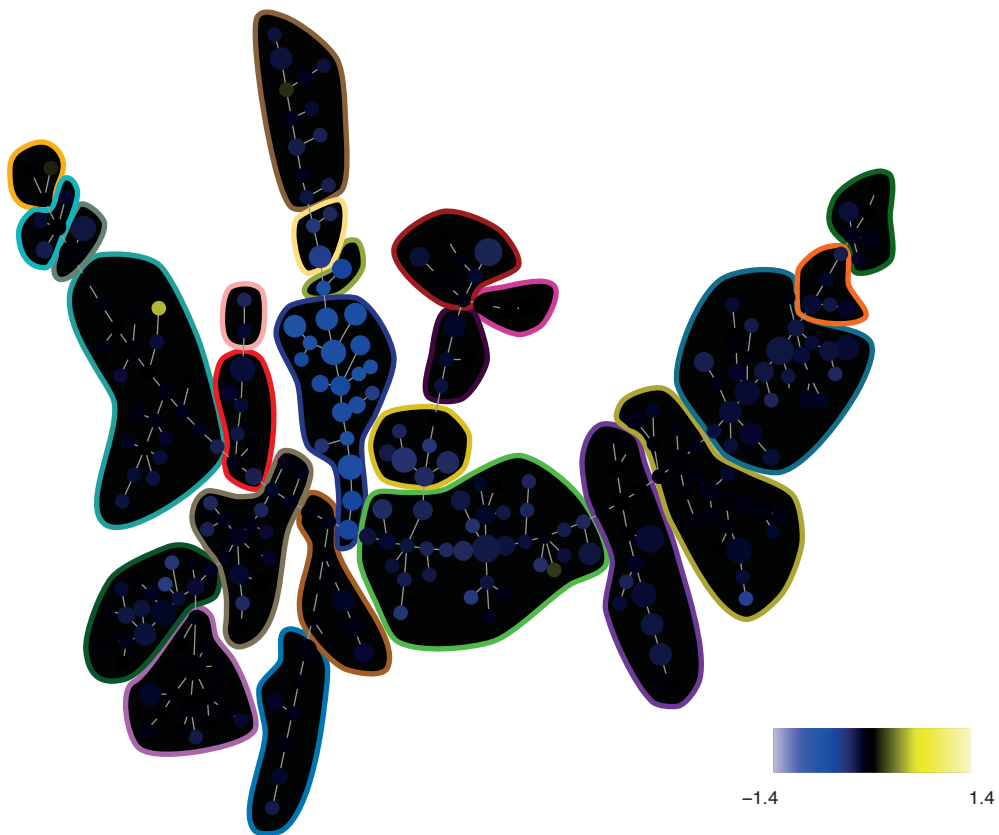


Figure S9A

151-pERK1/2 ---- TNFa vs Ref Ratio

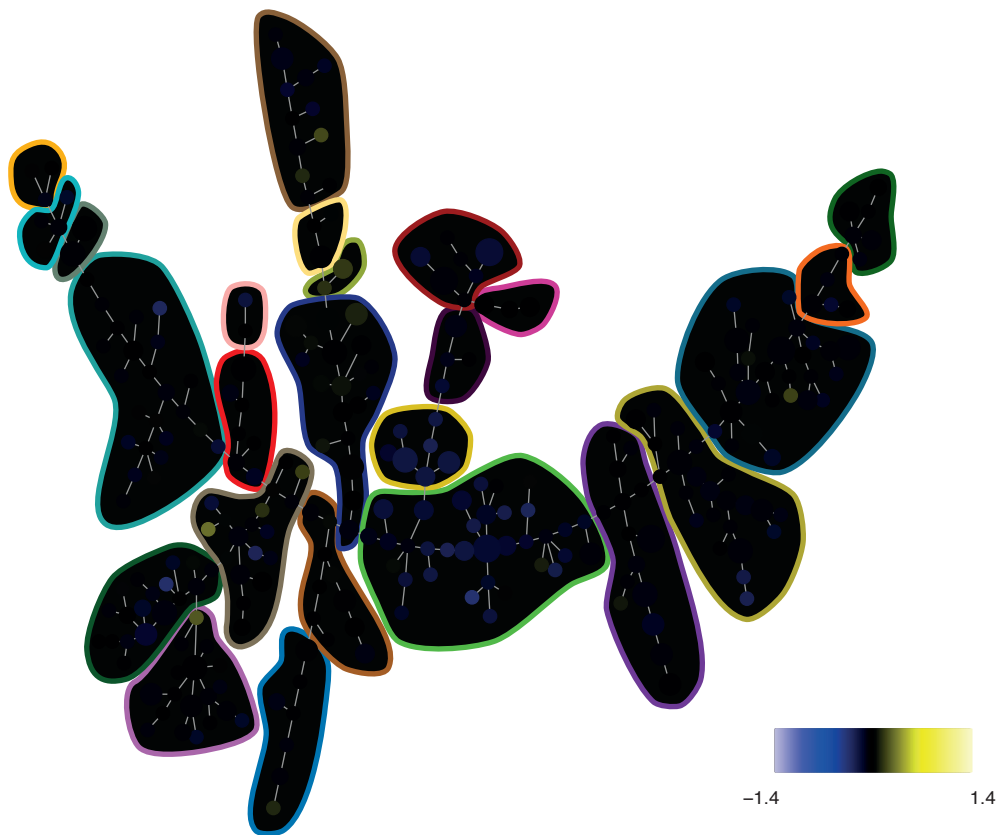


Figure S9A

151-pERK1/2 ---- TPO vs Ref Ratio

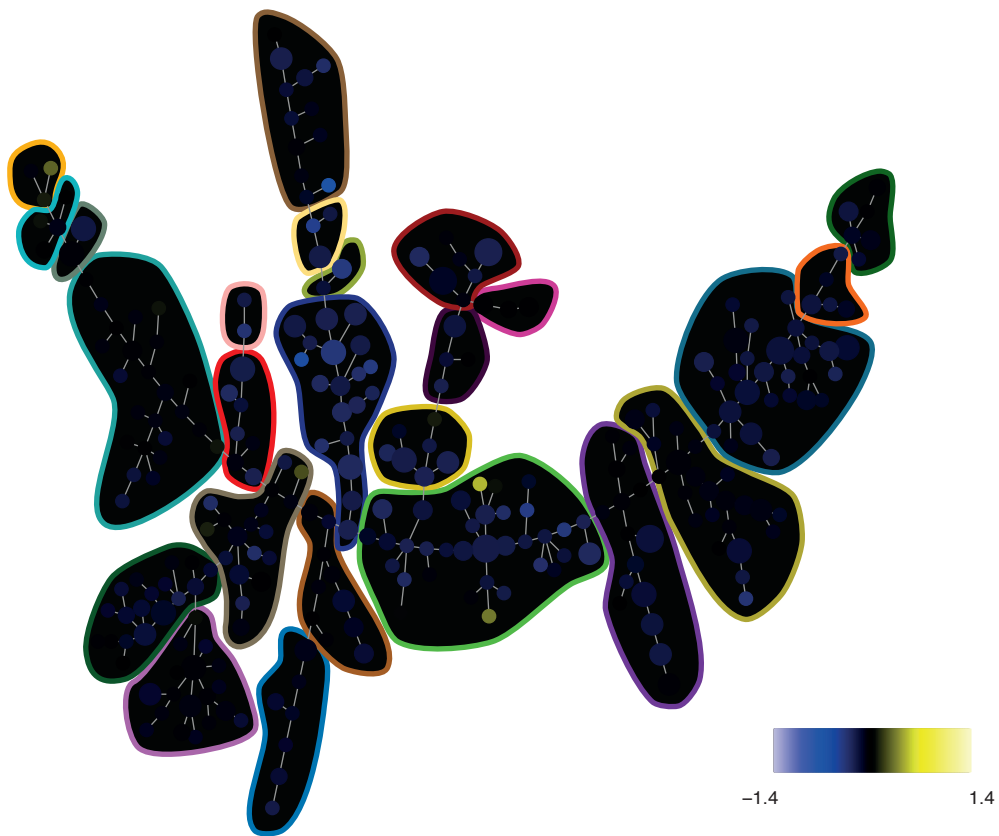


Figure S9A

152-Ki67 ---- BCR vs Ref Ratio

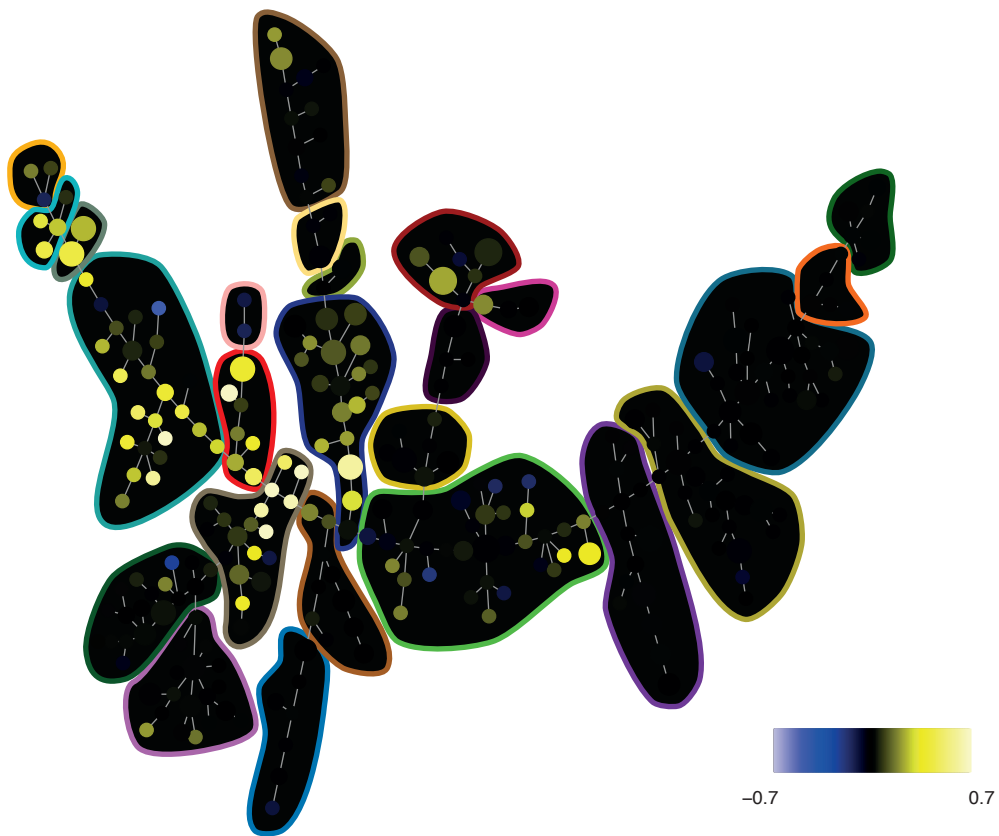


Figure S9A

152-Ki67 ---- DMSO vs Ref Ratio

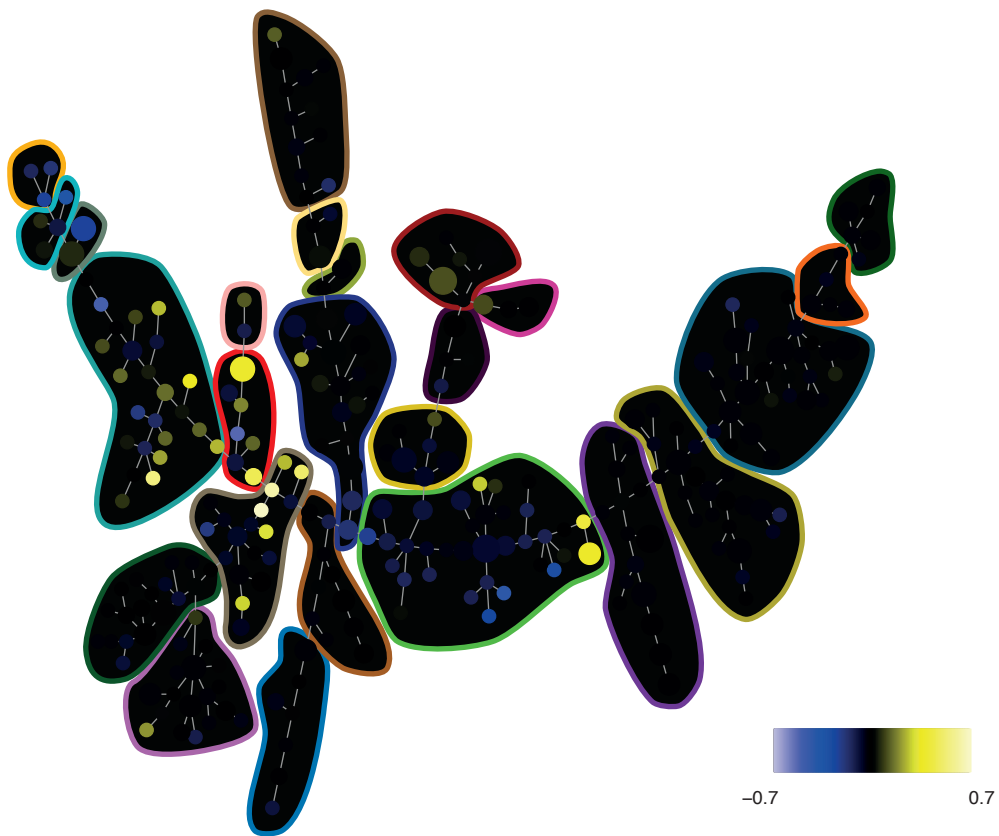


Figure S9A

152-Ki67 ---- Flt3L vs Ref Ratio

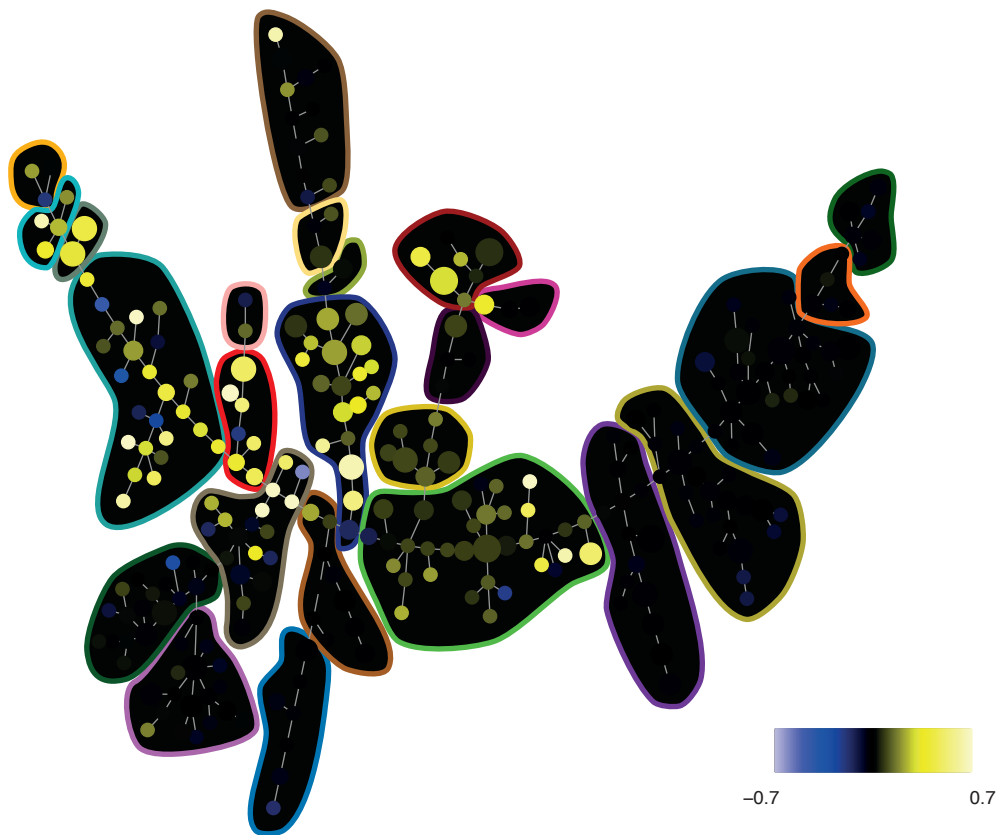


Figure S9A

152-Ki67 ---- GCSF vs Ref Ratio

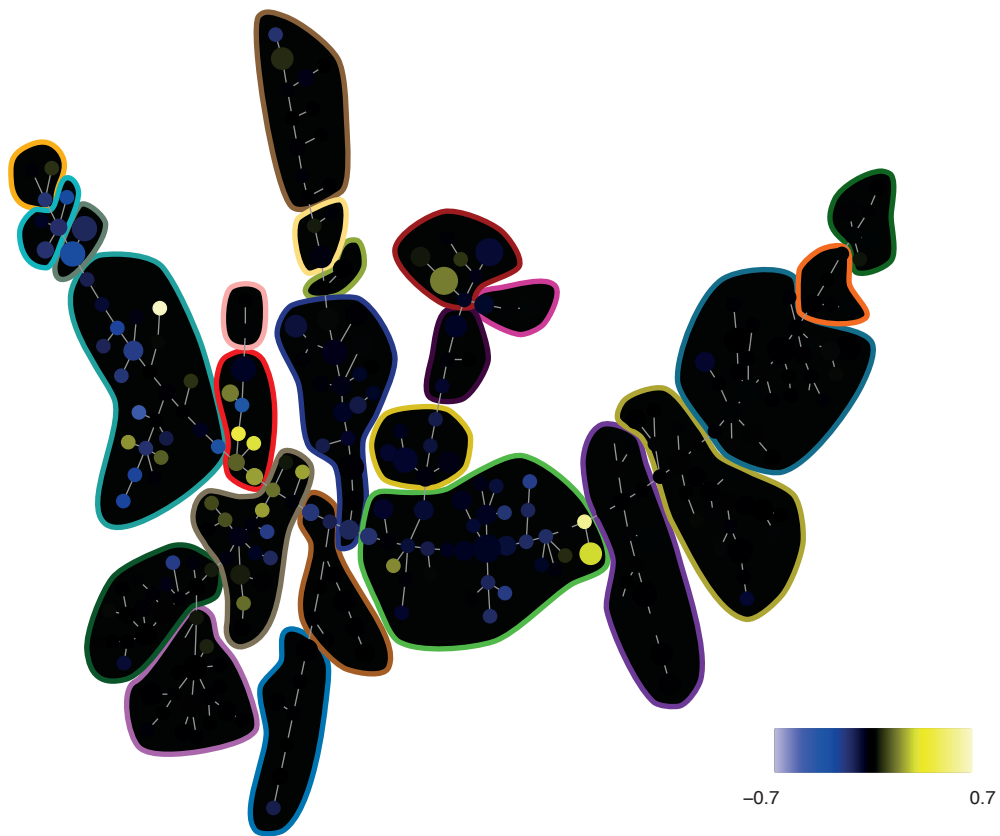


Figure S9A

152-Ki67 ---- GMCSF vs Ref Ratio

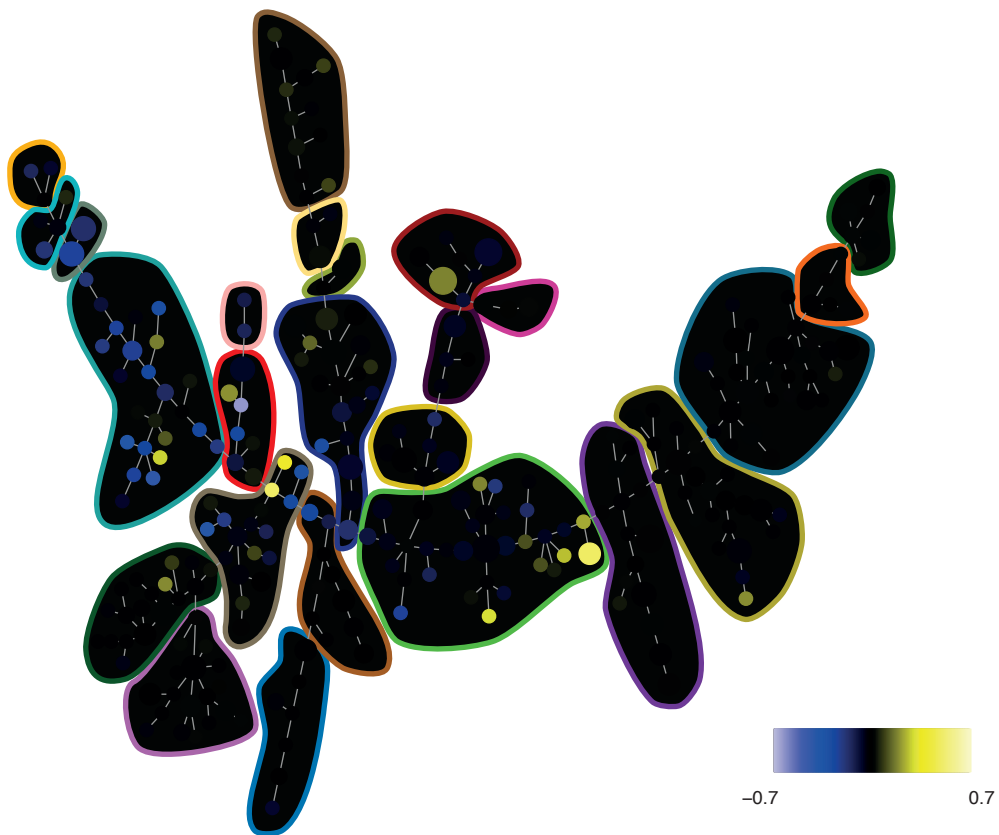


Figure S9A

152-Ki67 ---- IFNad vs Ref Ratio

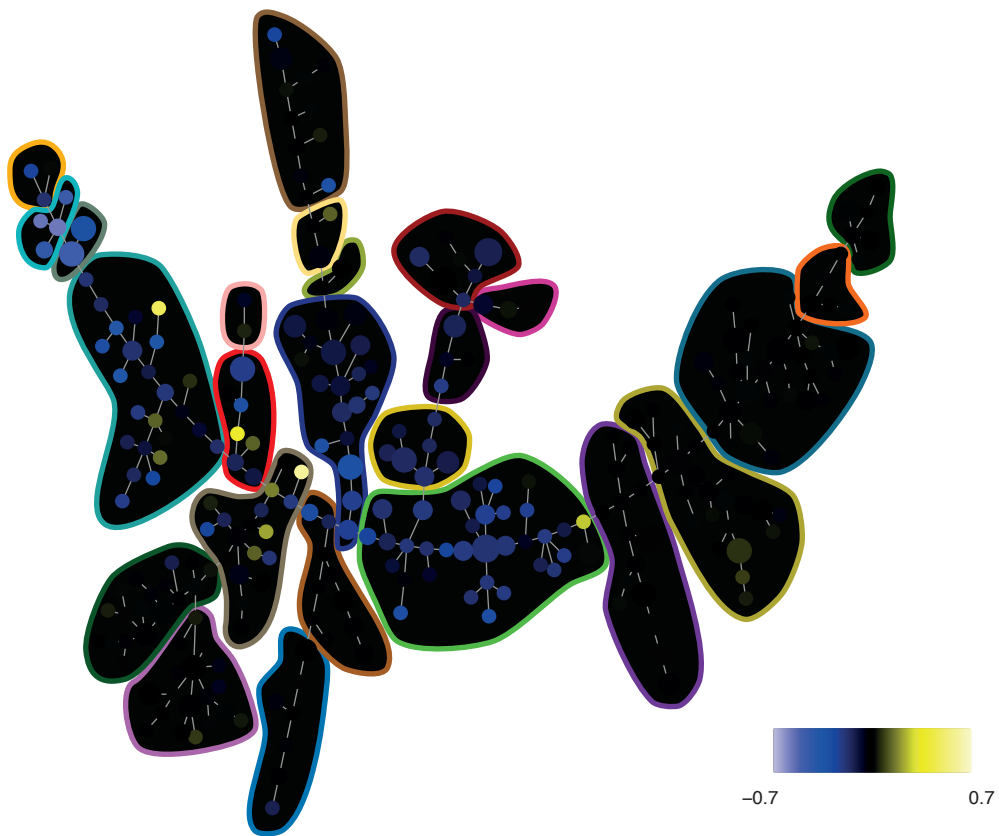


Figure S9A

152-Ki67 ---- IL3 vs Ref Ratio

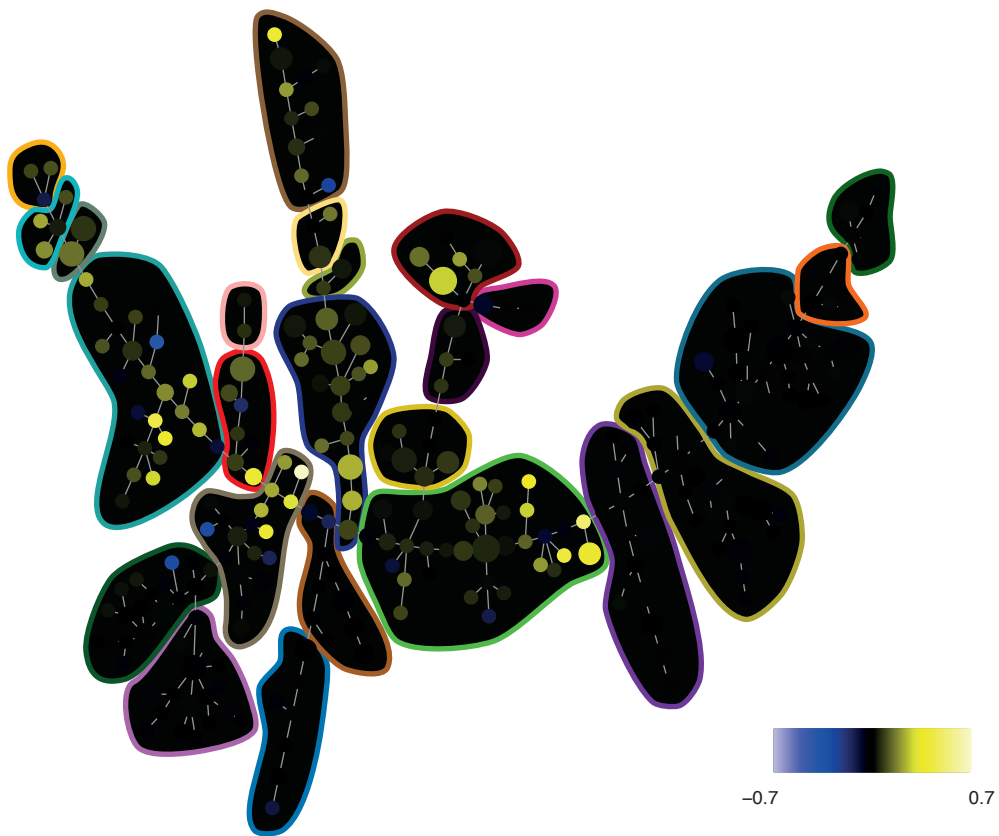


Figure S9A

152-Ki67 ---- IL7 vs Ref Ratio

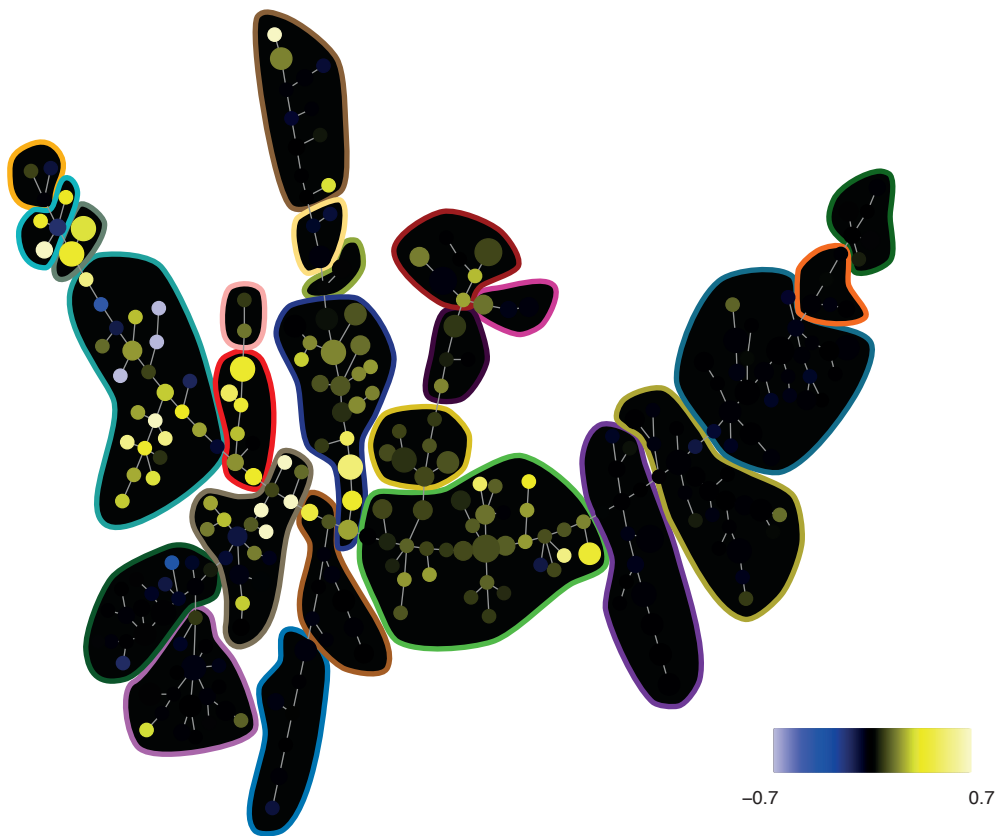


Figure S9A

152-Ki67 ---- LPS vs Ref Ratio

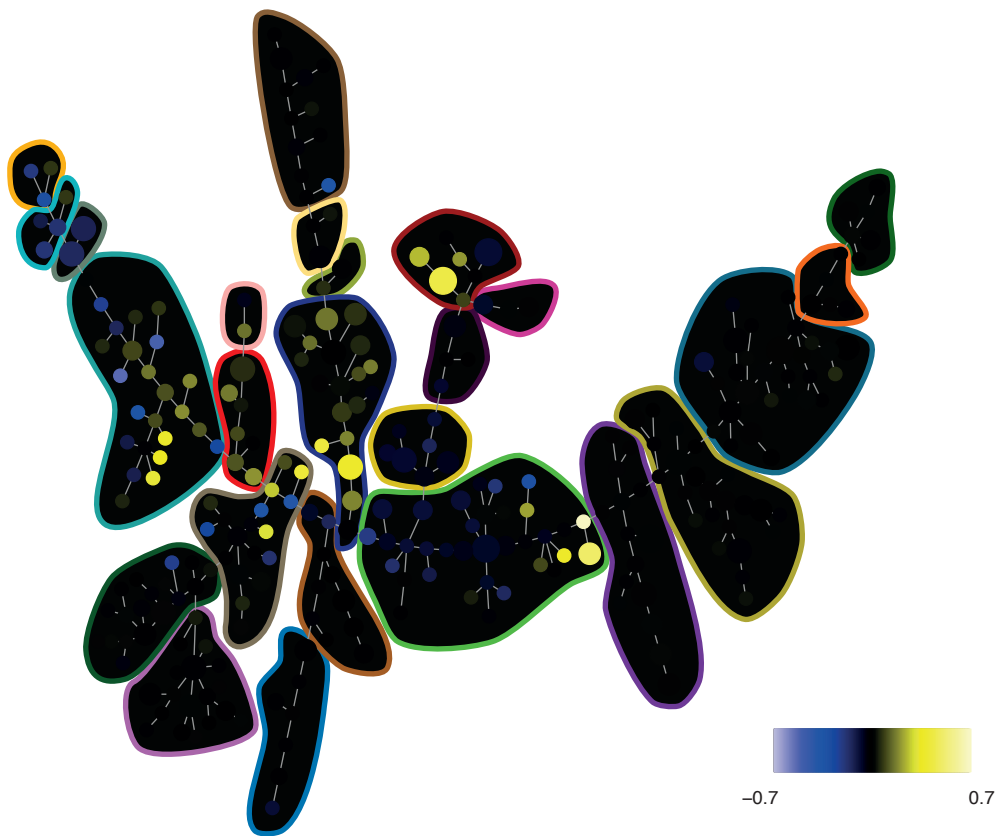


Figure S9A

152-Ki67 ---- PMAiono vs Ref Ratio

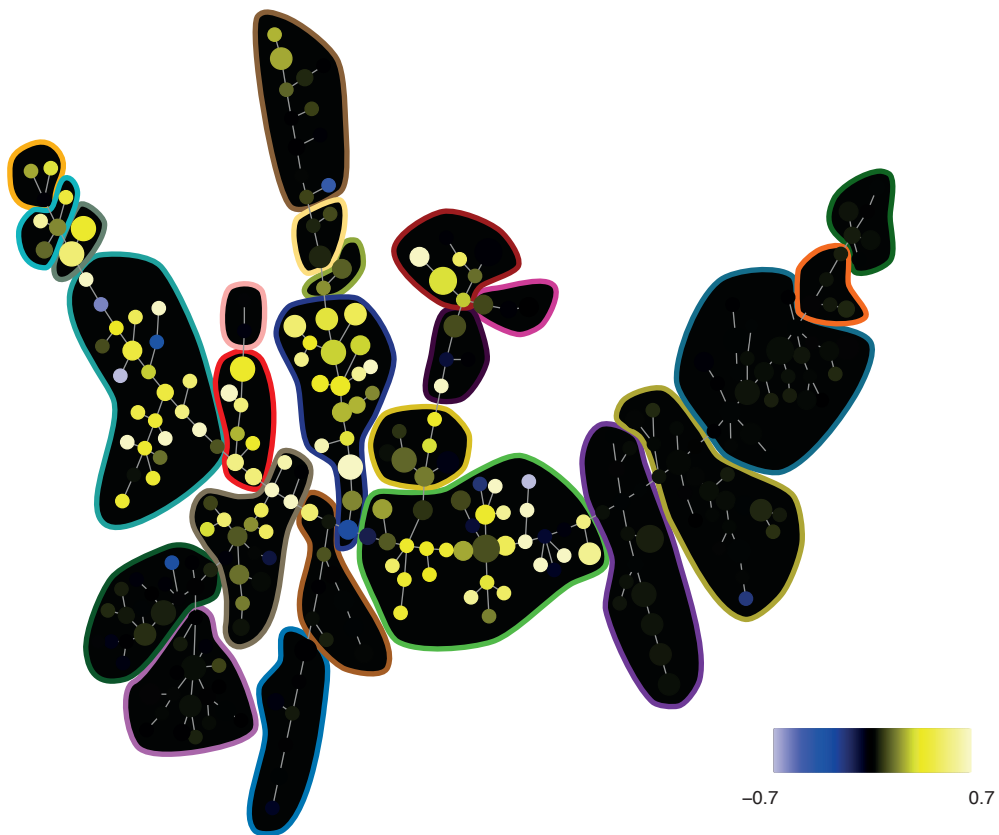


Figure S9A

152-Ki67 ---- PVO4 vs Ref Ratio

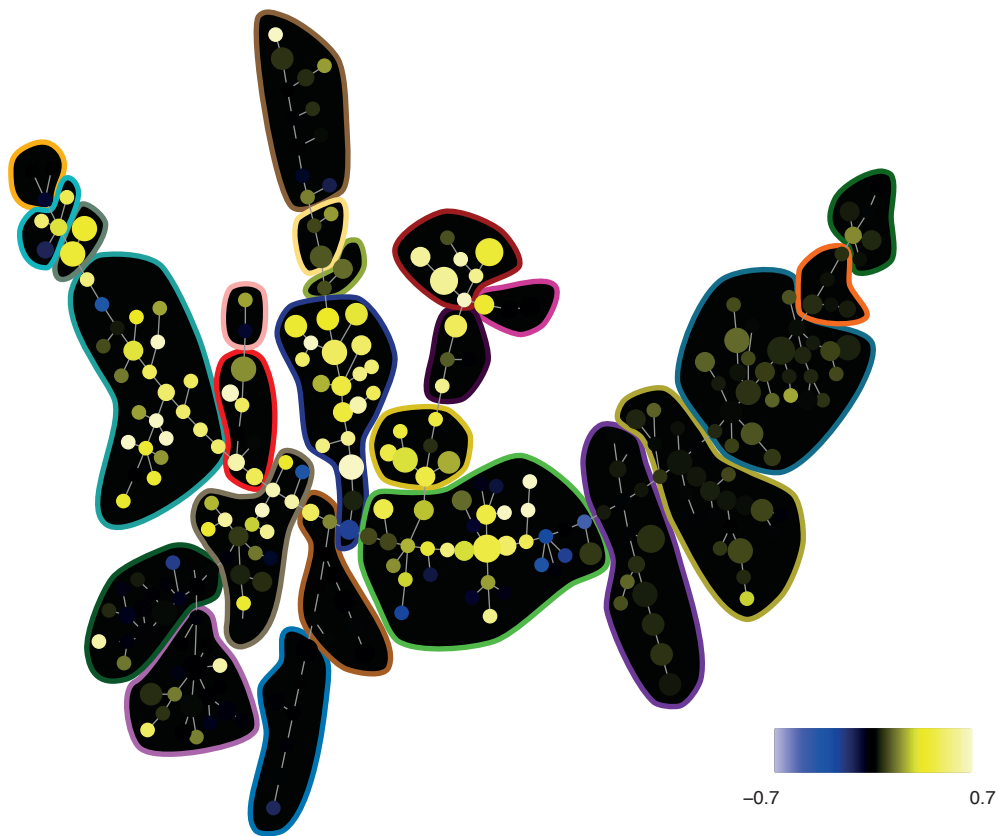


Figure S9A

152-Ki67 ---- SCF vs Ref Ratio

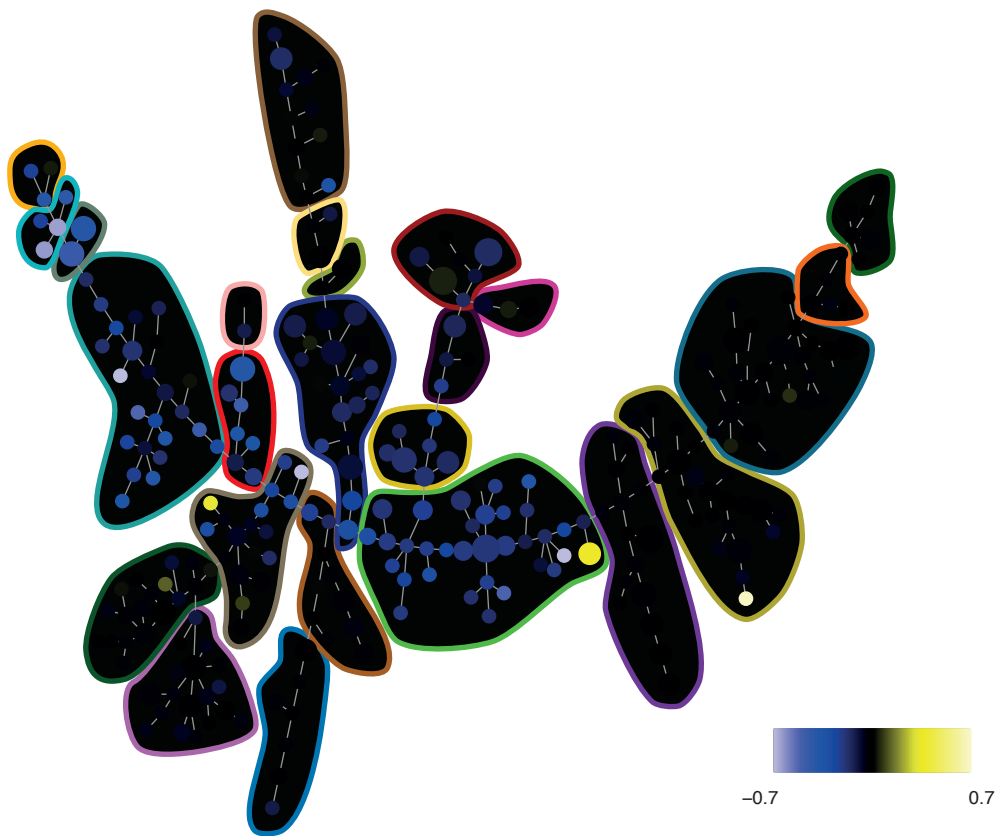


Figure S9A

152-Ki67 ---- TNFa vs Ref Ratio

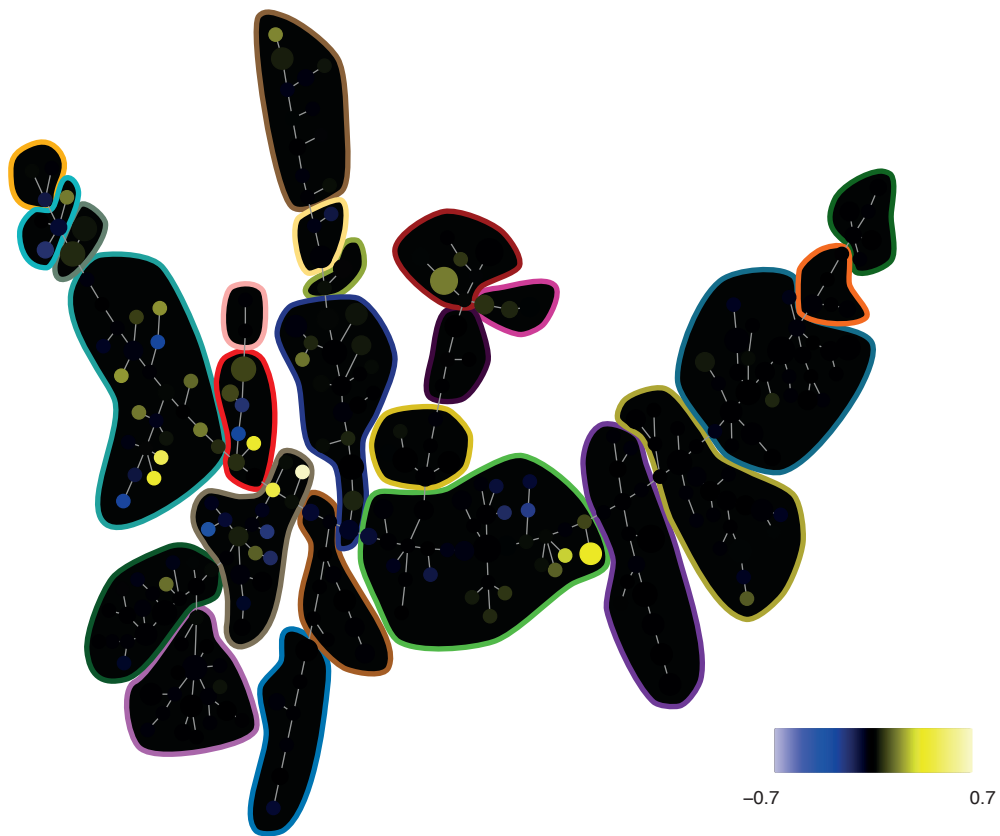


Figure S9A

152-Ki67 --- TPO vs Ref Ratio

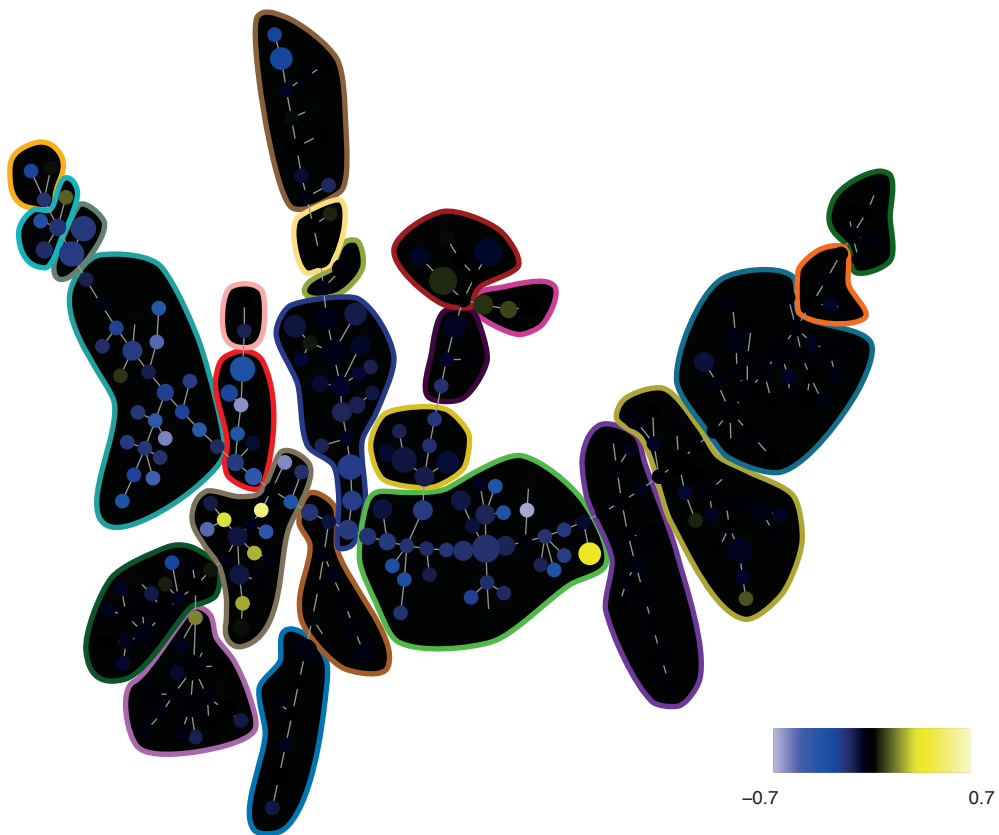


Figure S9A

153-pMAPKAPK2 ---- BCR vs Ref Ratio

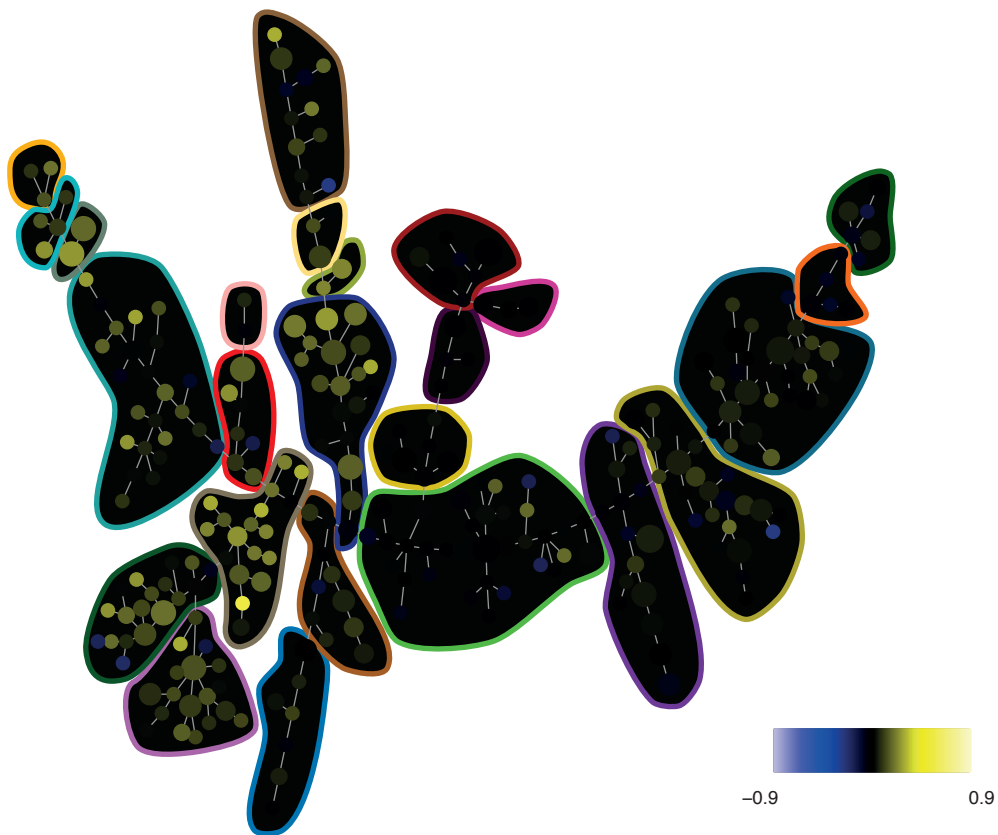


Figure S9A

153-pMAPKAPK2 ---- DMSO vs Ref Ratio

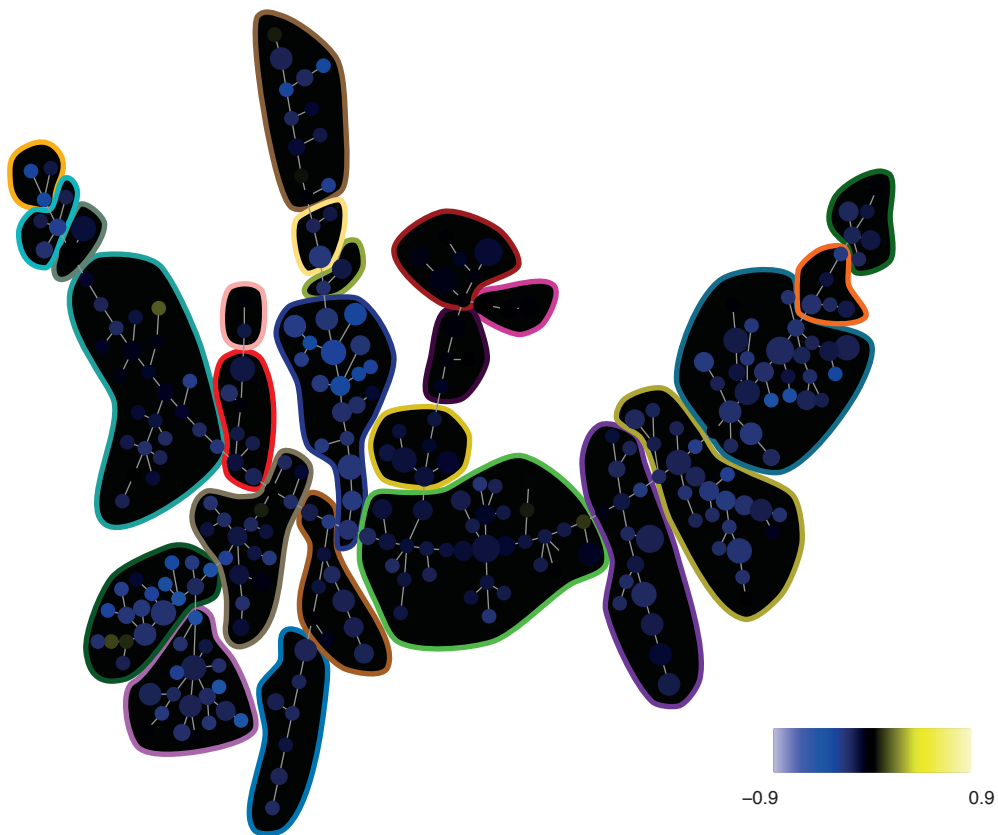


Figure S9A

153-pMAPKAPK2 ---- FIt3L vs Ref Ratio

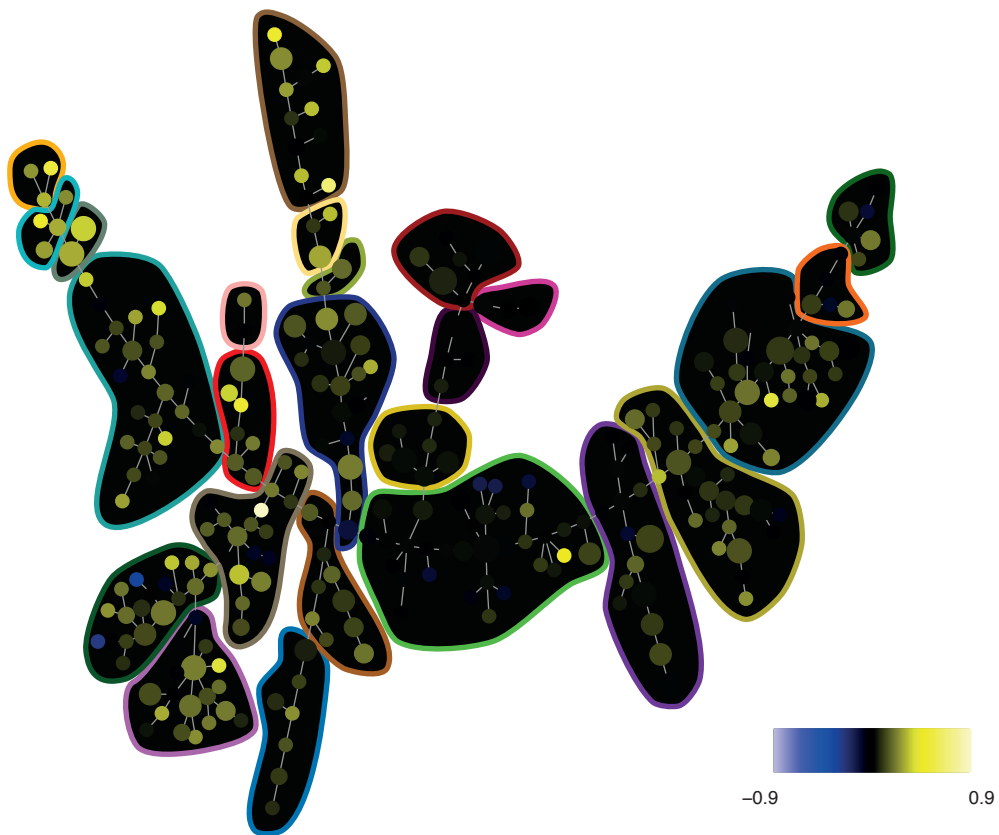


Figure S9A

153-pMAPKAPK2 --- GCSF vs Ref Ratio

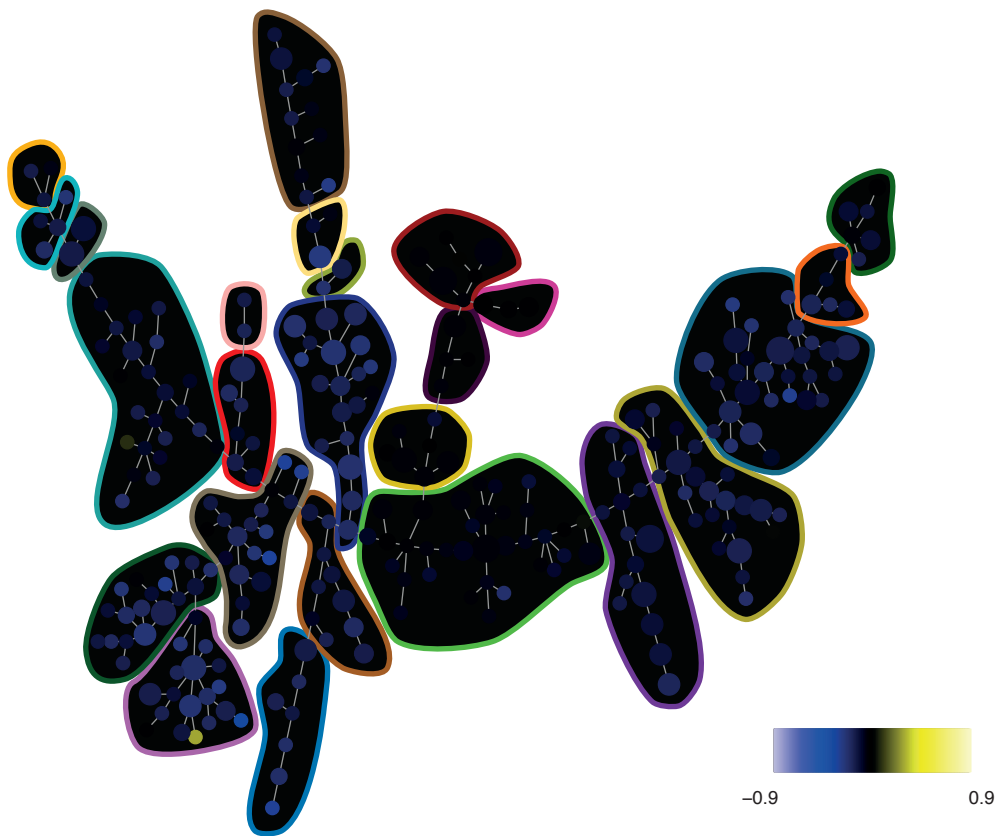


Figure S9A

153-pMAPKAPK2 --- GMCSF vs Ref Ratio

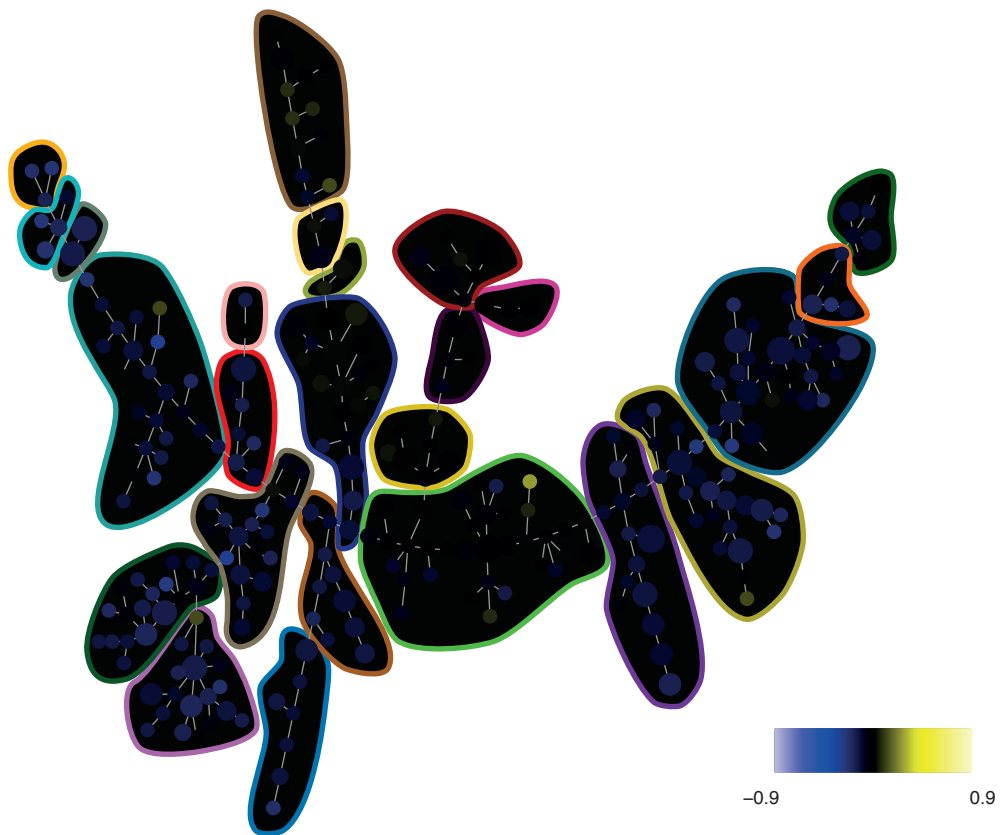


Figure S9A

153-pMAPKAPK2 ---- IFNad vs Ref Ratio

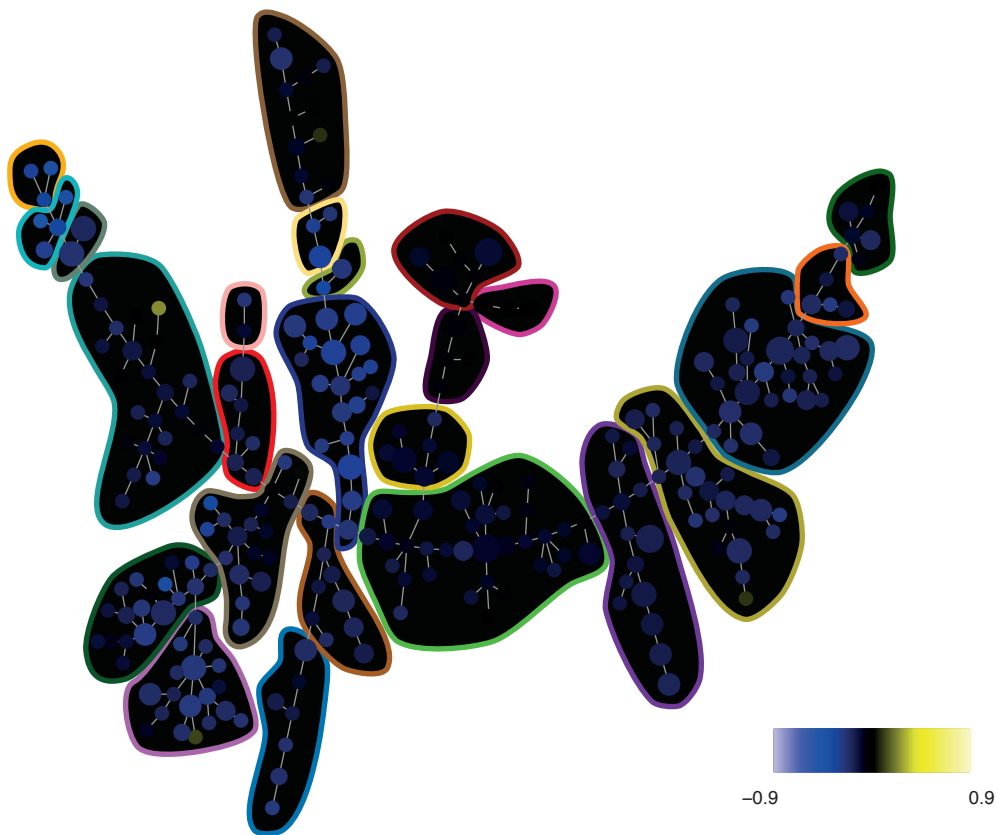


Figure S9A

153-pMAPKAPK2 ---- IL3 vs Ref Ratio

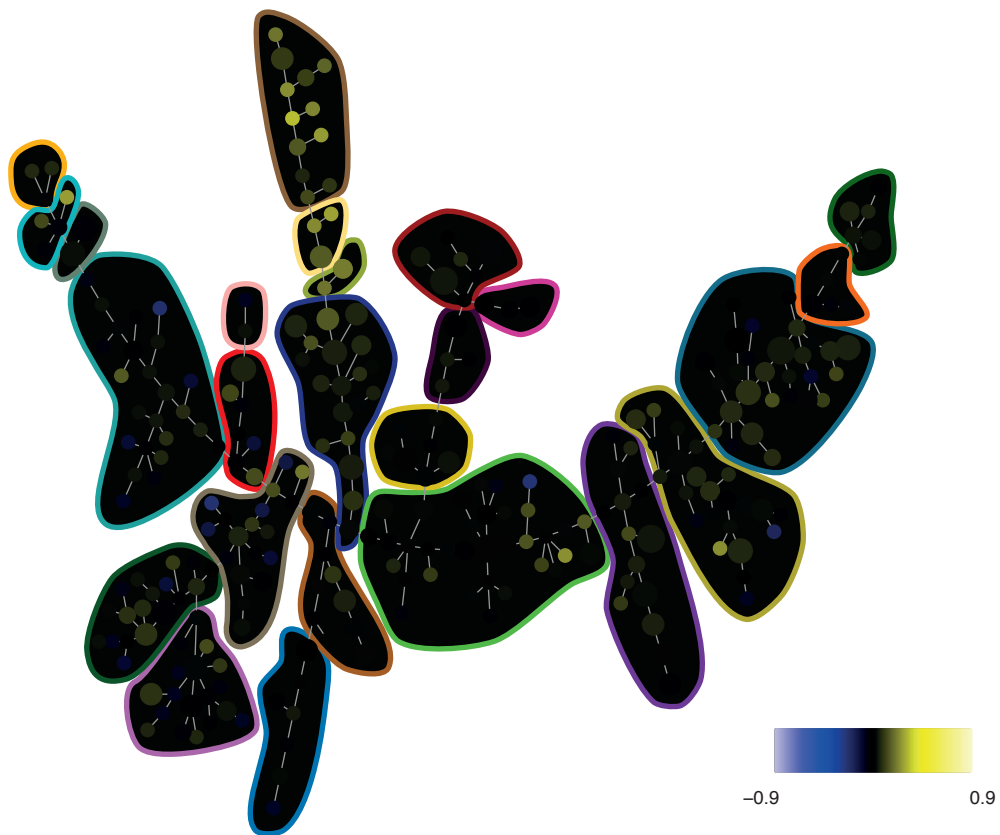


Figure S9A

153-pMAPKAPK2 ---- IL7 vs Ref Ratio

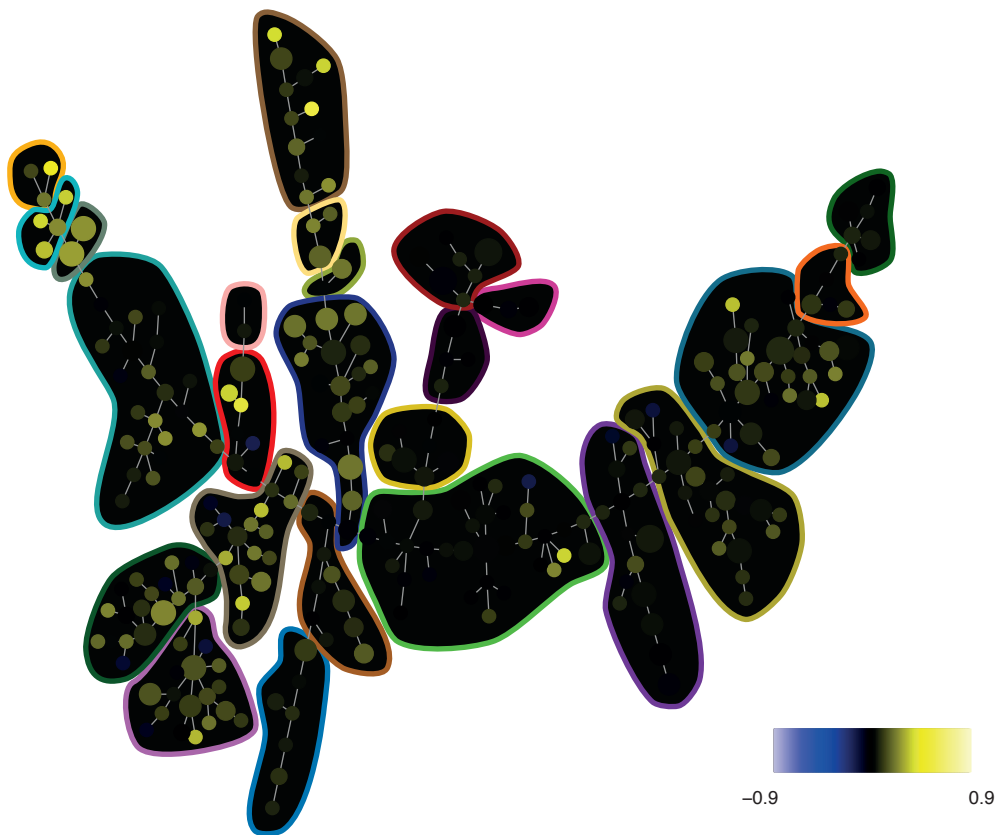


Figure S9A

153-pMAPKAPK2 ---- LPS vs Ref Ratio

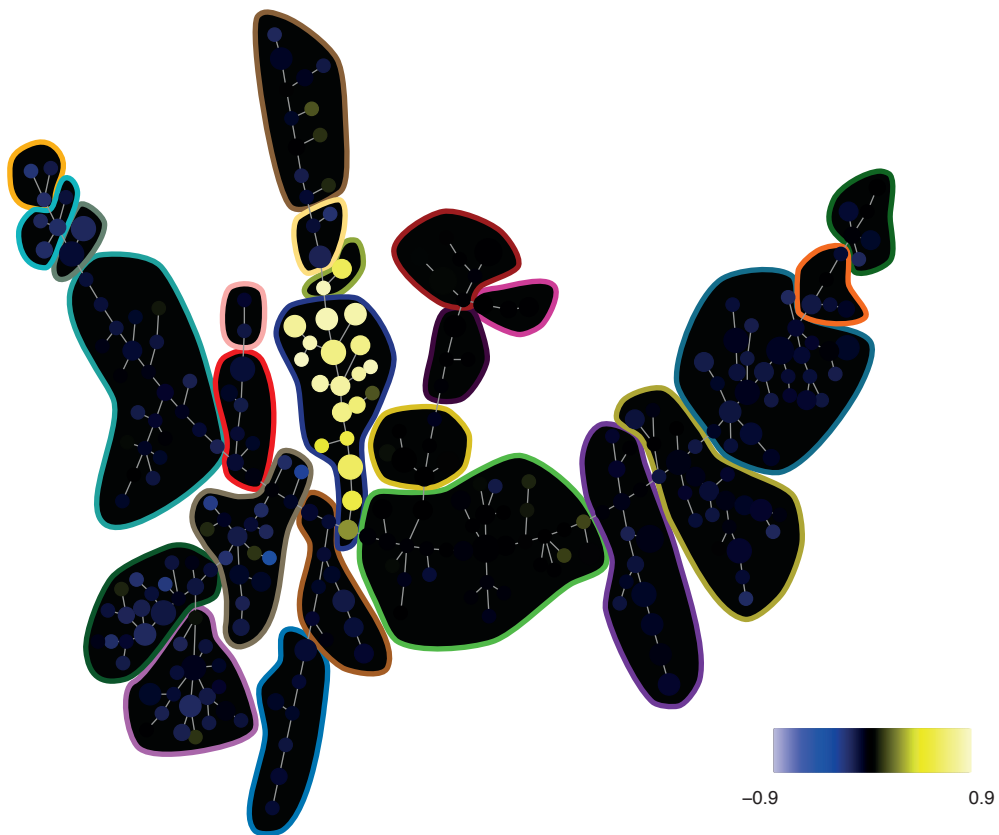


Figure S9A

153-pMAPKAPK2 ---- PMAiono vs Ref Ratio

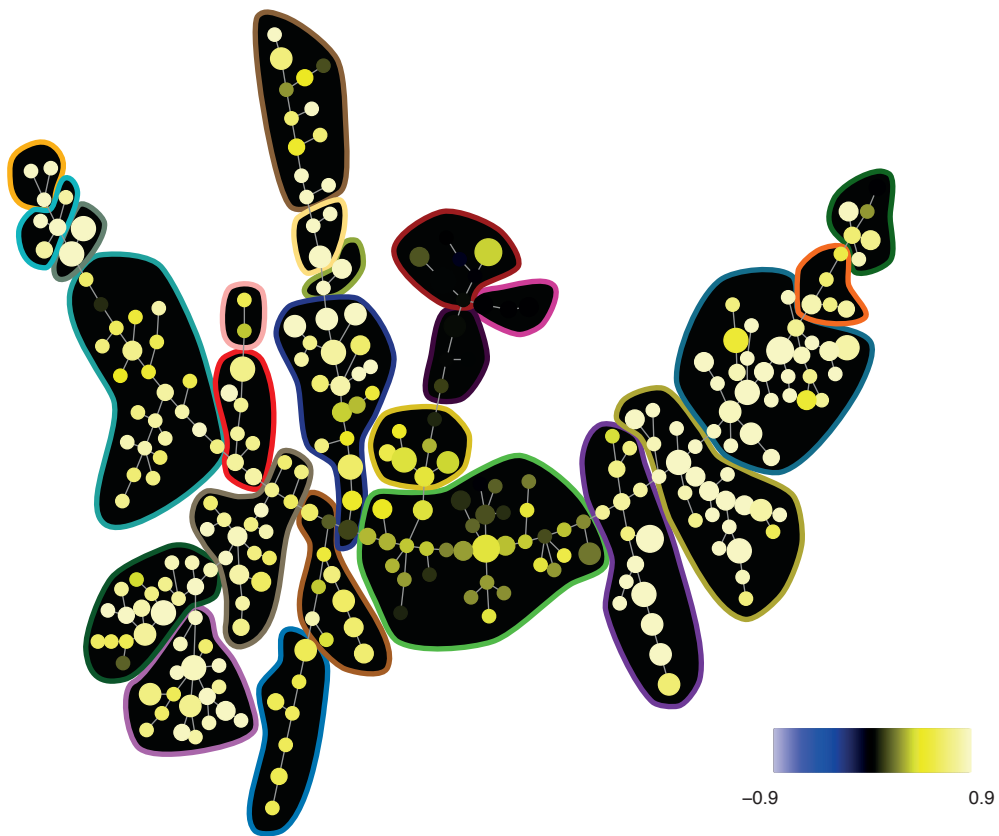


Figure S9A

153-pMAPKAPK2 ---- PVO4 vs Ref Ratio

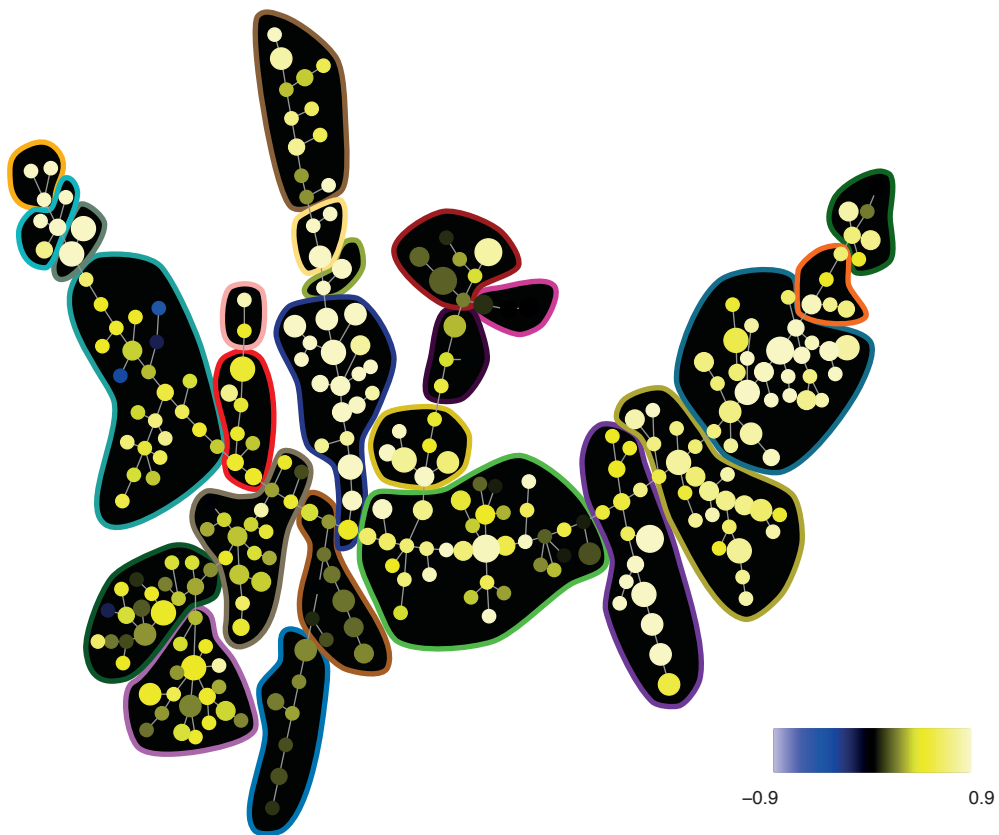


Figure S9A

153-pMAPKAPK2 ---- SCF vs Ref Ratio

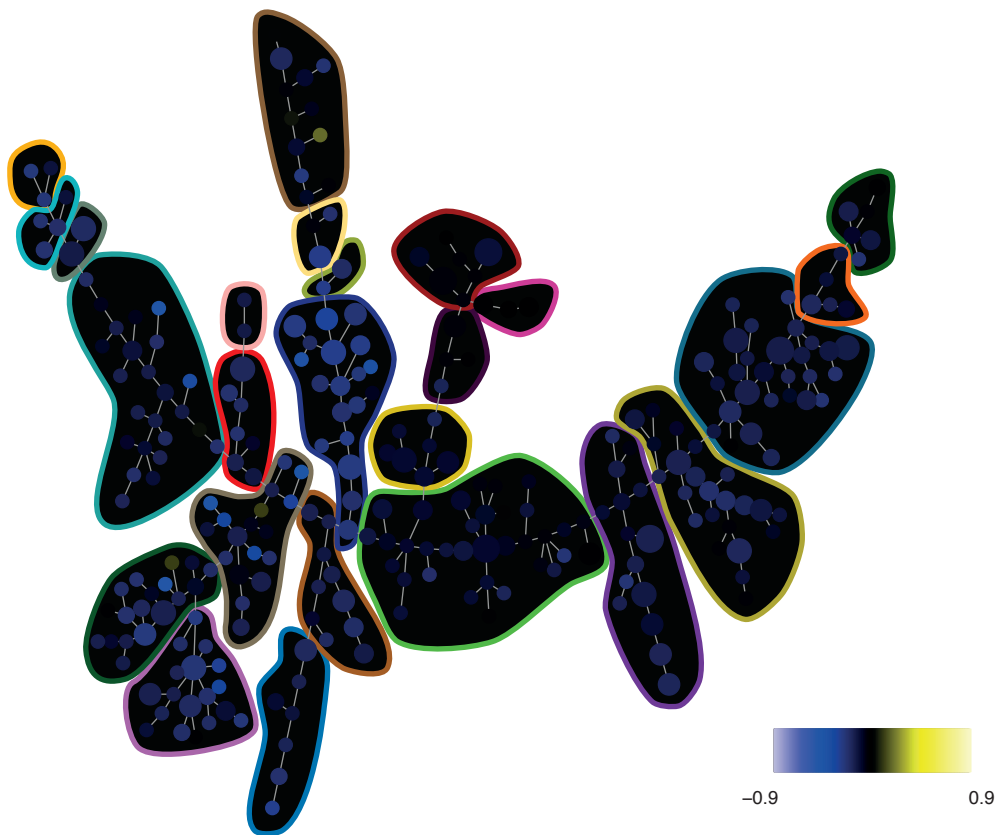


Figure S9A

153-pMAPKAPK2 ---- TNFa vs Ref Ratio

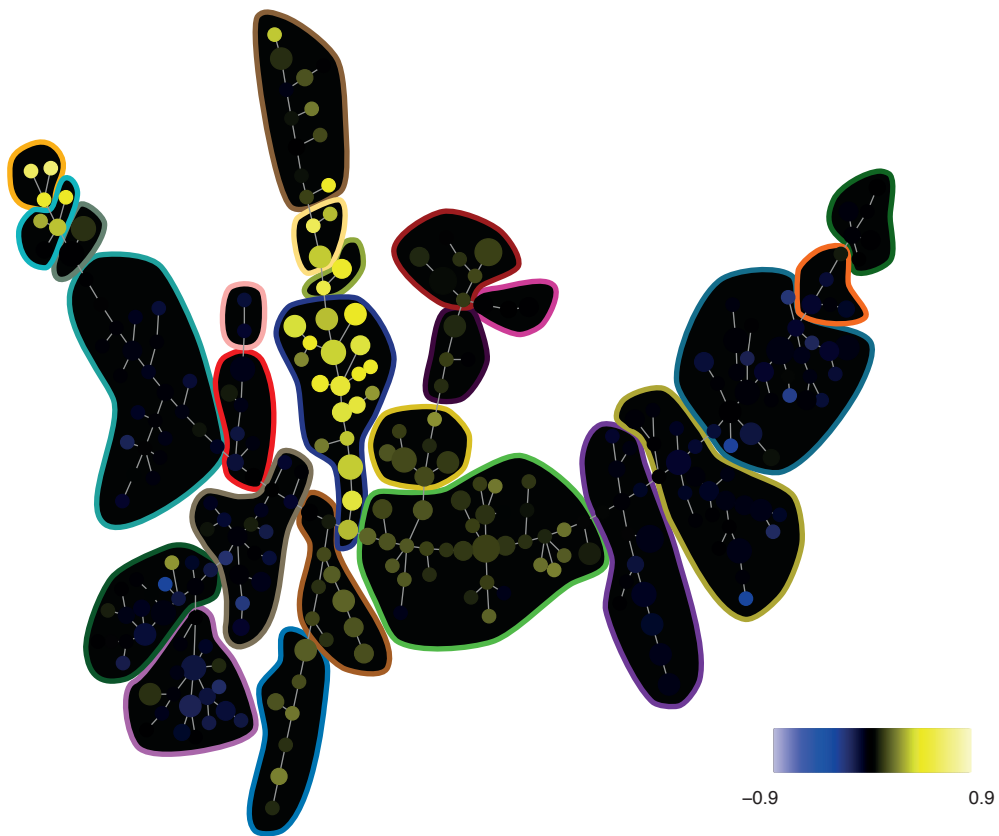


Figure S9A

153-pMAPKAPK2 ---- TPO vs Ref Ratio

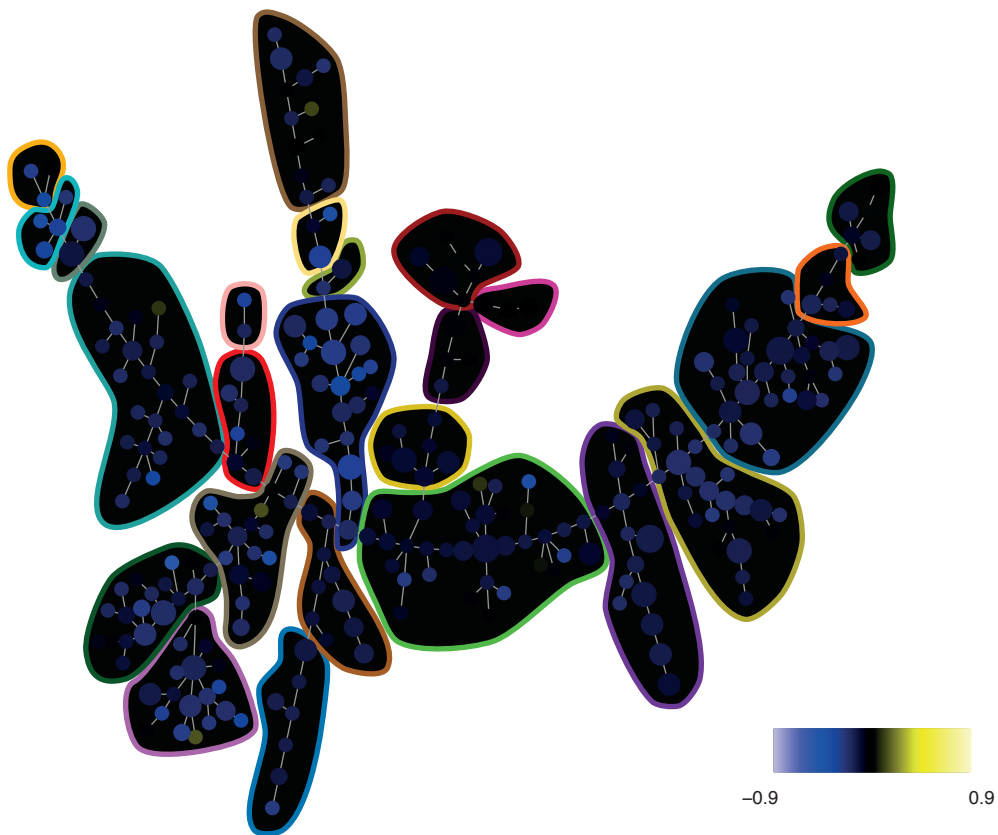


Figure S9A

154-pSHP2 --- BCR vs Ref Ratio

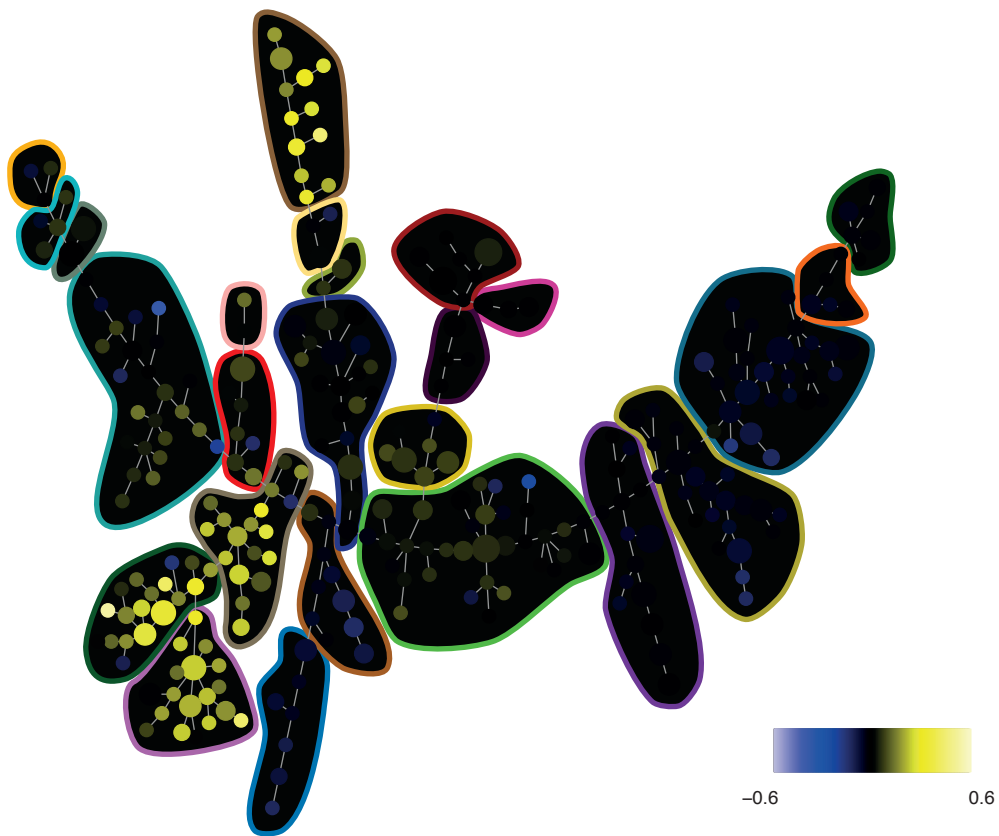


Figure S9A

154-pSHP2 --- DMSO vs Ref Ratio

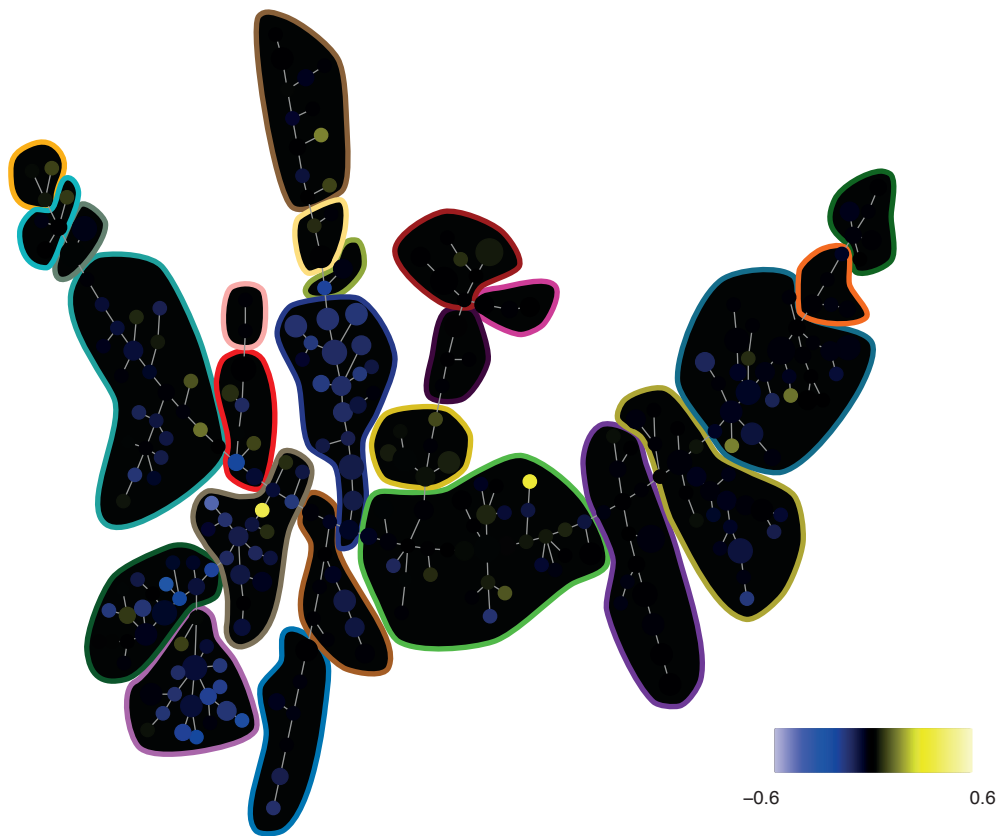


Figure S9A

154-pSHP2 --- Flt3L vs Ref Ratio

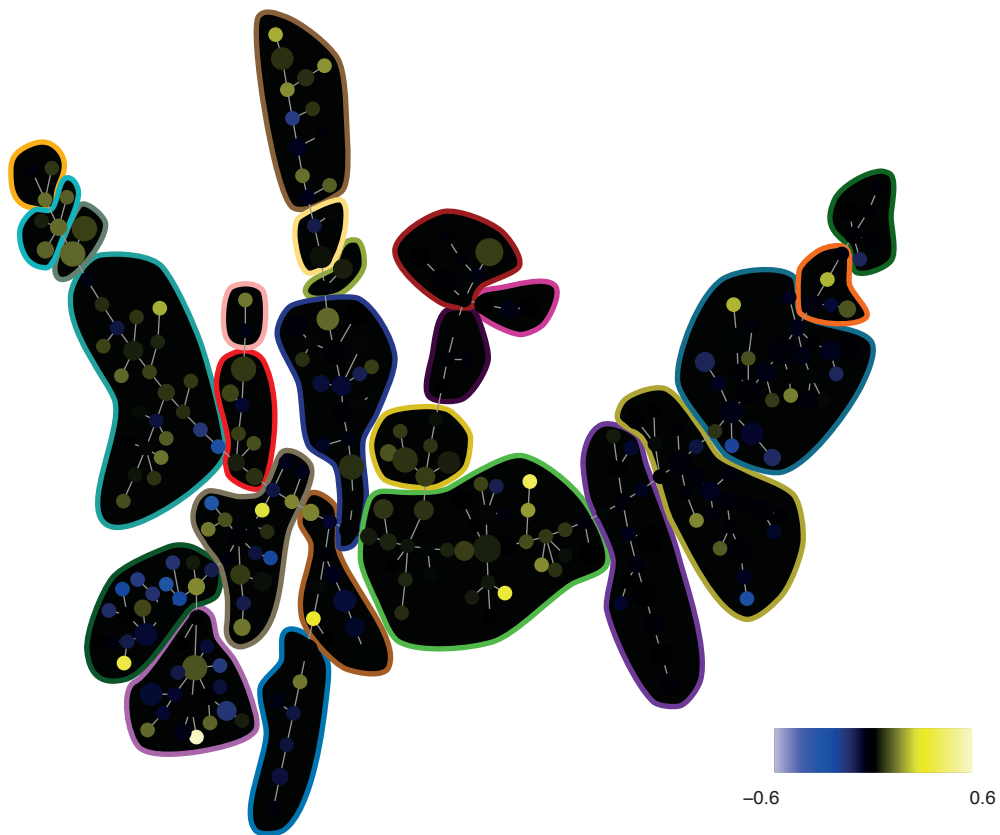


Figure S9A

154-pSHP2 ---- GCSF vs Ref Ratio

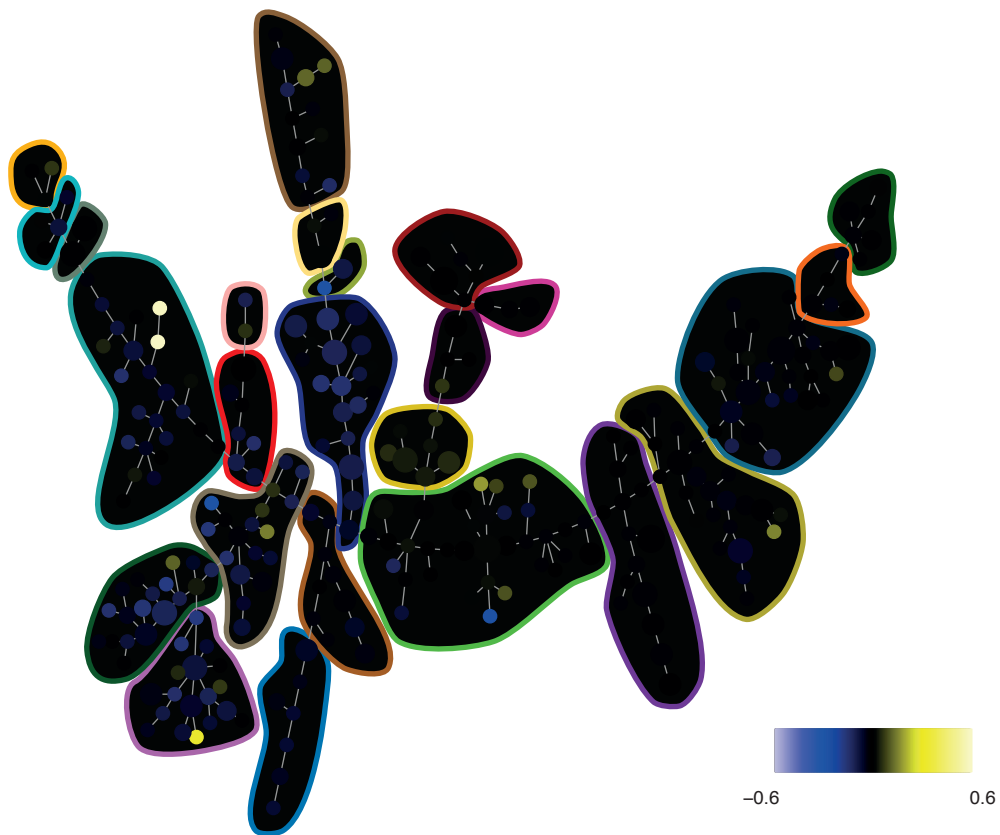


Figure S9A

154-pSHP2 — GMCSF vs Ref Ratio

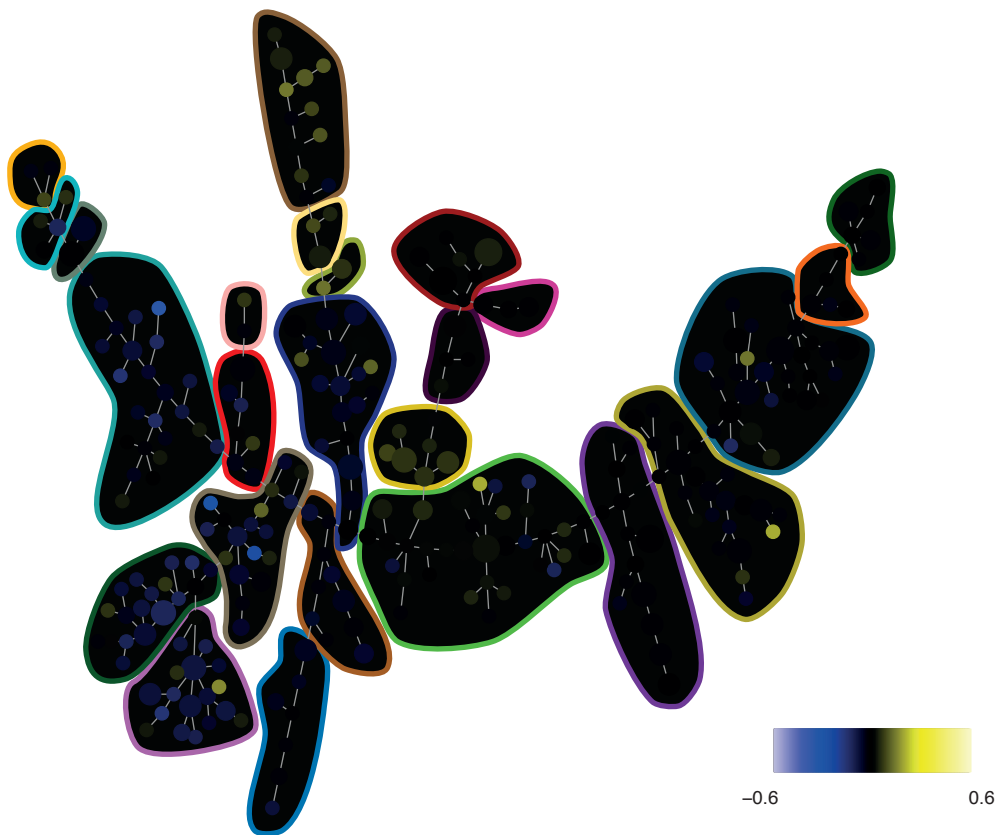


Figure S9A

154-pSHP2 --- IFNad vs Ref Ratio

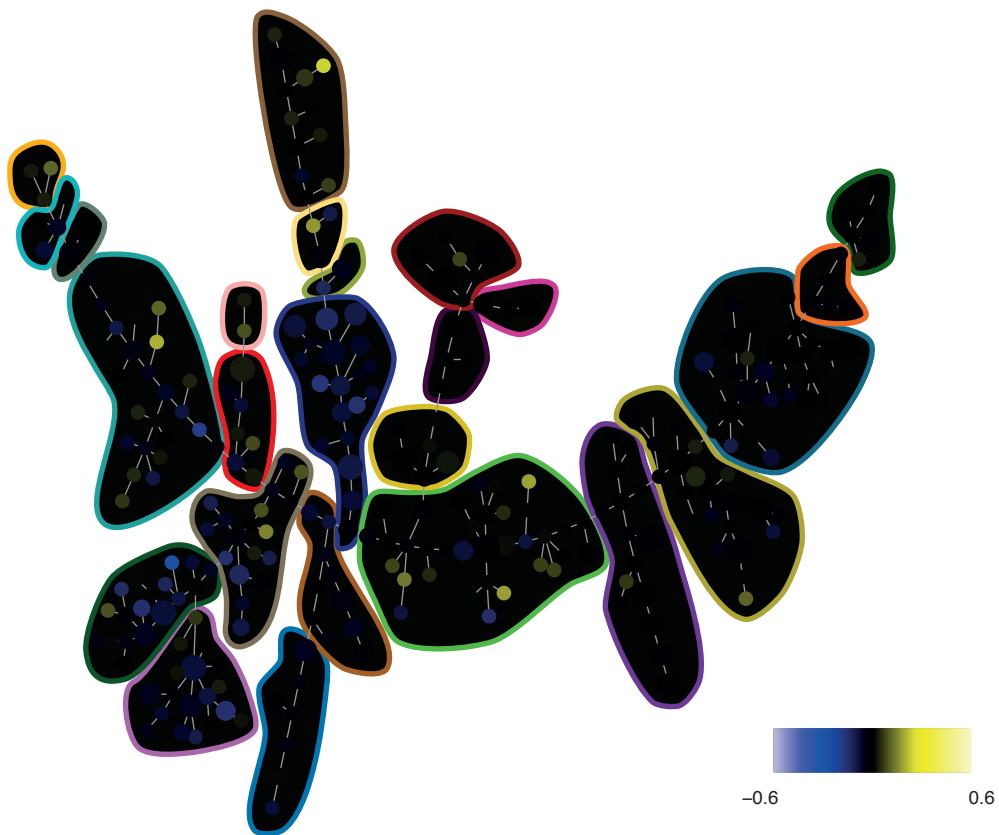


Figure S9A

154-pSHP2 ---- IL3 vs Ref Ratio

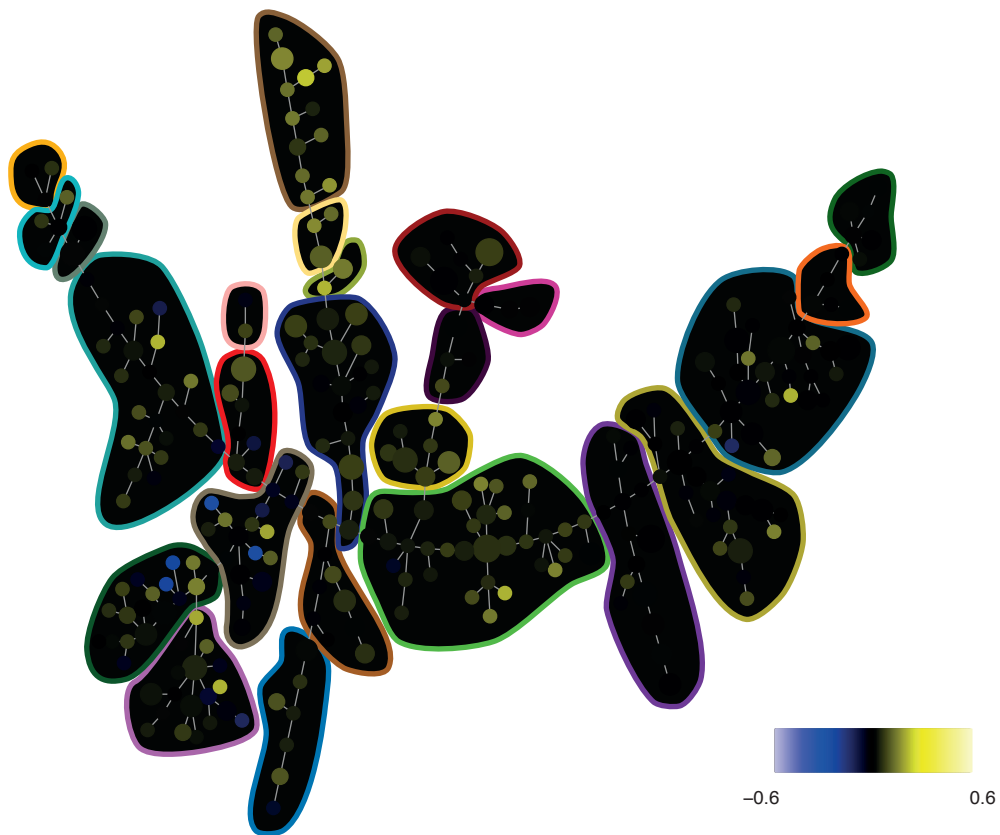


Figure S9A

154-pSHP2 ---- IL7 vs Ref Ratio

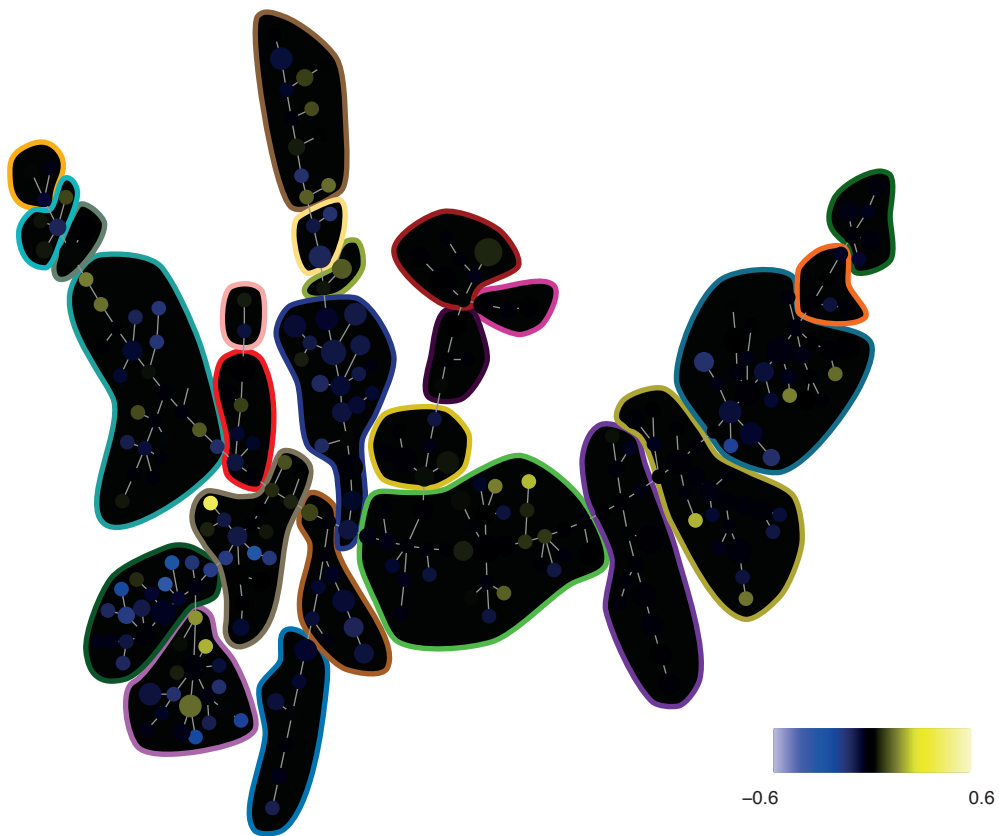


Figure S9A

154-pSHP2 ---- LPS vs Ref Ratio

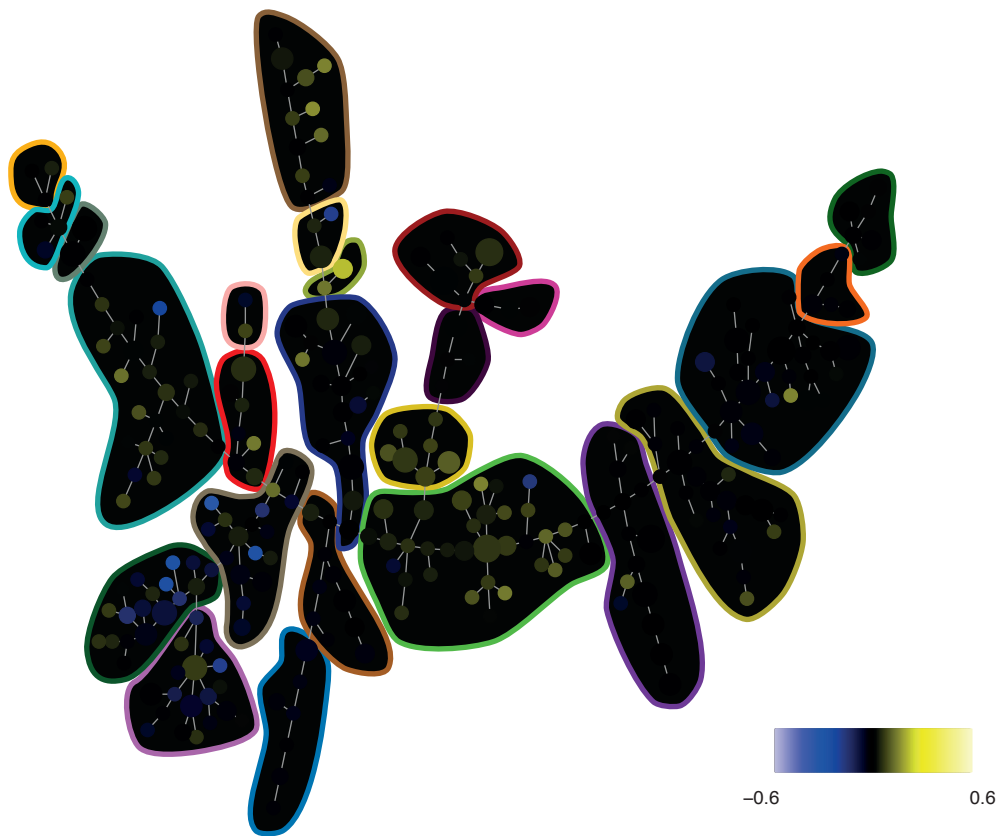


Figure S9A

154-pSHP2 ---- PMAiono vs Ref Ratio

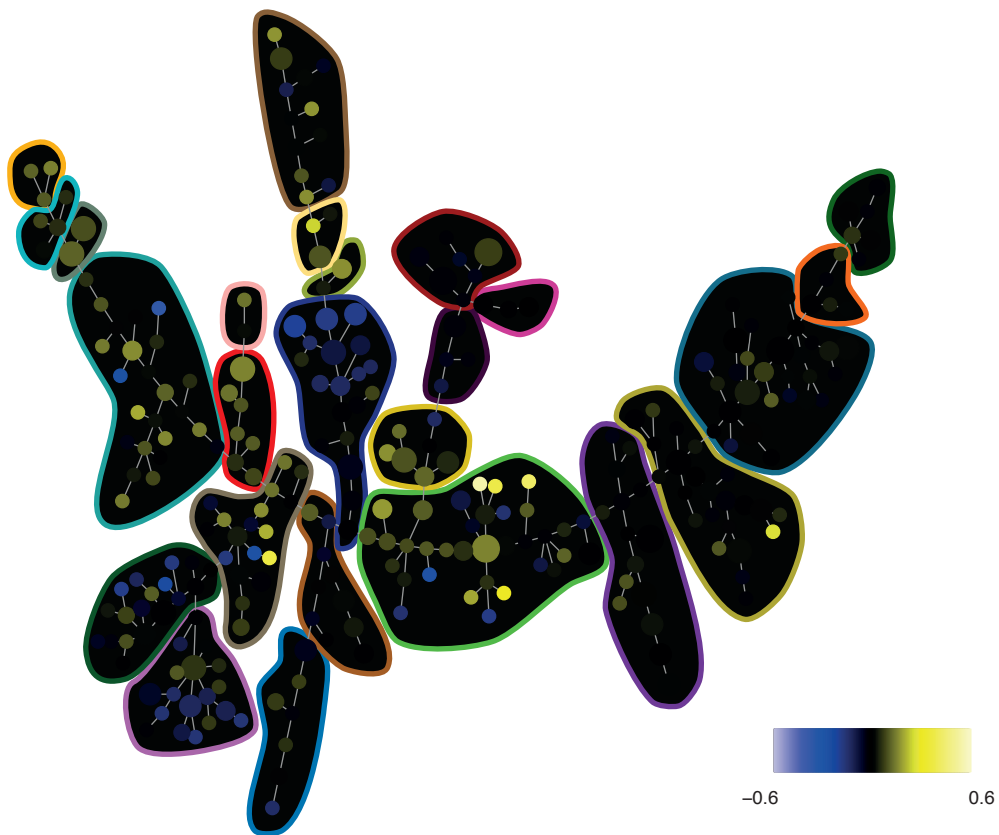


Figure S9A

154-pSHP2 ---- PVO4 vs Ref Ratio

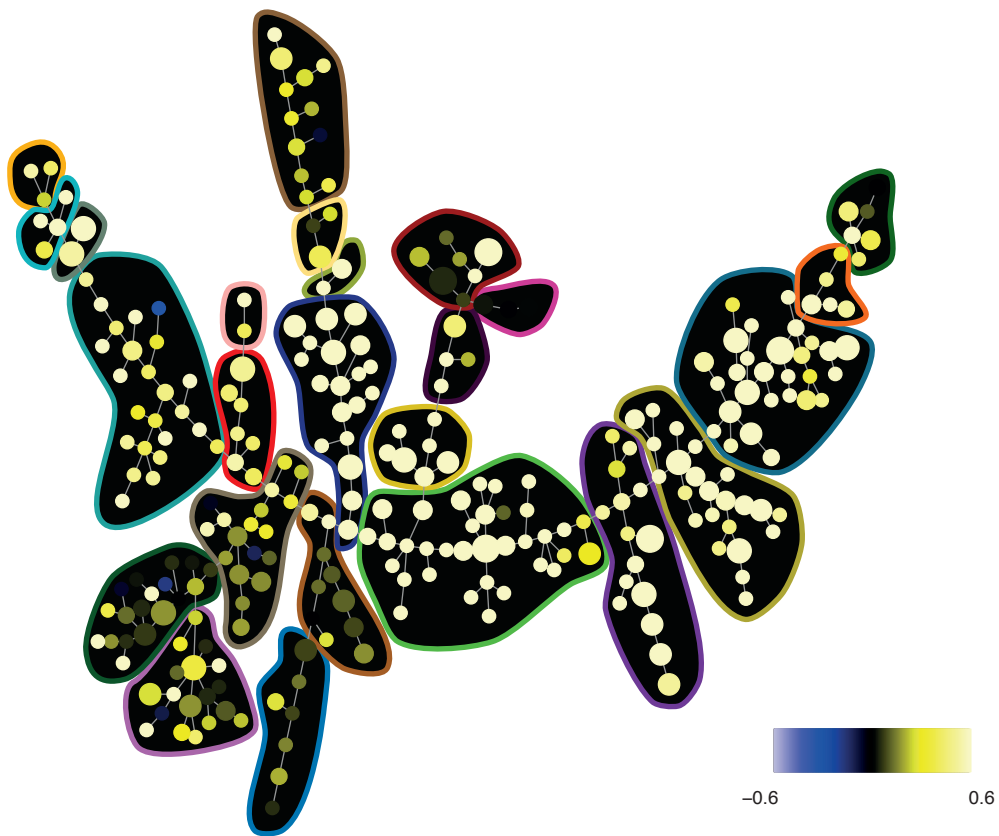


Figure S9A

154-pSHP2 --- SCF vs Ref Ratio

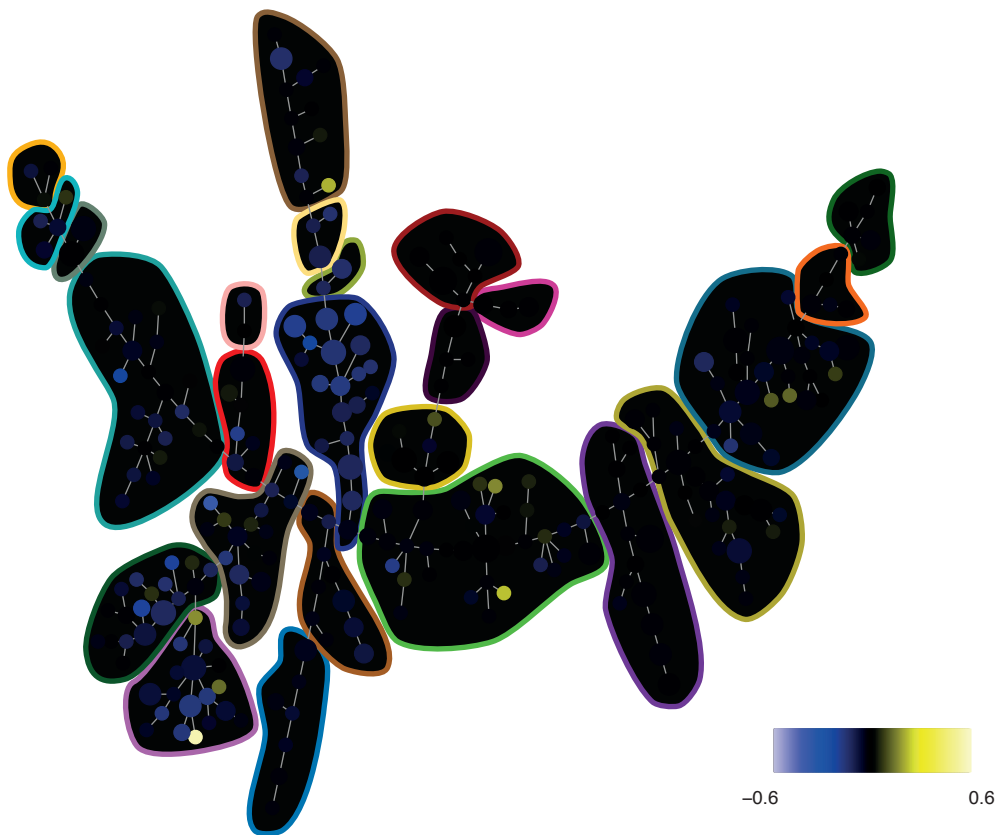


Figure S9A

154-pSHP2 ---- TNFa vs Ref Ratio

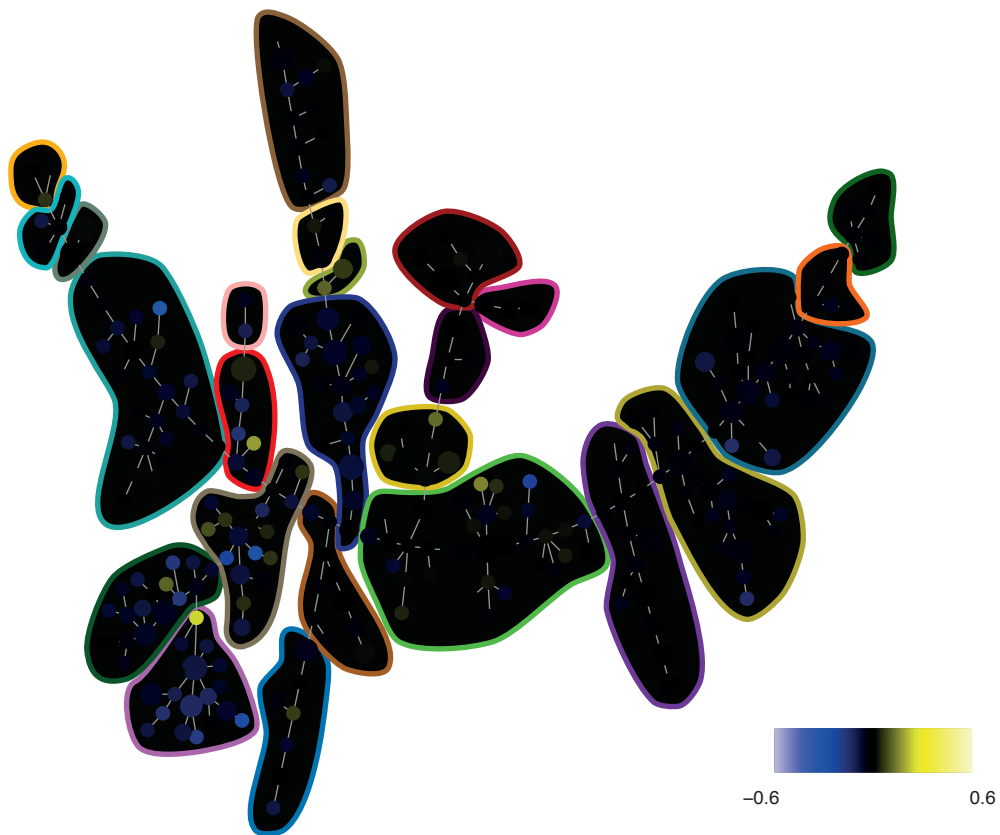


Figure S9A

154-pSHP2 --- TPO vs Ref Ratio

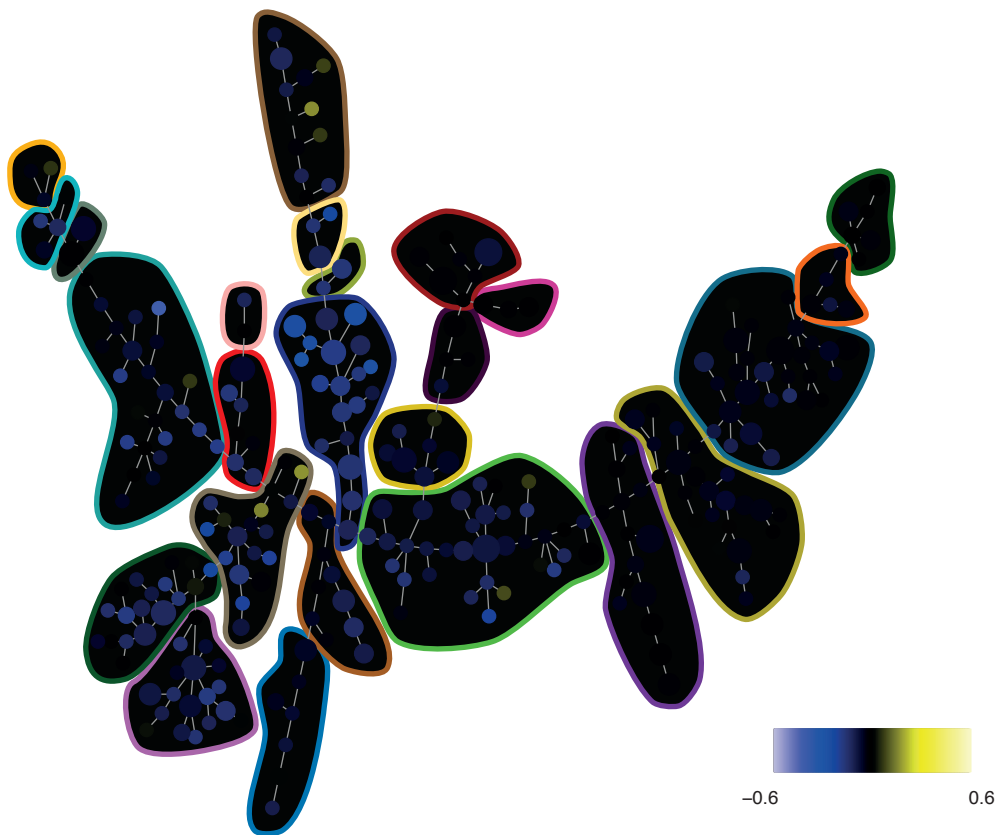


Figure S9A

156-pZAP70/Syk --- BCR vs Ref Ratio

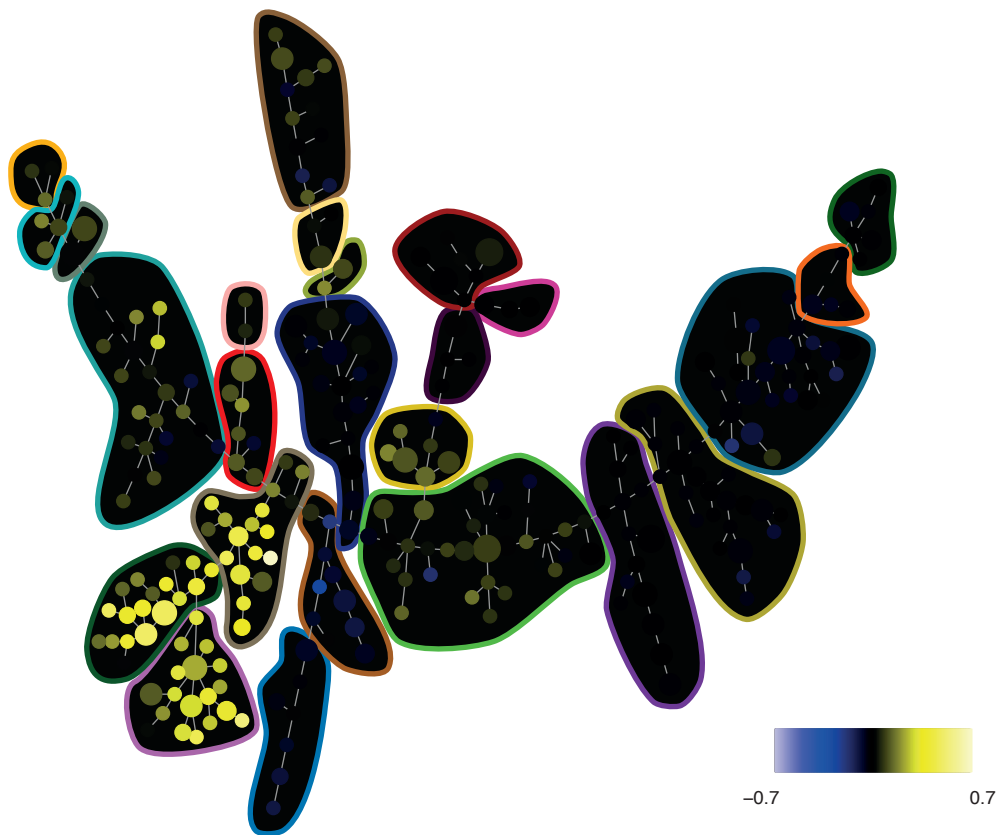


Figure S9A

156-pZAP70/Syk --- DMSO vs Ref Ratio

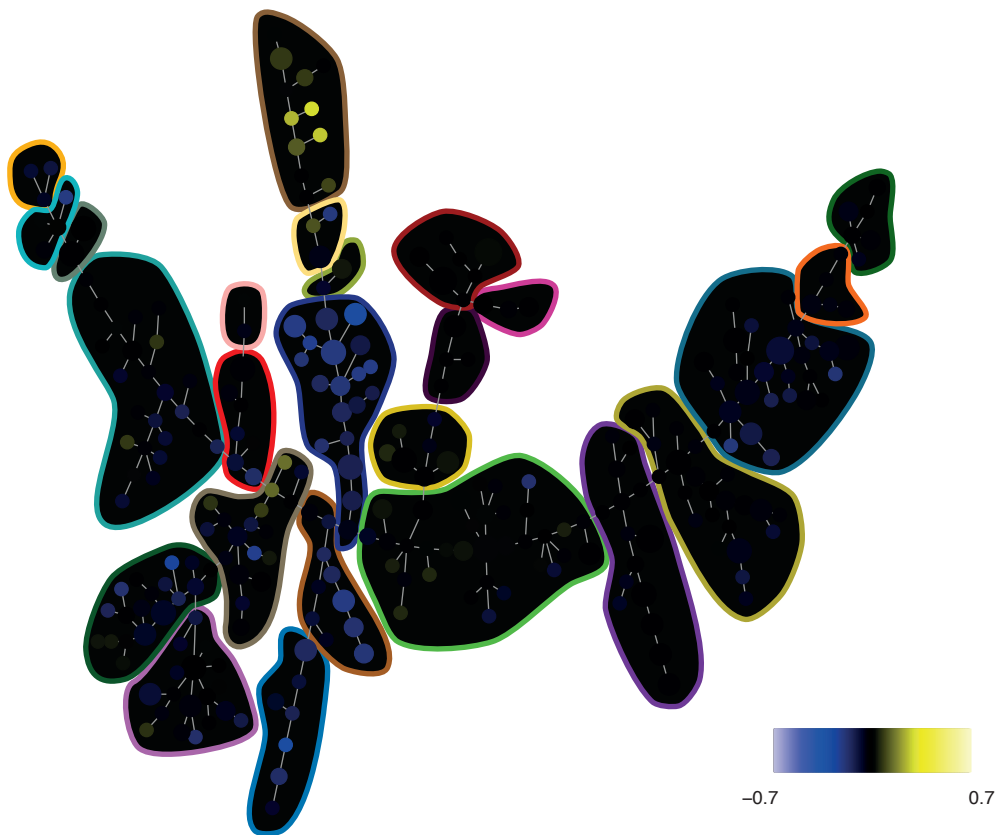


Figure S9A

156-pZAP70/Syk --- Flt3L vs Ref Ratio

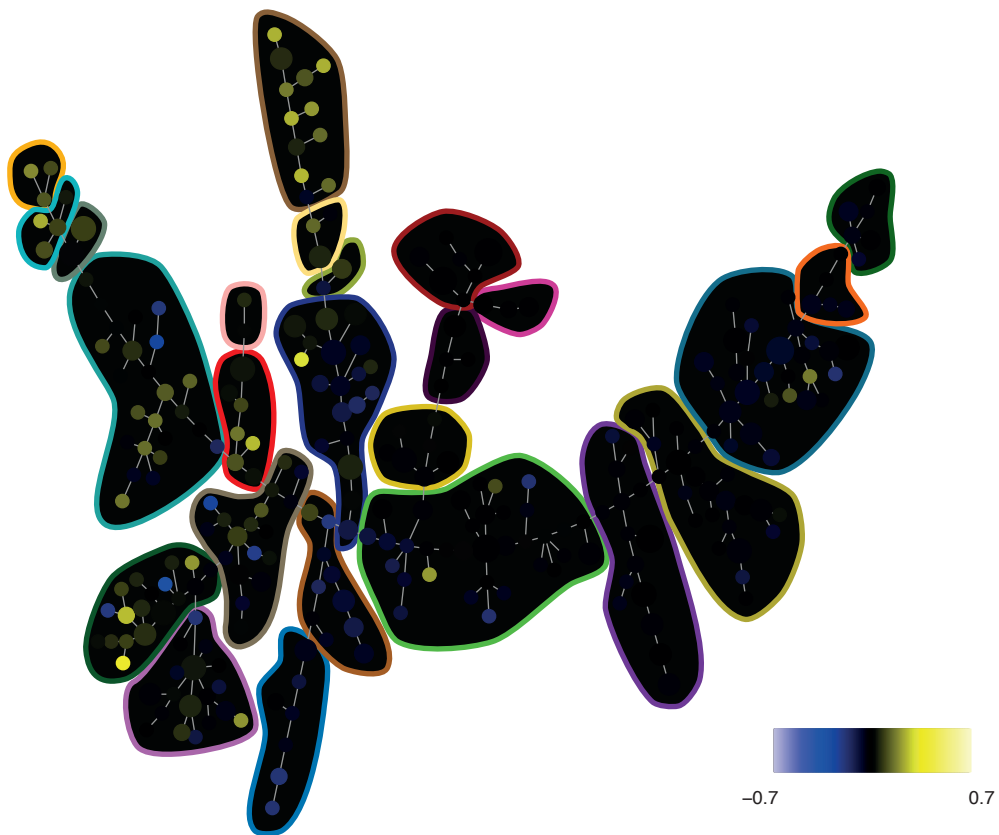


Figure S9A

156-pZAP70/Syk --- GCSF vs Ref Ratio

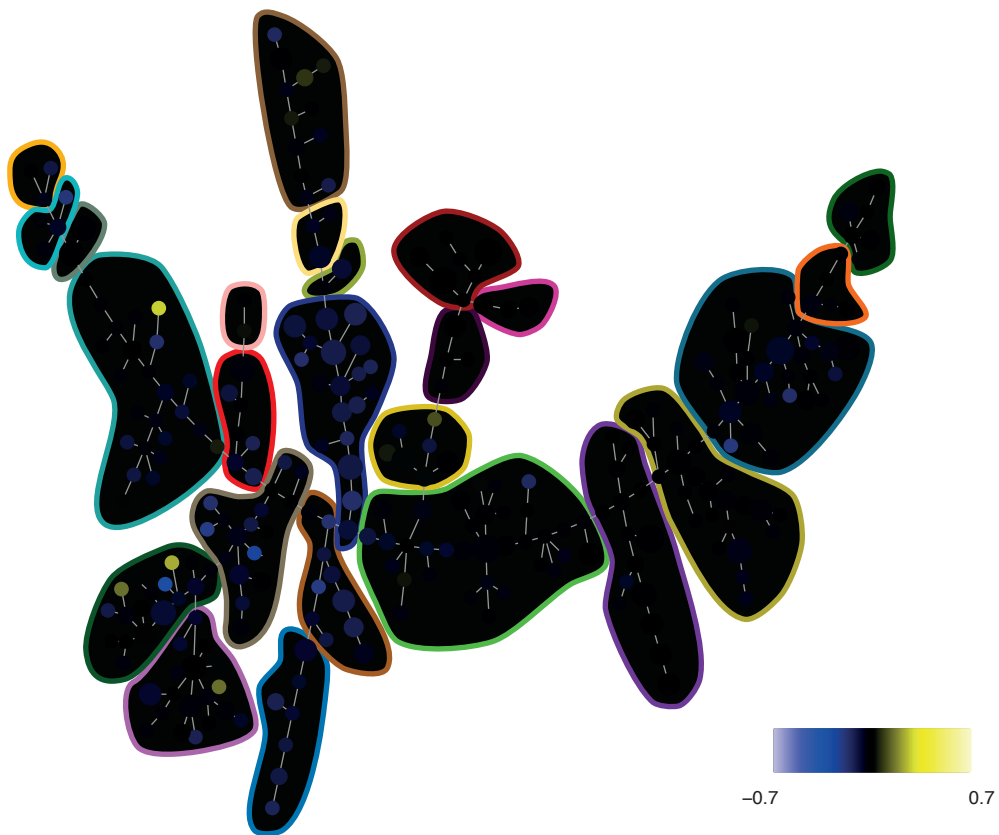


Figure S9A

156-pZAP70/Syk — GMCSF vs Ref Ratio

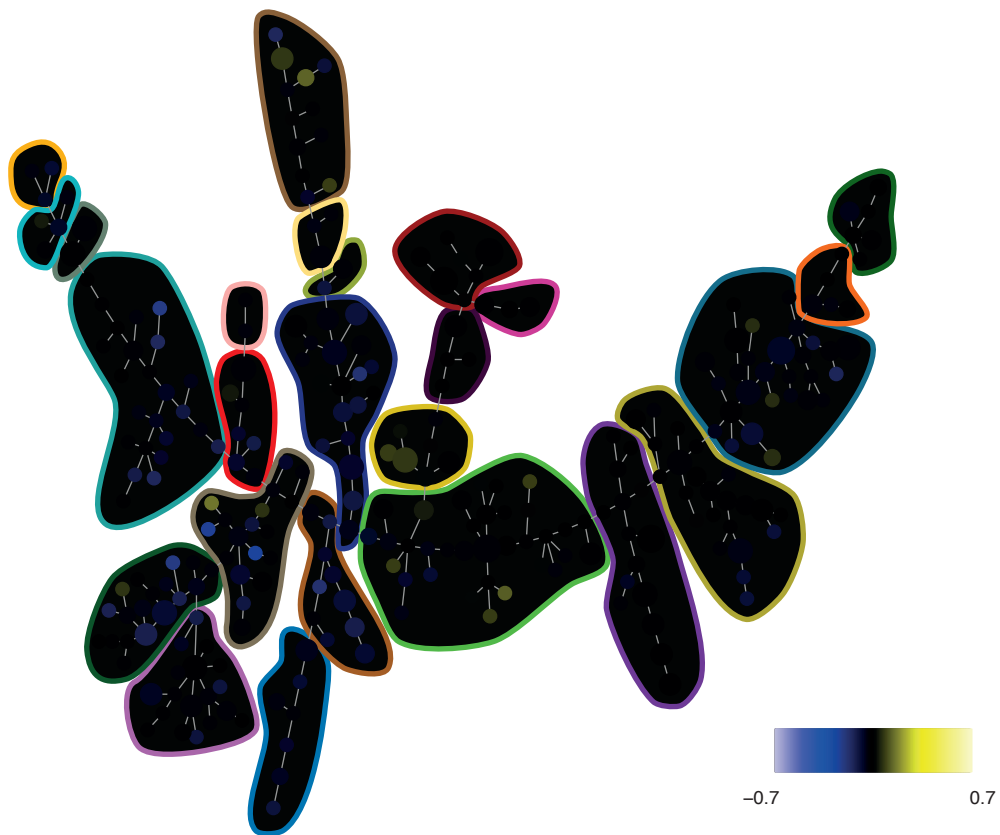


Figure S9A

156-pZAP70/Syk ---- IFNad vs Ref Ratio

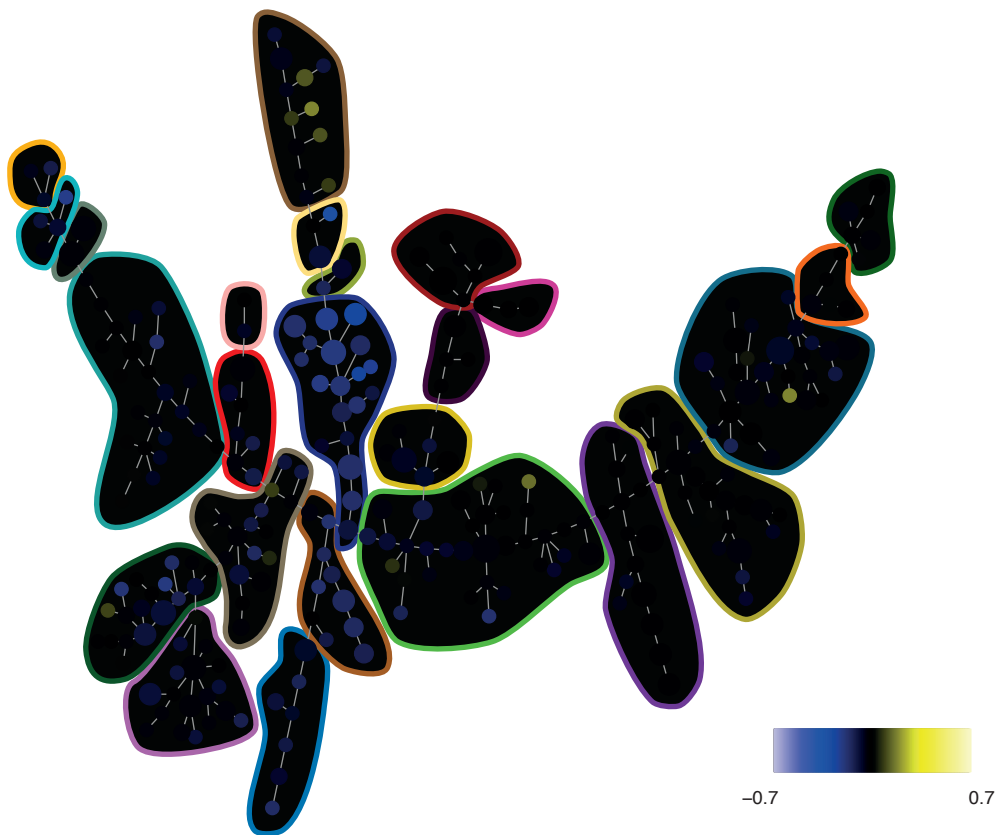


Figure S9A

156-pZAP70/Syk ---- IL3 vs Ref Ratio

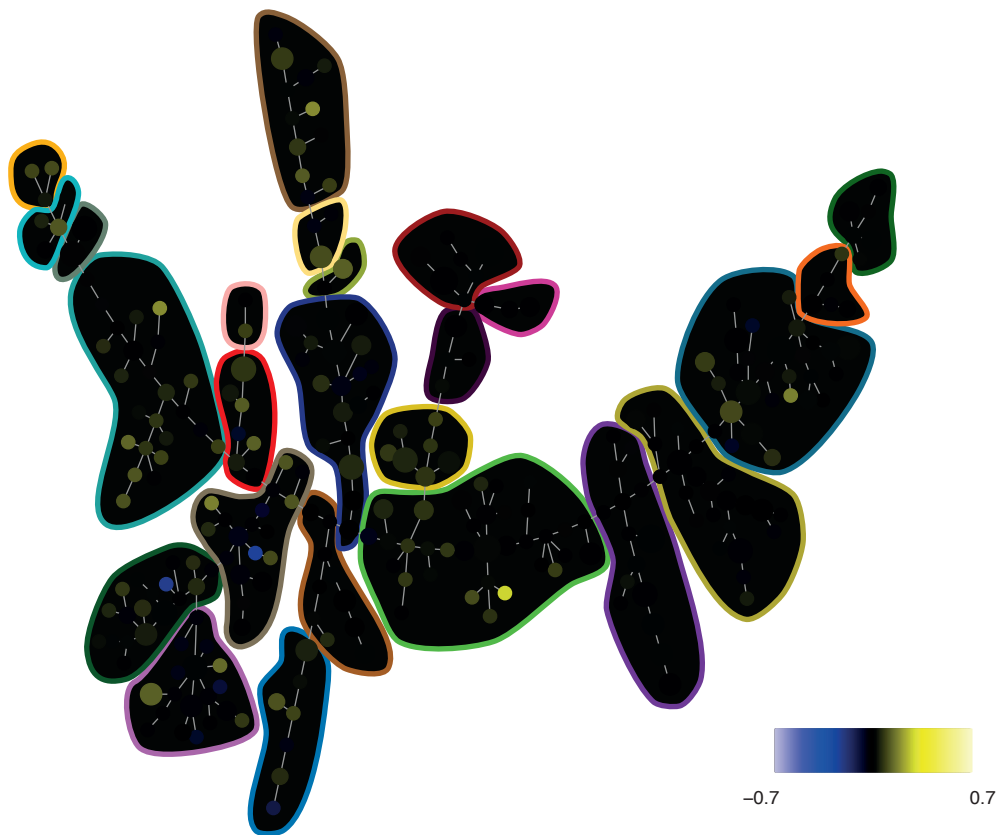


Figure S9A

156-pZAP70/Syk ---- IL7 vs Ref Ratio

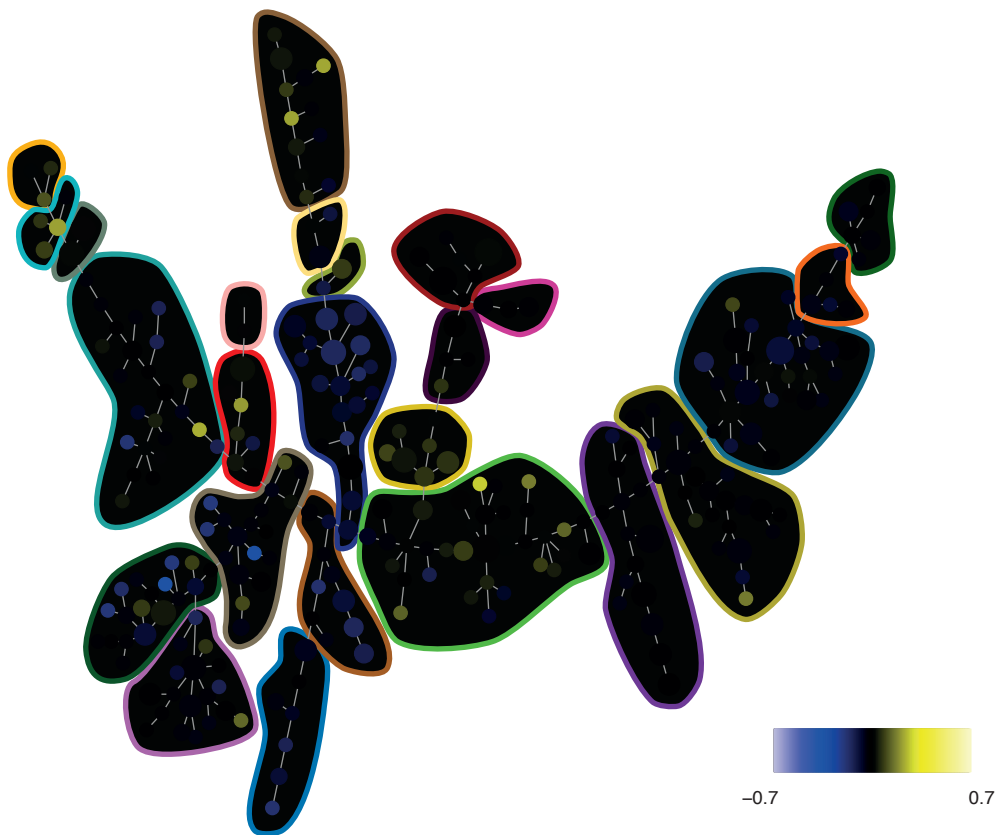


Figure S9A

156-pZAP70/Syk ---- LPS vs Ref Ratio

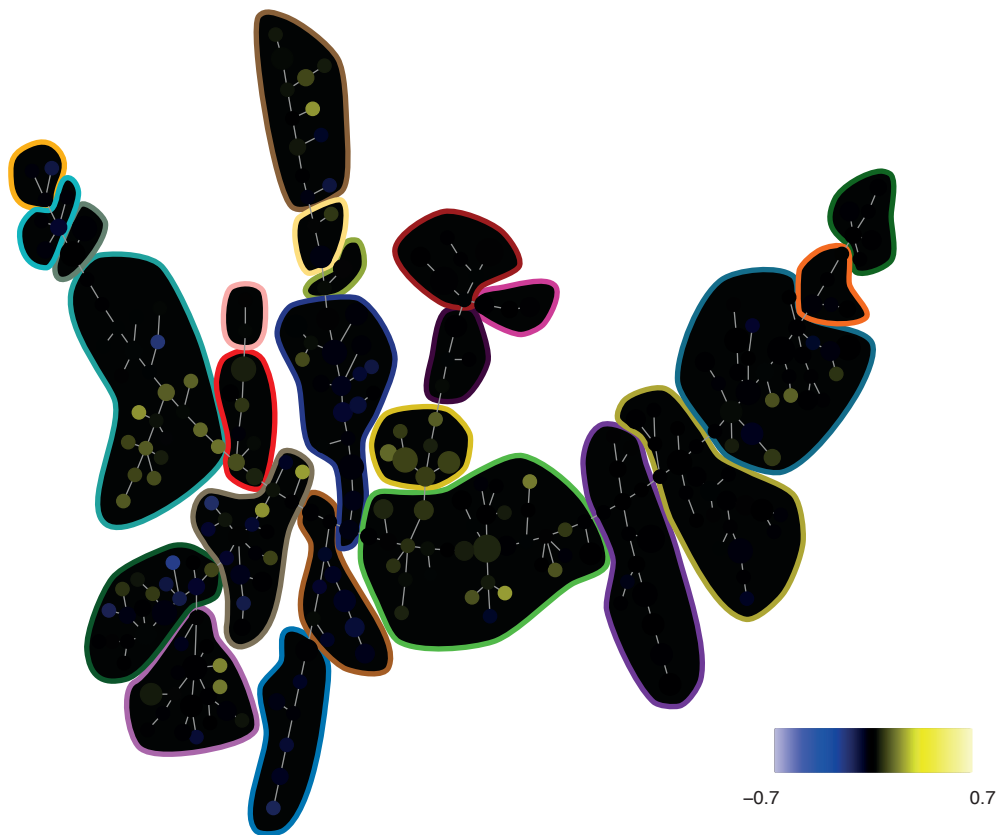


Figure S9A

156-pZAP70/Syk ---- PMAiono vs Ref Ratio

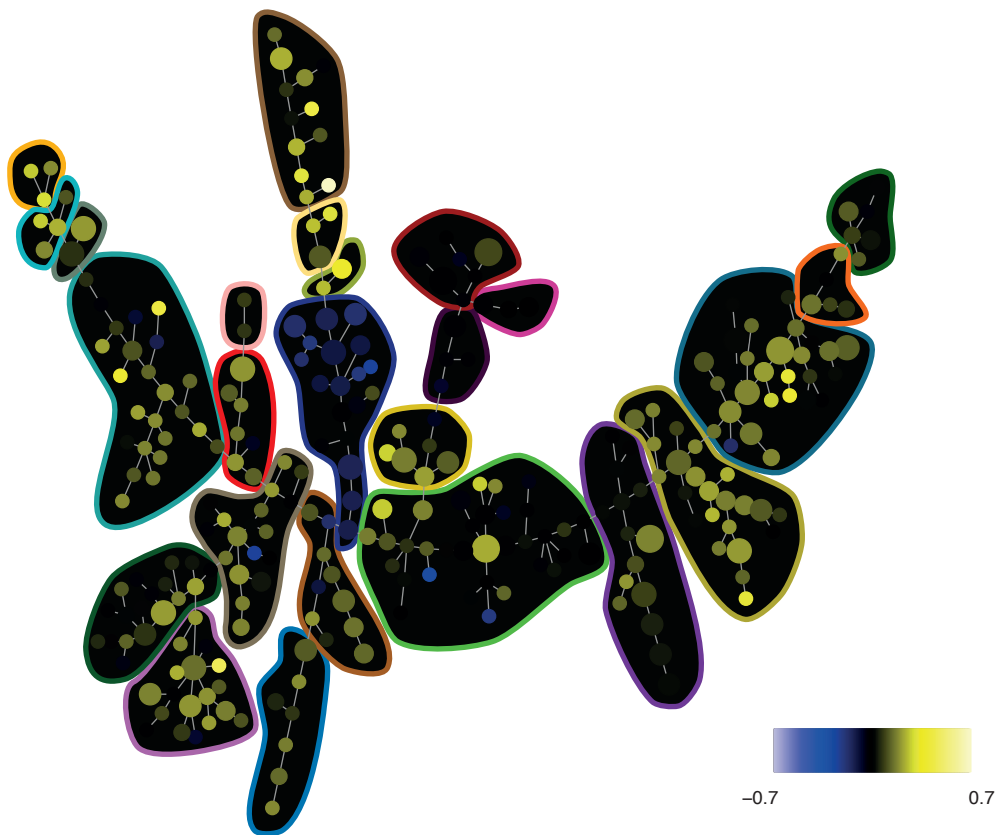


Figure S9A

156-pZAP70/Syk ---- PVO4 vs Ref Ratio

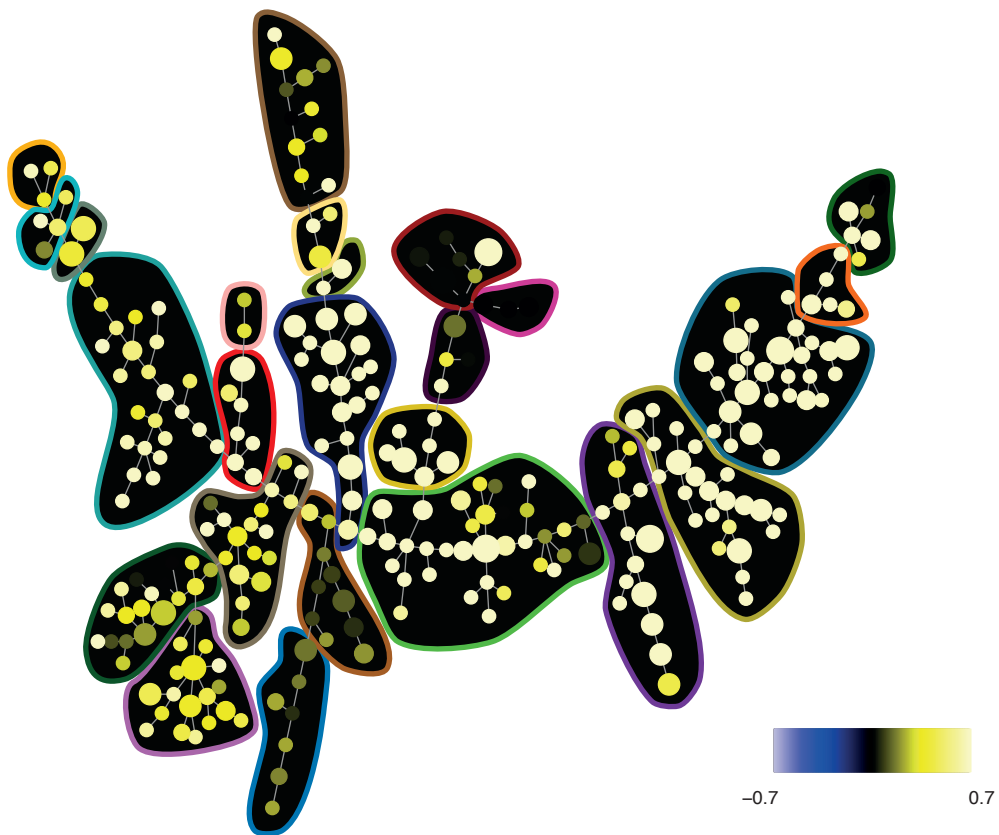


Figure S9A

156-pZAP70/Syk ---- SCF vs Ref Ratio

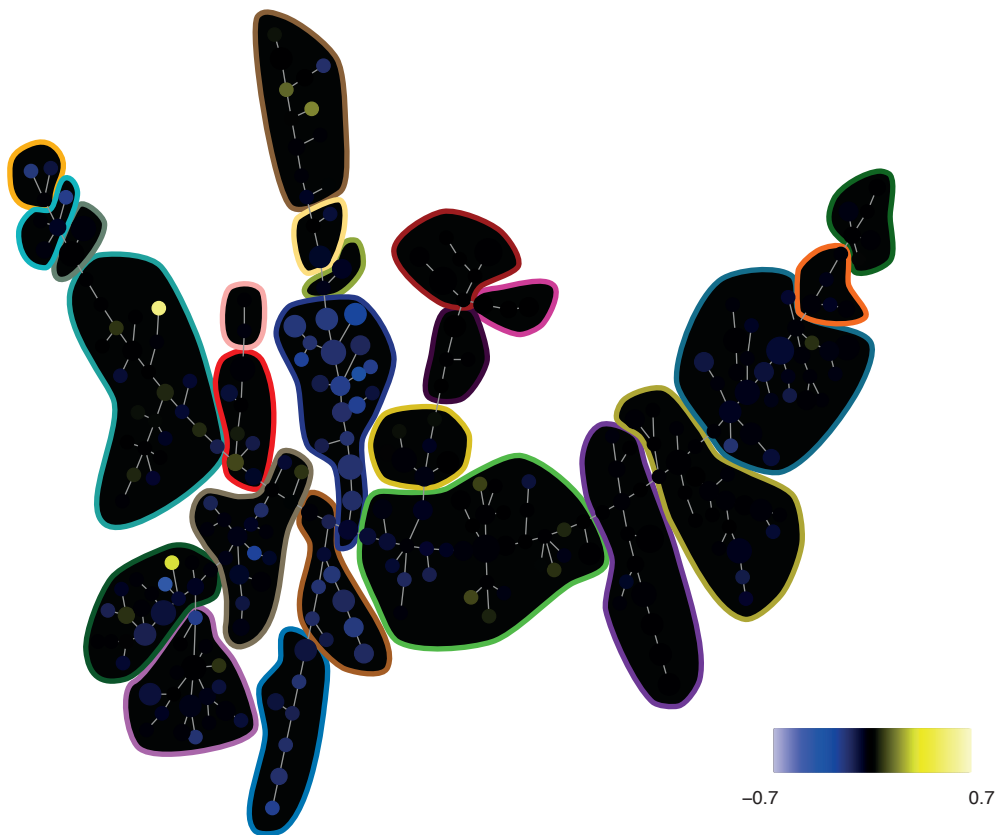


Figure S9A

156-pZAP70/Syk ---- TNFa vs Ref Ratio

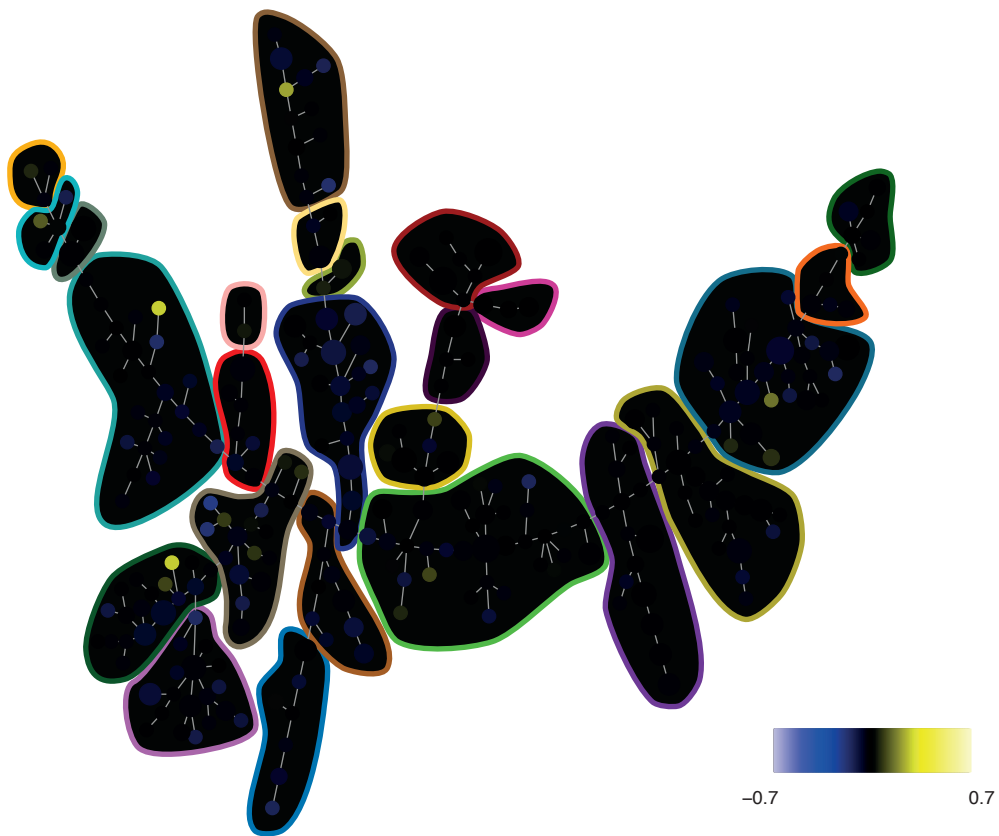


Figure S9A

156-pZAP70/Syk --- TPO vs Ref Ratio

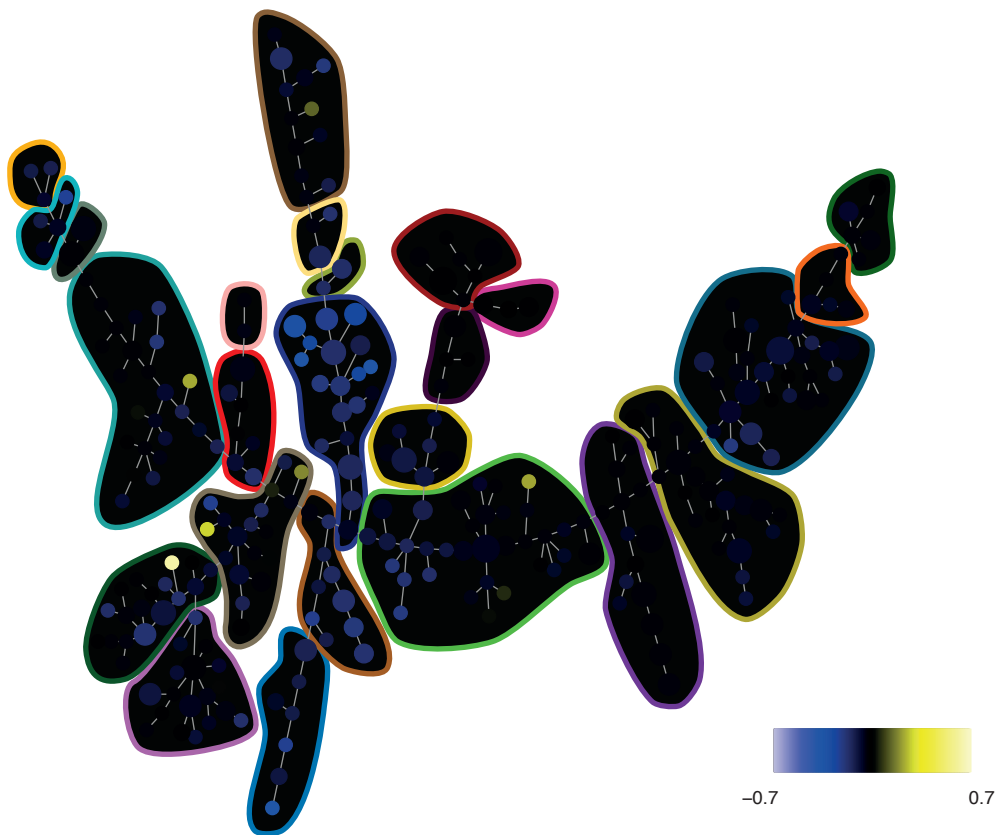


Figure S9A

159-pSTAT3 ---- BCR vs Ref Ratio

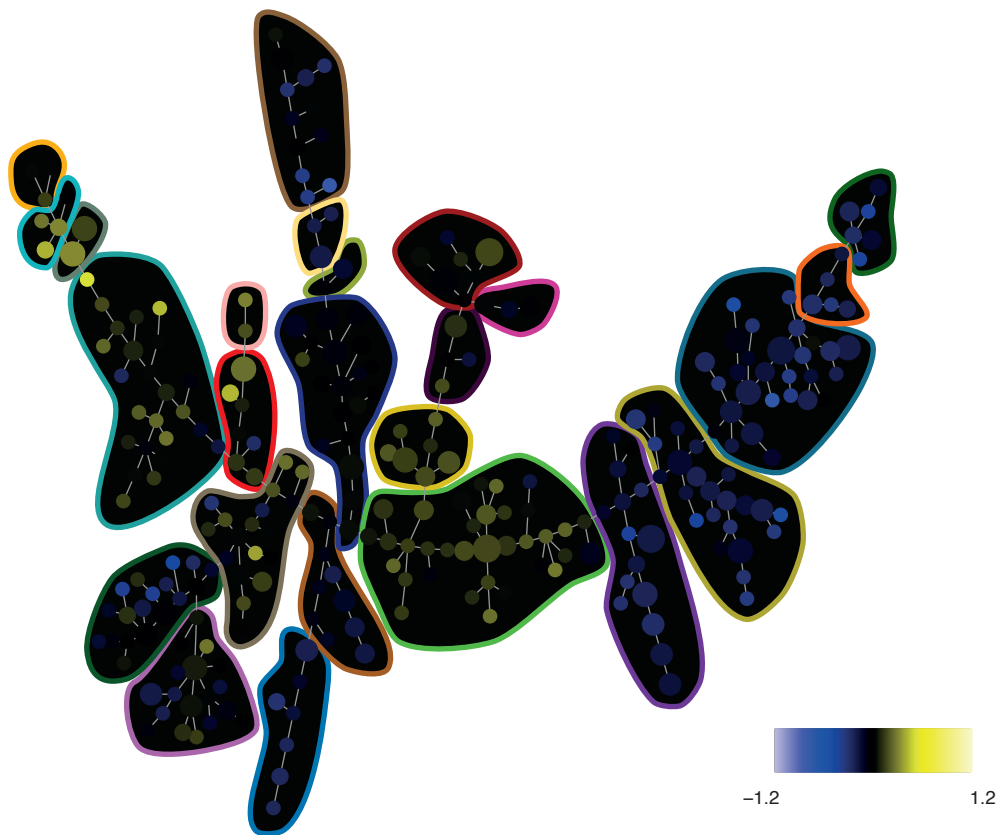


Figure S9A

159-pSTAT3 ---- DMSO vs Ref Ratio

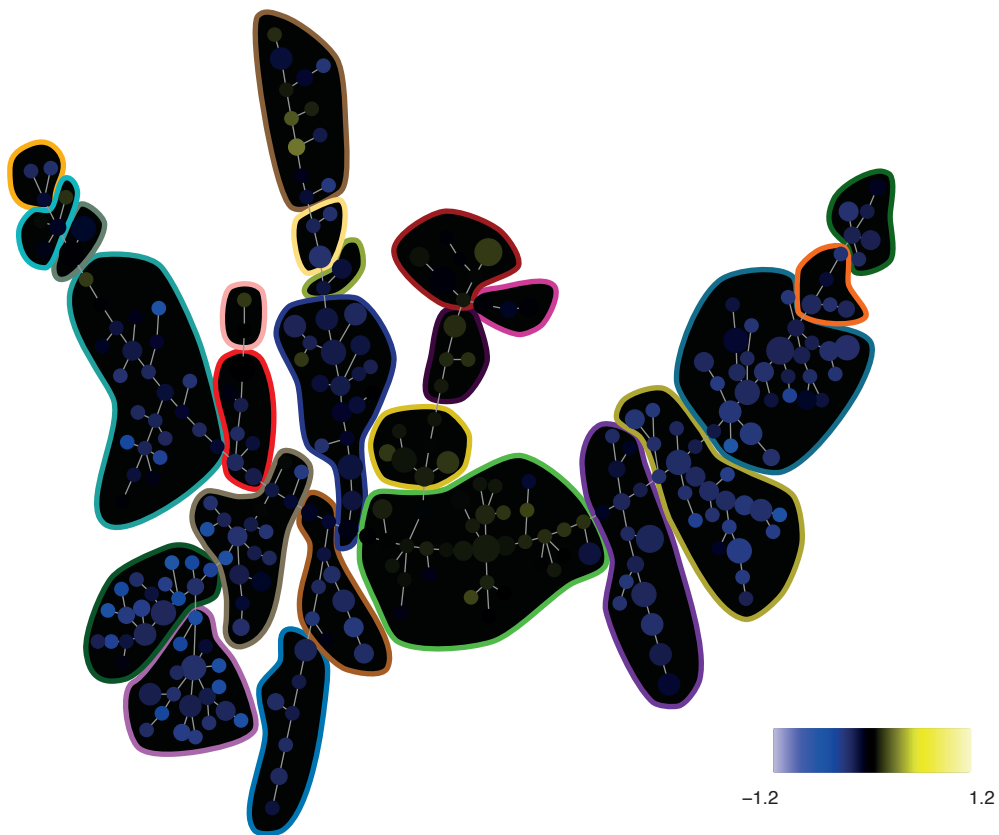


Figure S9A

159-pSTAT3 ---- Flt3L vs Ref Ratio

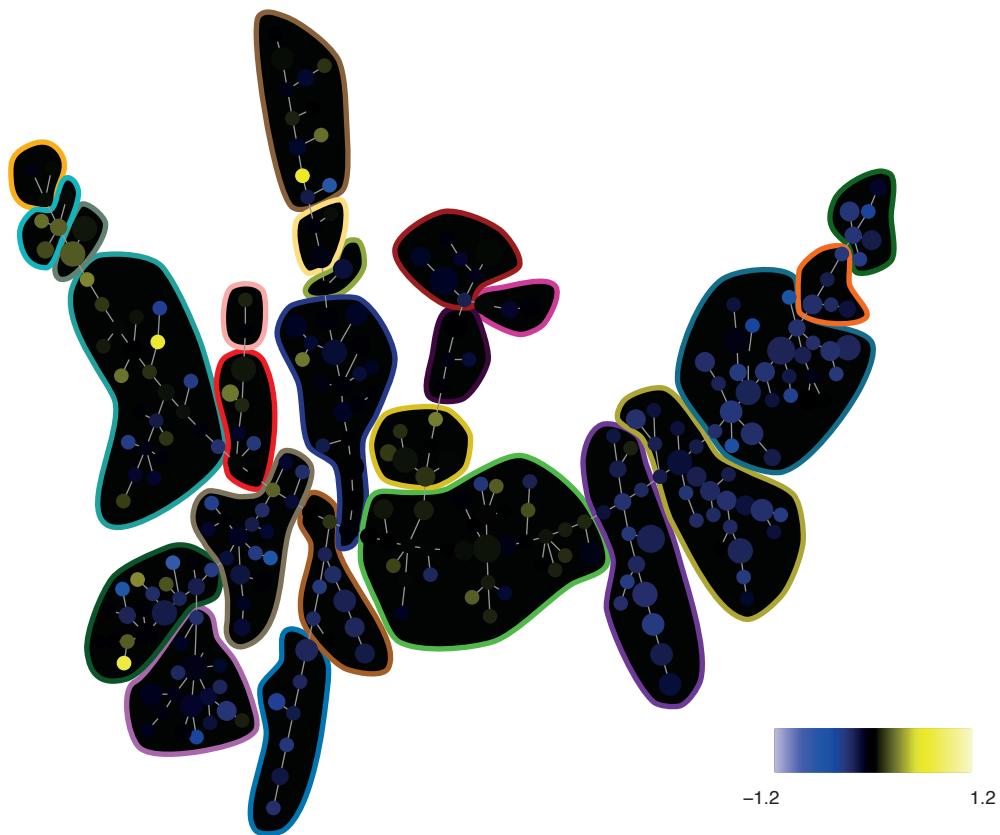


Figure S9A

159-pSTAT3 --- GCSF vs Ref Ratio

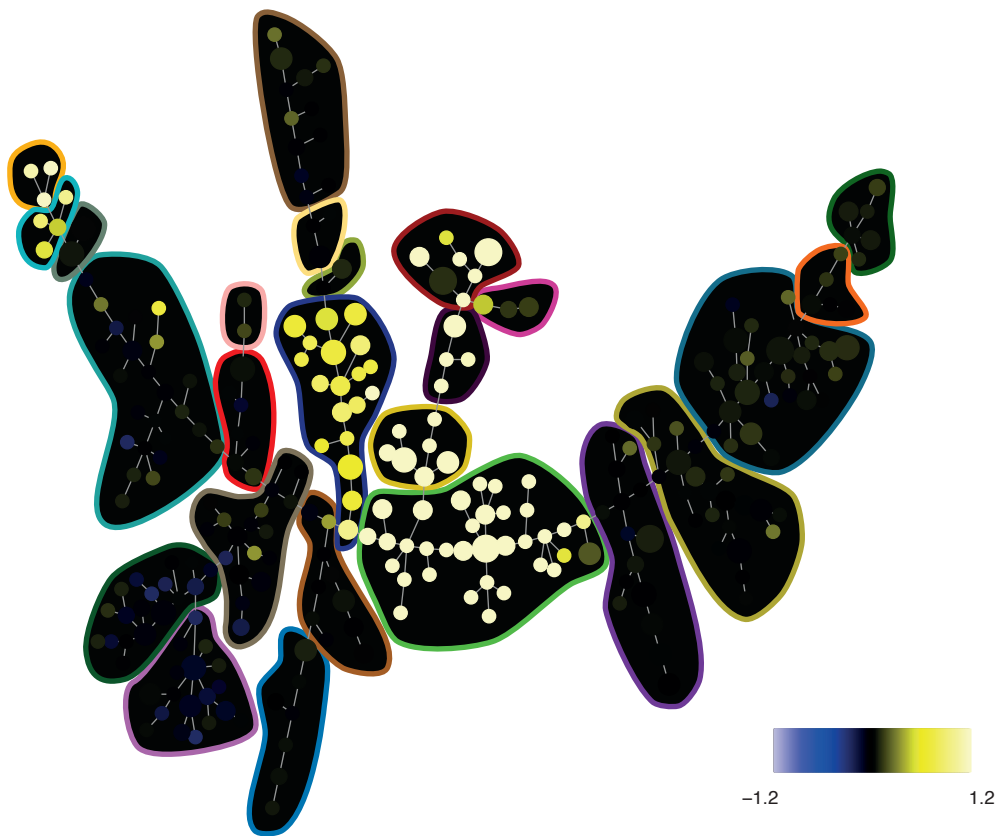


Figure S9A

159-pSTAT3 ---- GMCSF vs Ref Ratio

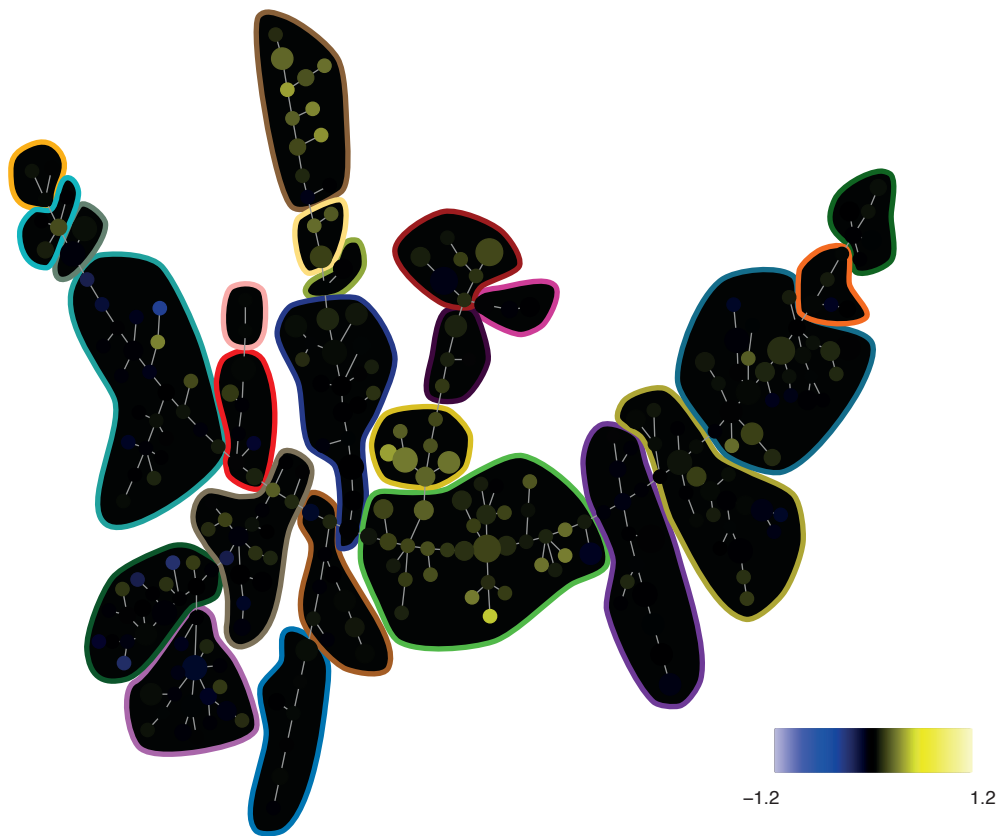


Figure S9A

159-pSTAT3 ---- IFNad vs Ref Ratio

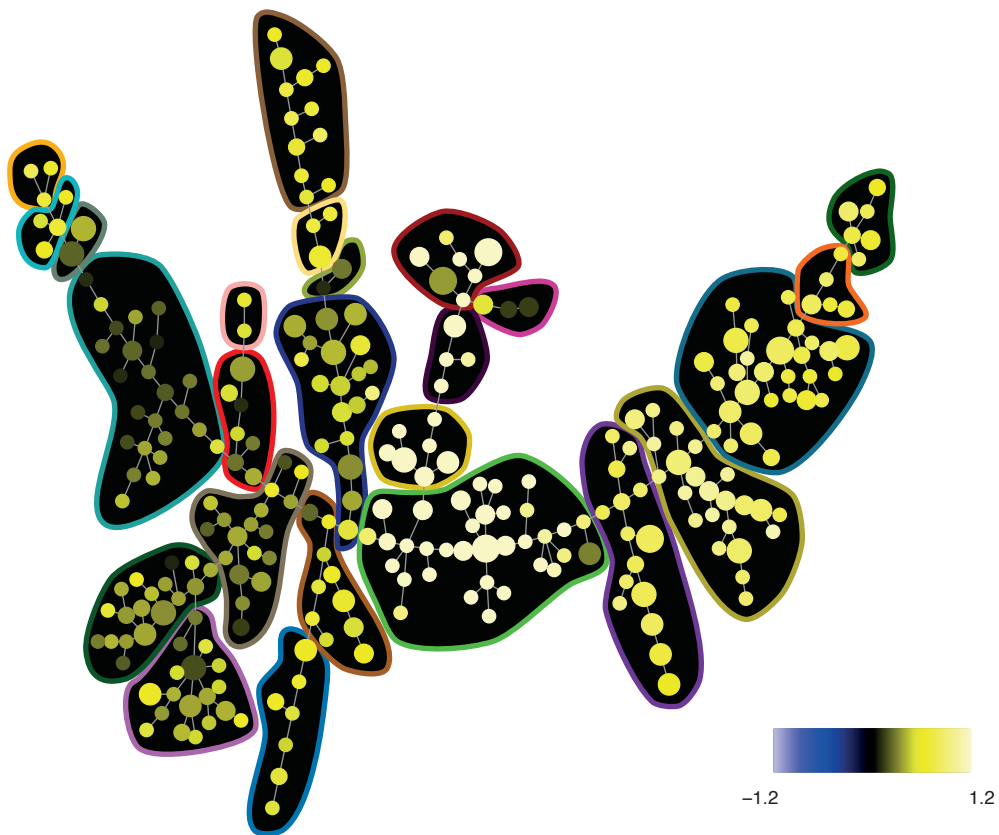


Figure S9A

159-pSTAT3 --- IL3 vs Ref Ratio



Figure S9A

159-pSTAT3 ---- IL7 vs Ref Ratio

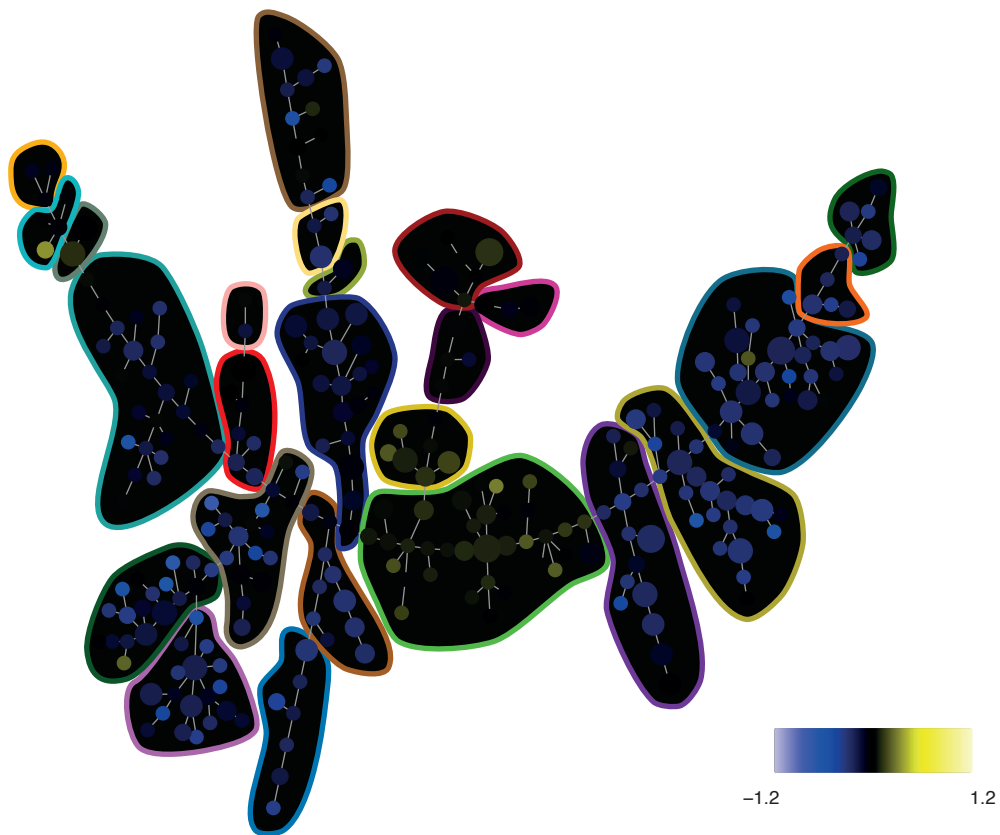


Figure S9A

159-pSTAT3 ---- LPS vs Ref Ratio

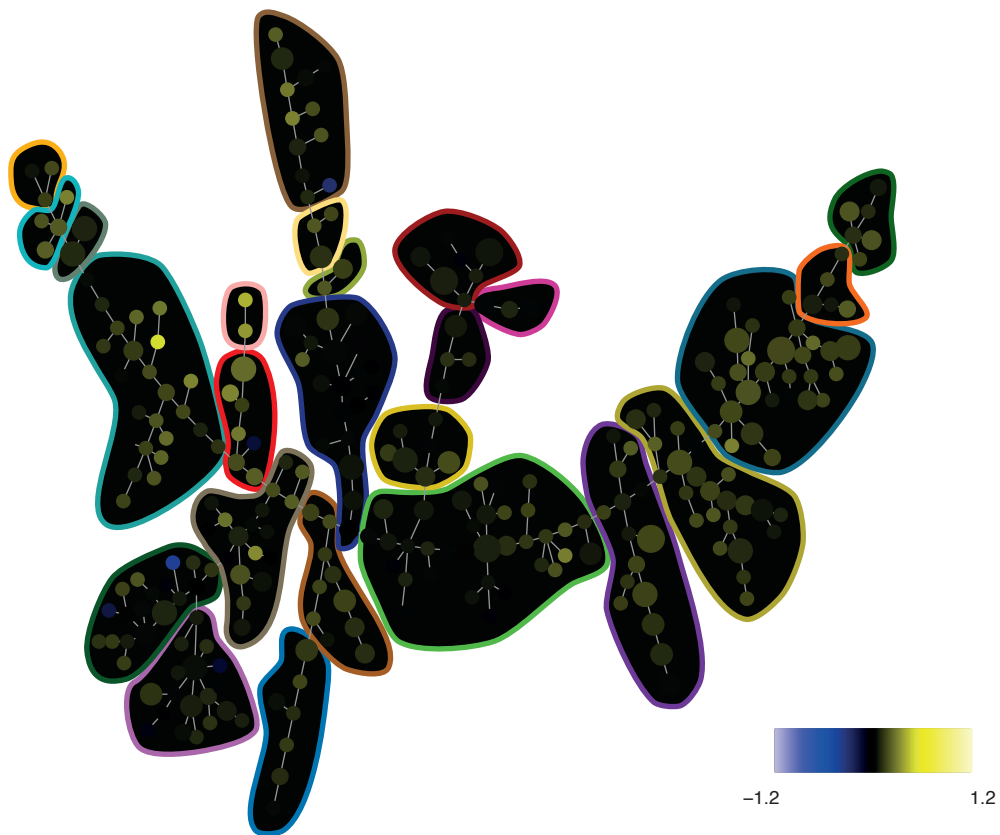


Figure S9A

159-pSTAT3 --- PMAiono vs Ref Ratio

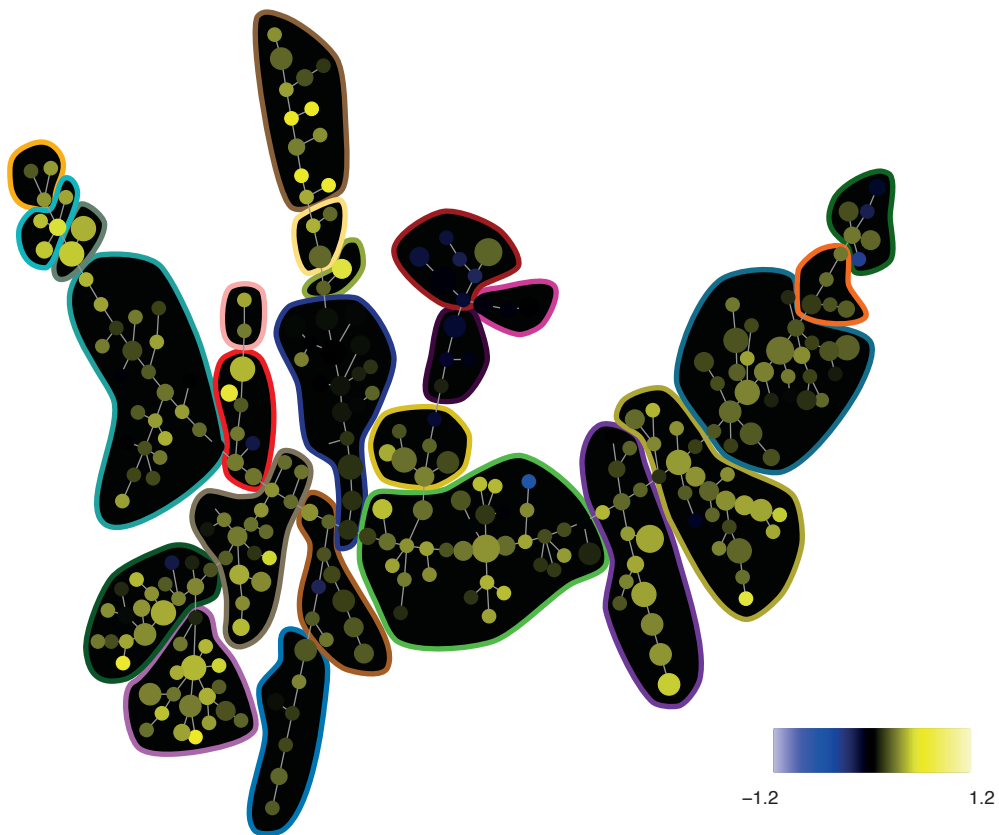


Figure S9A

159-pSTAT3 ---- PVO4 vs Ref Ratio



Figure S9A

159-pSTAT3 ---- SCF vs Ref Ratio

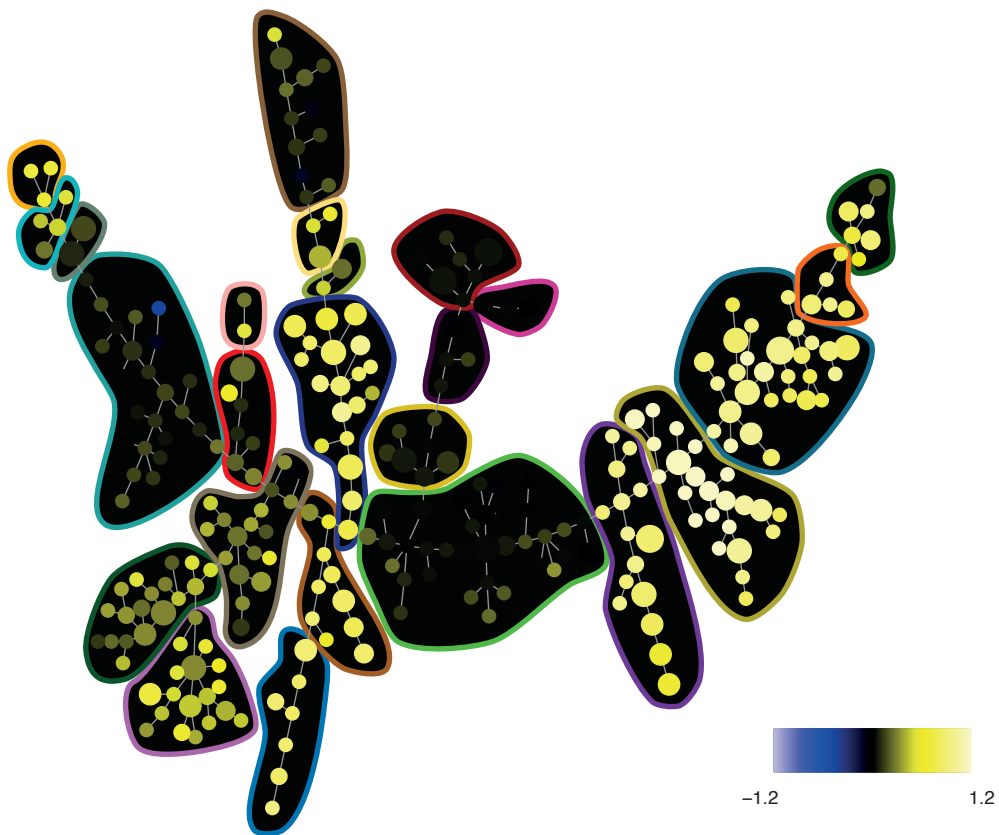


Figure S9A

159-pSTAT3 ---- TNFa vs Ref Ratio

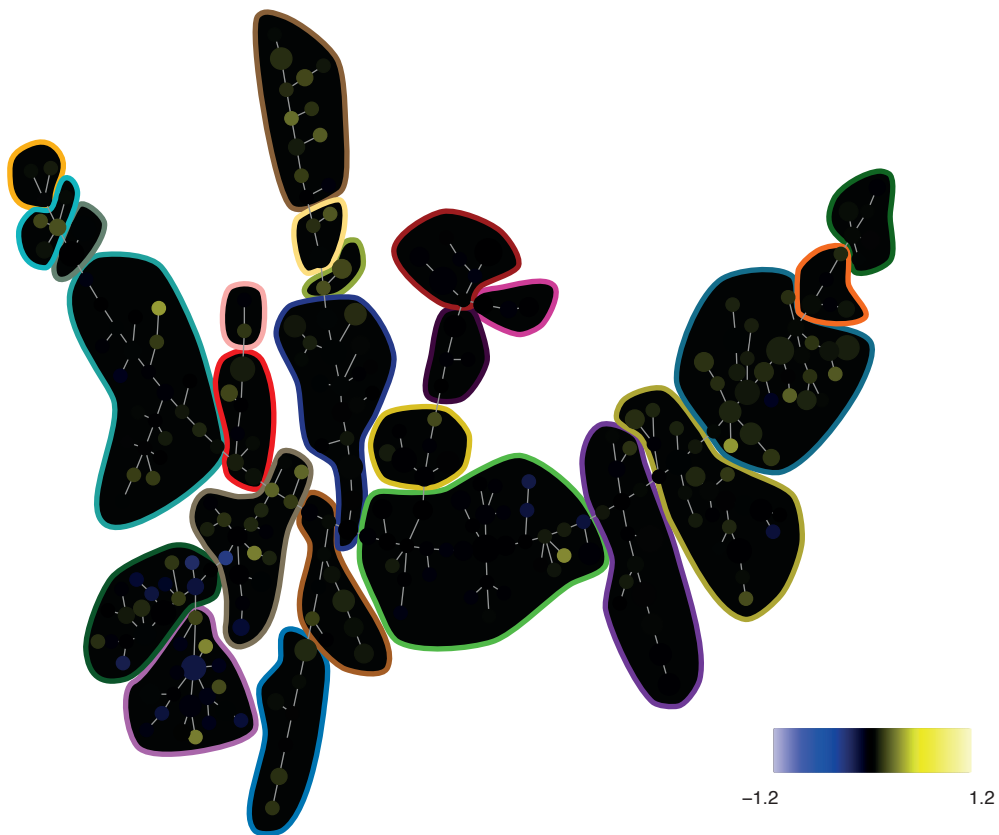


Figure S9A

159-pSTAT3 ---- TPO vs Ref Ratio

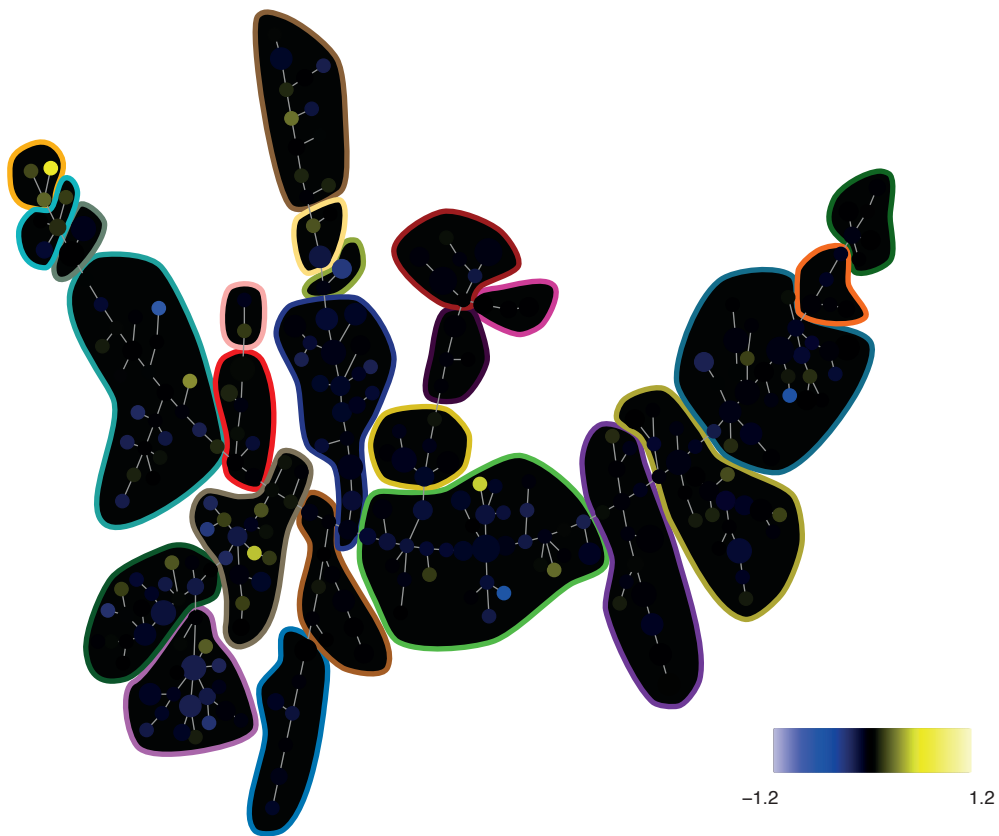


Figure S9A

164-pSLP-76 ---- BCR vs Ref Ratio

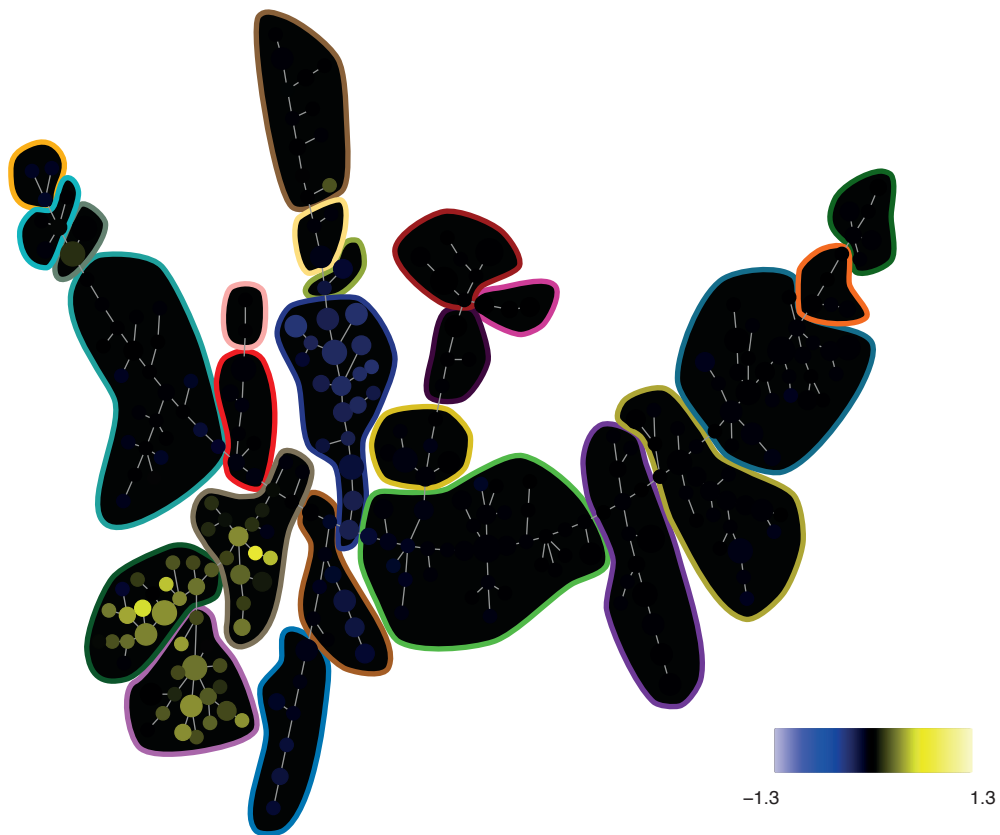


Figure S9A

164-pSLP-76 --- DMSO vs Ref Ratio

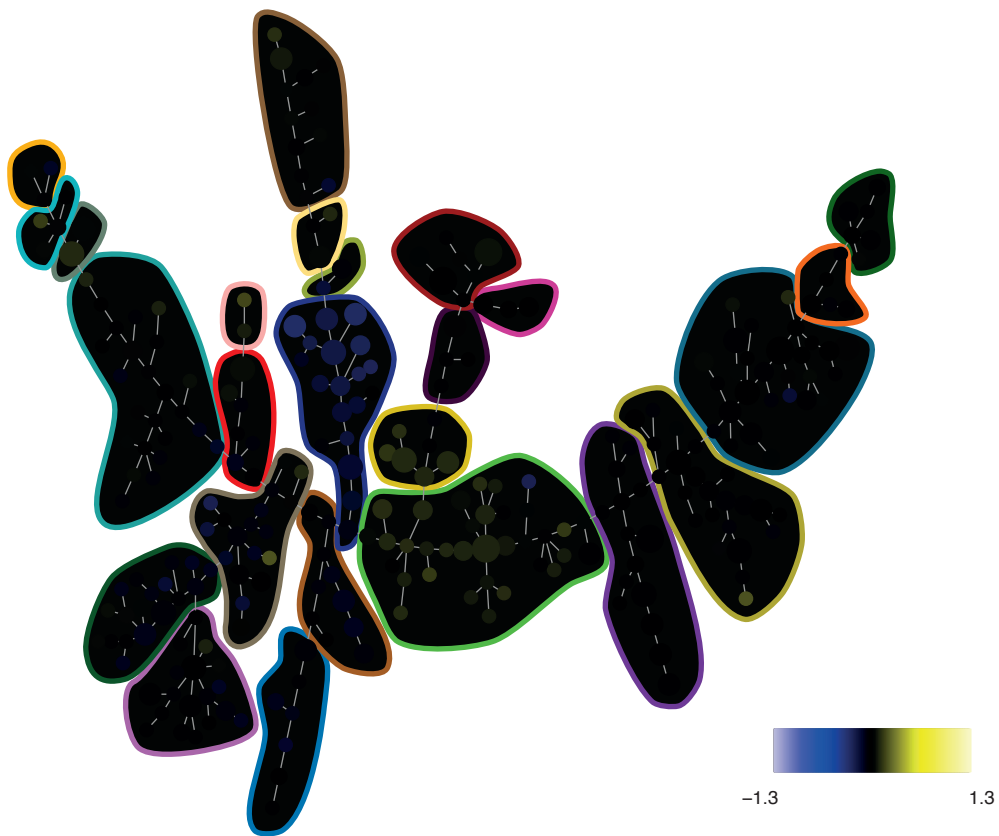


Figure S9A

164-pSLP-76 ---- Flt3L vs Ref Ratio

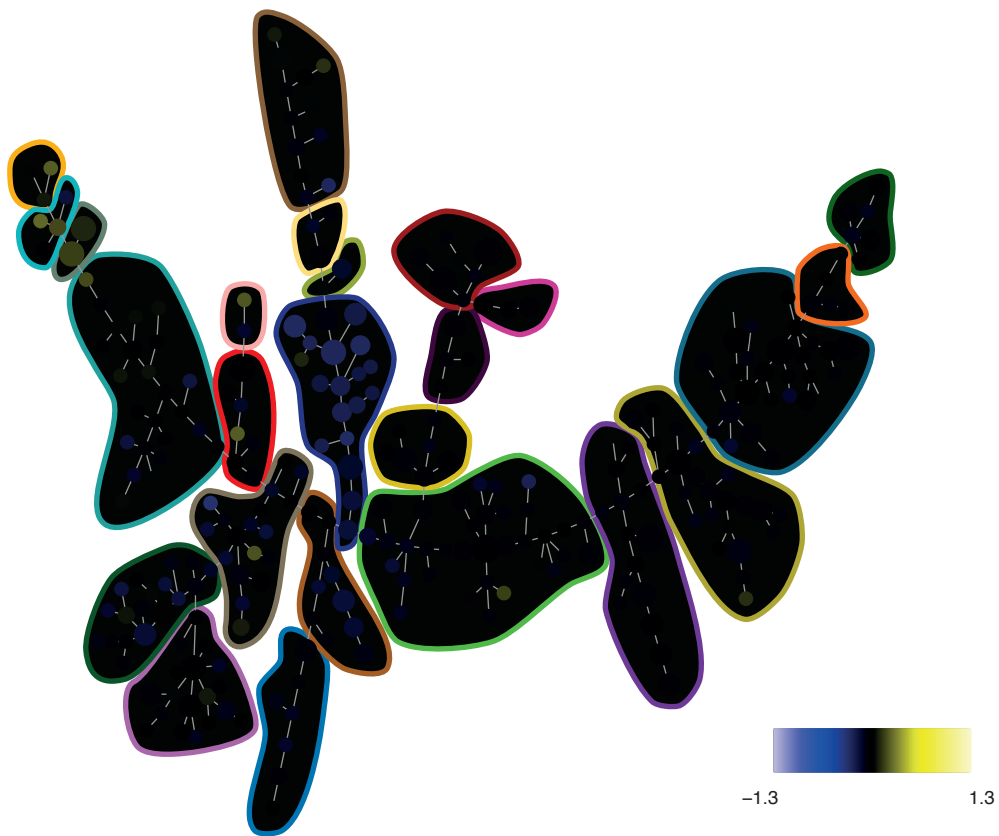


Figure S9A

164-pSLP-76 ---- GCSF vs Ref Ratio

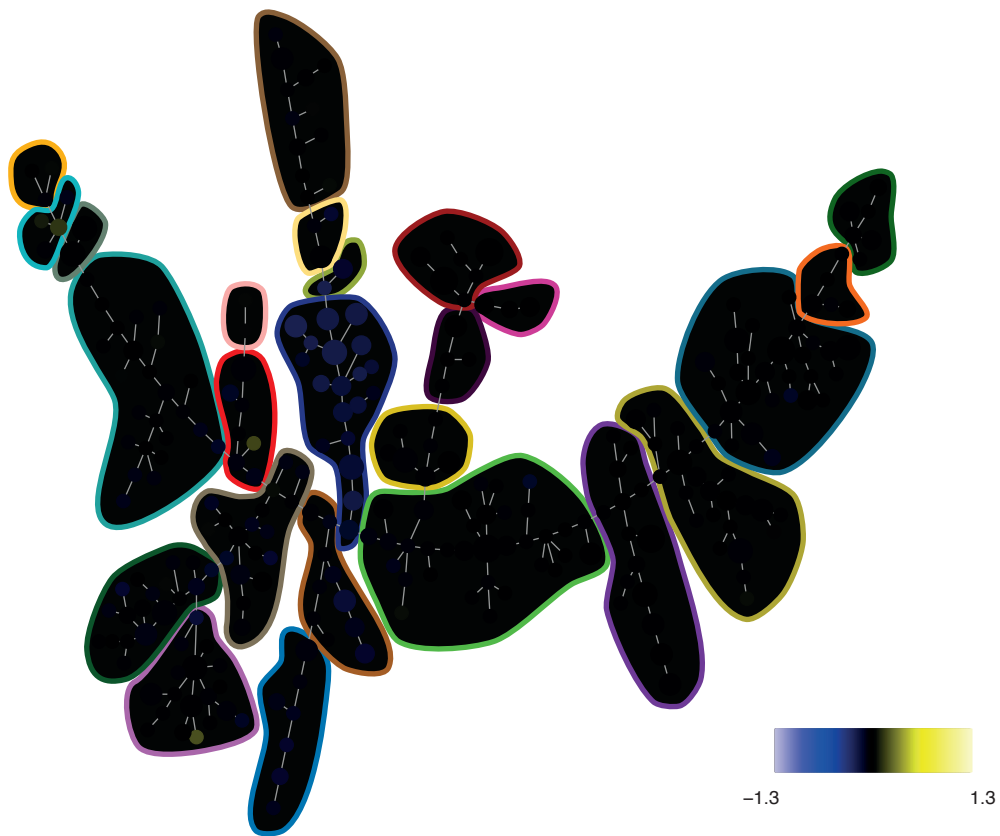


Figure S9A

164-pSLP-76 ---- GMCSF vs Ref Ratio

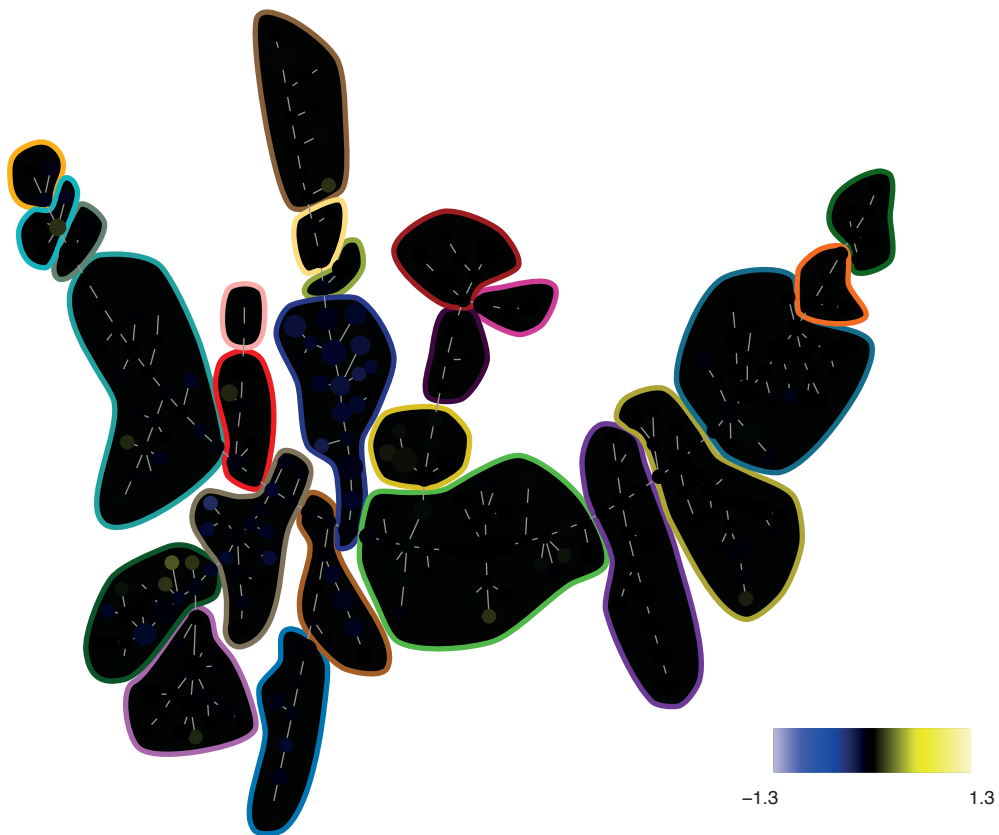


Figure S9A

164-pSLP-76 ---- IFNad vs Ref Ratio

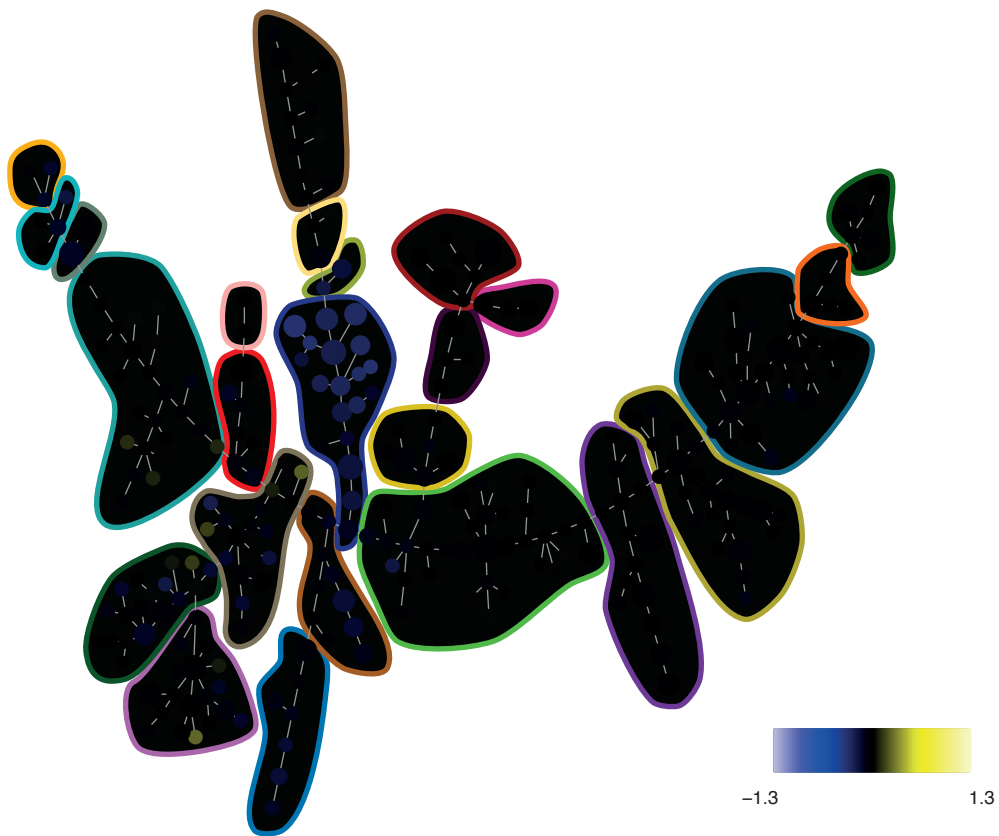


Figure S9A

164-pSLP-76 ---- IL3 vs Ref Ratio

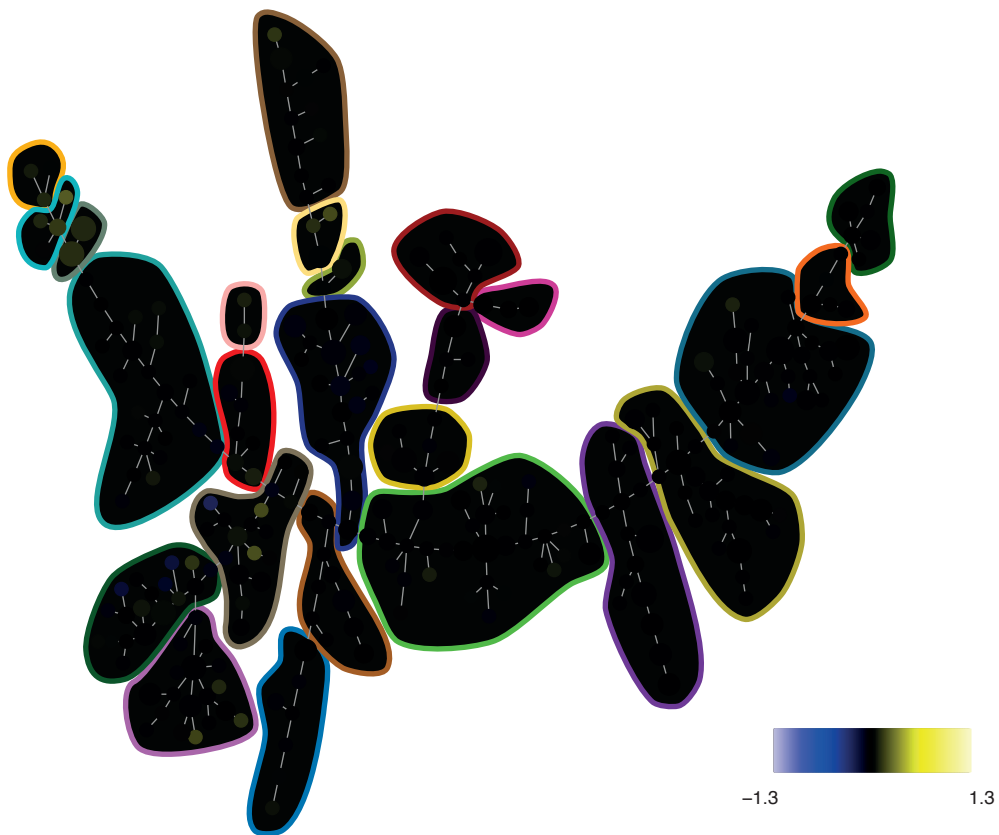


Figure S9A

164-pSLP-76 --- IL7 vs Ref Ratio

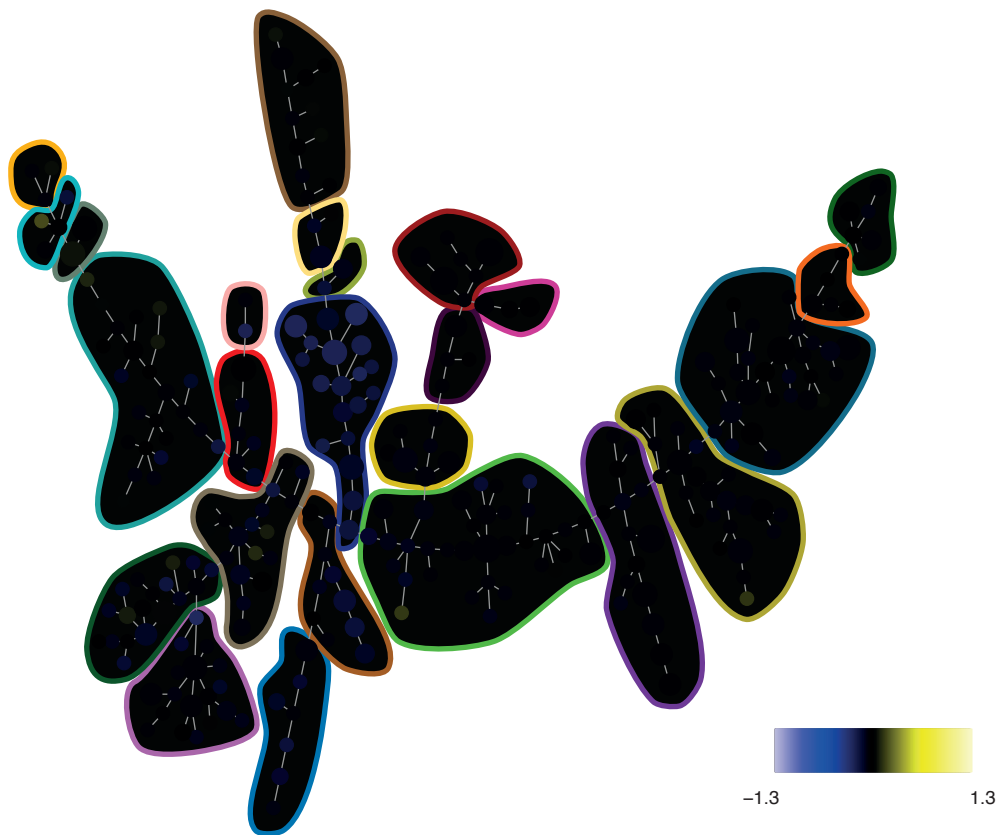


Figure S9A

164-pSLP-76 --- LPS vs Ref Ratio

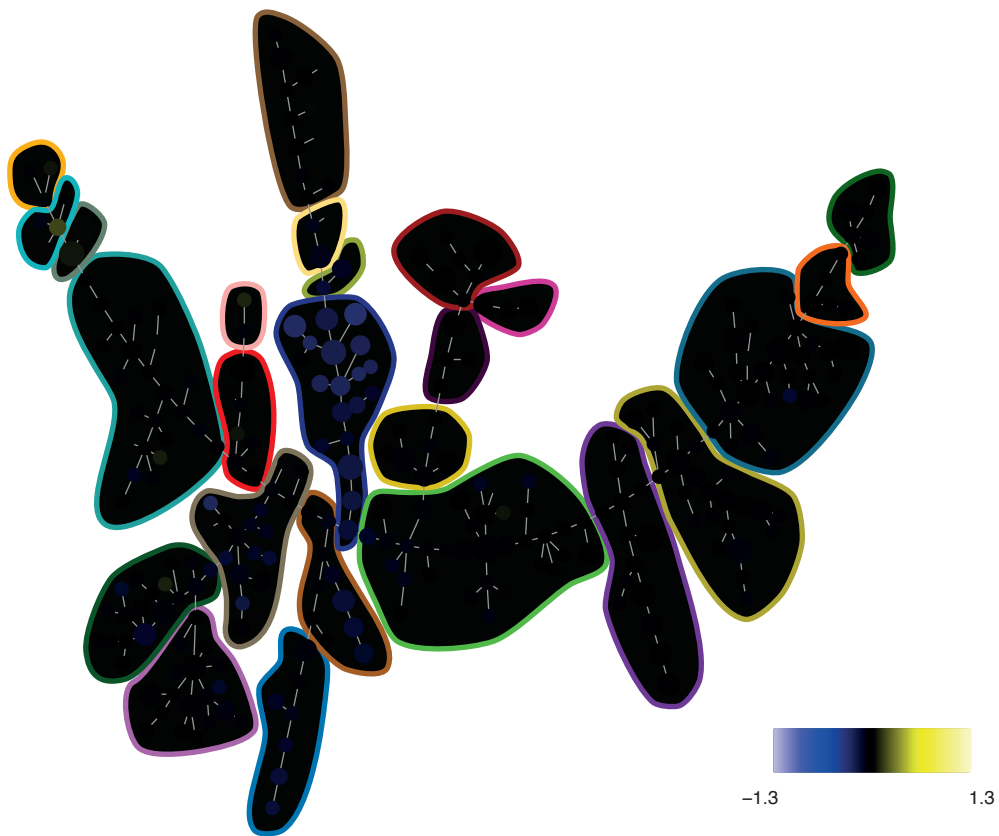


Figure S9A

164-pSLP-76 ---- PMAiono vs Ref Ratio

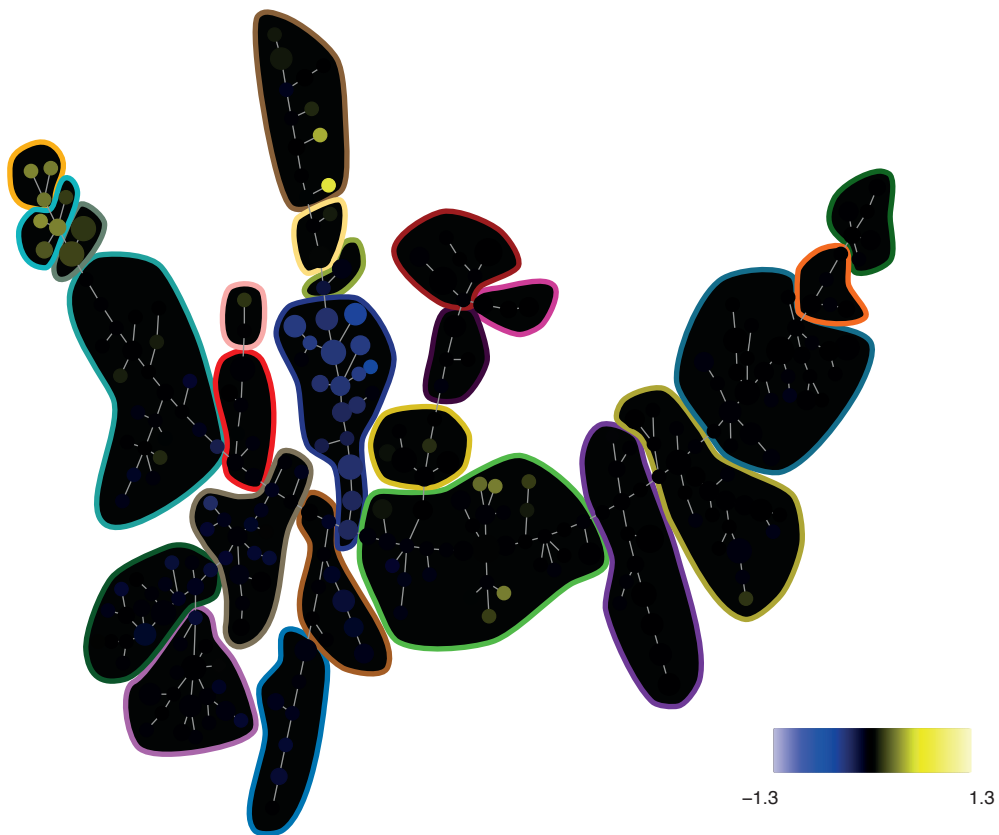


Figure S9A

164-pSLP-76 ---- PVO4 vs Ref Ratio

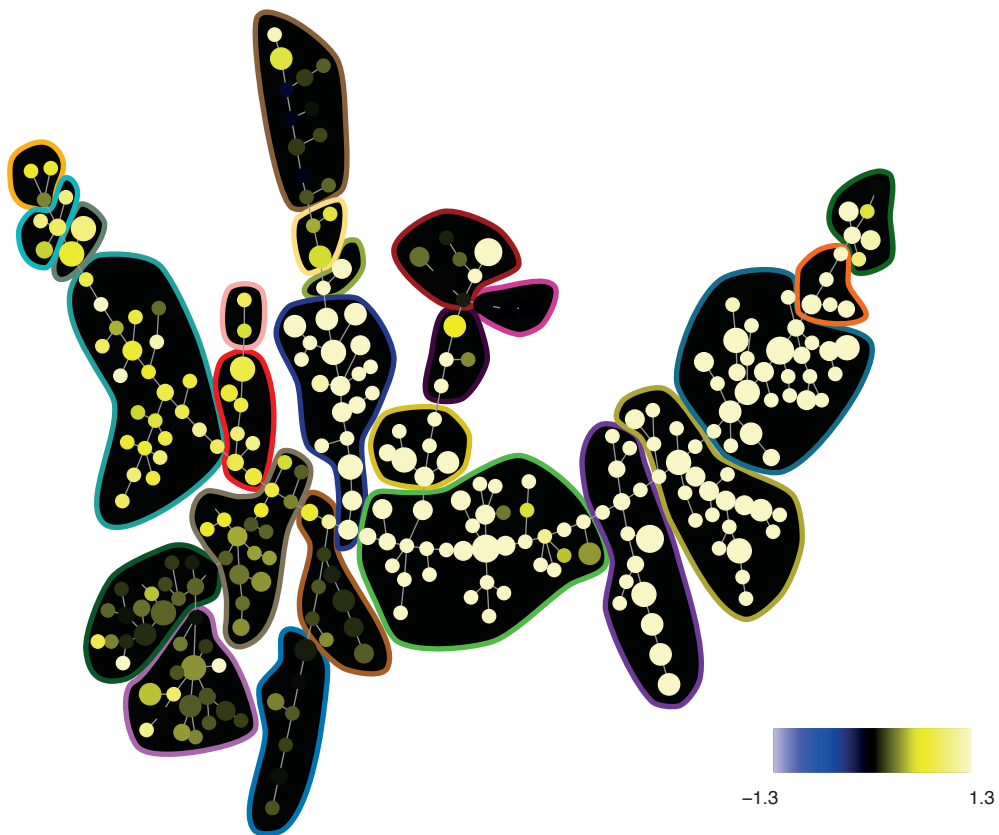


Figure S9A

164-pSLP-76 ---- SCF vs Ref Ratio

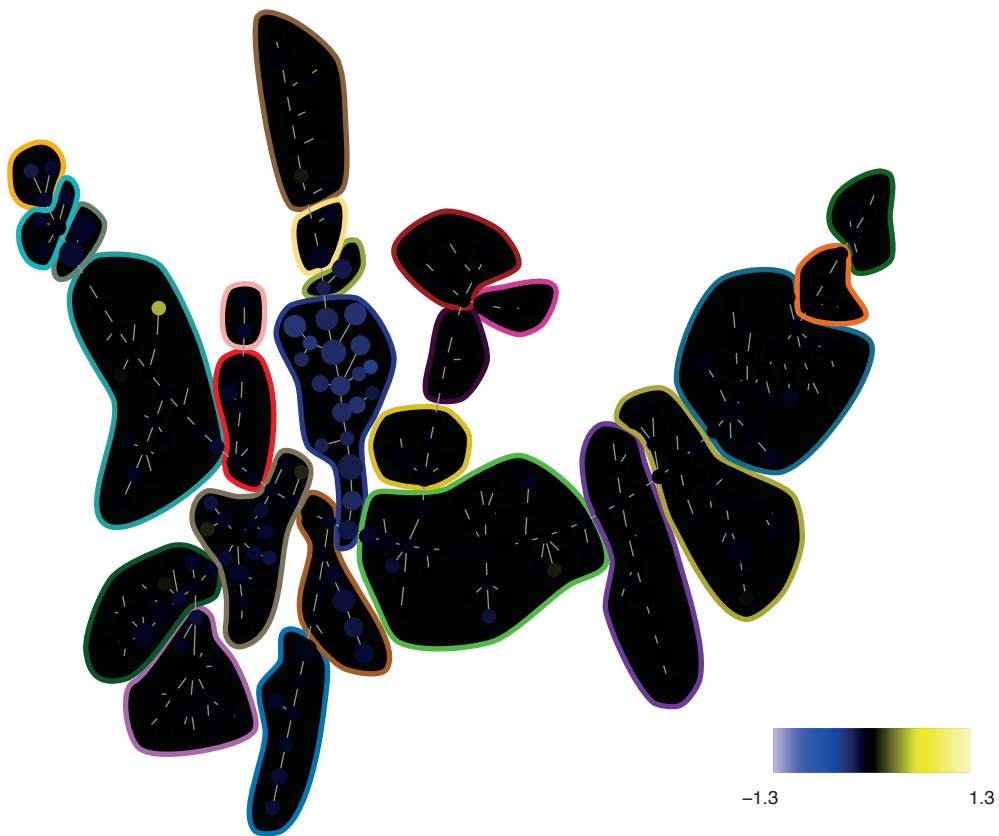


Figure S9A

164-pSLP-76 ---- TNFa vs Ref Ratio

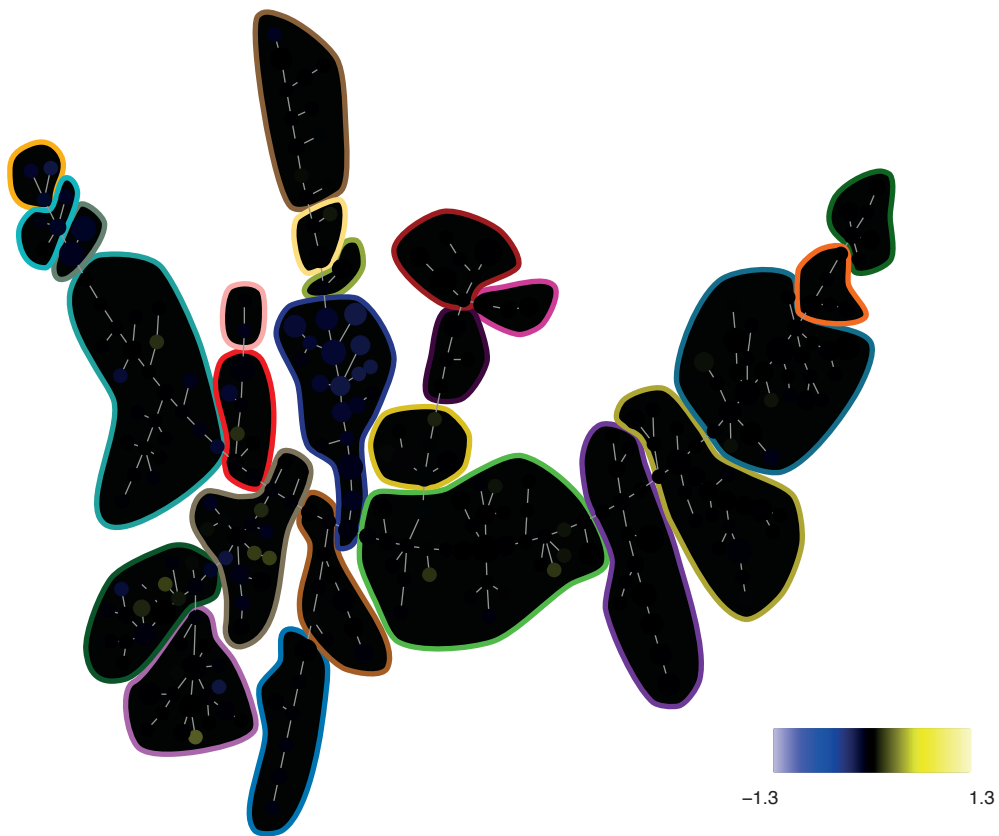


Figure S9A

164-pSLP-76 ---- TPO vs Ref Ratio

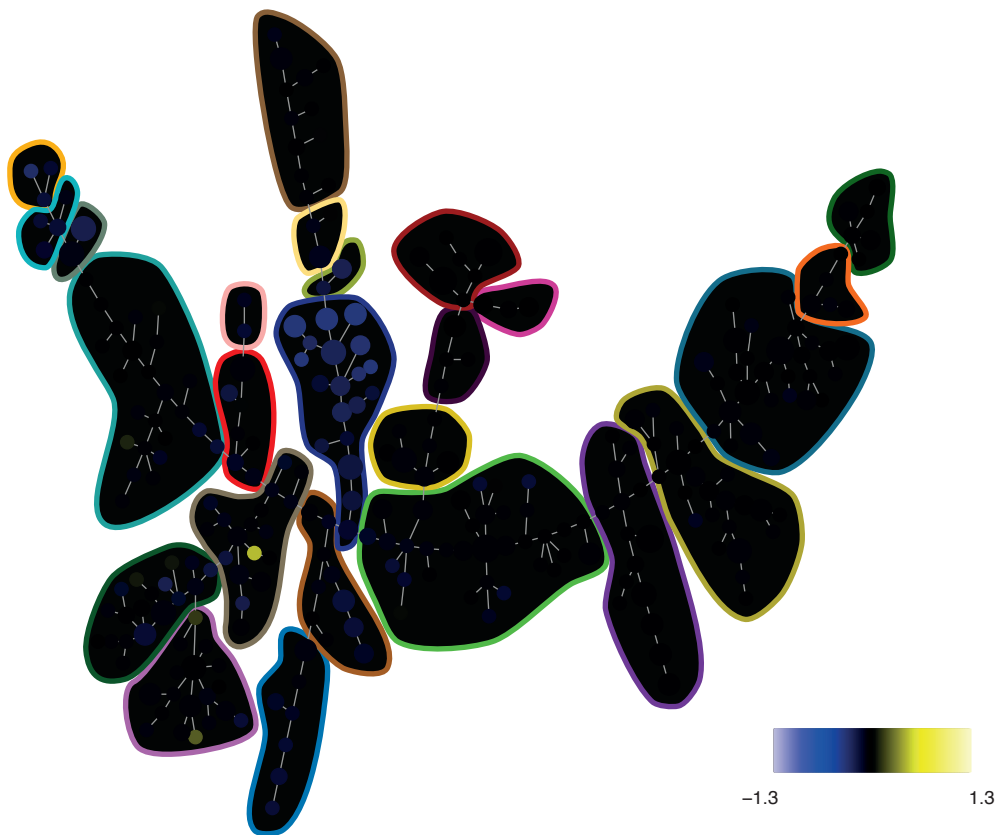


Figure S9A

165-pNFkB ---- BCR vs Ref Ratio

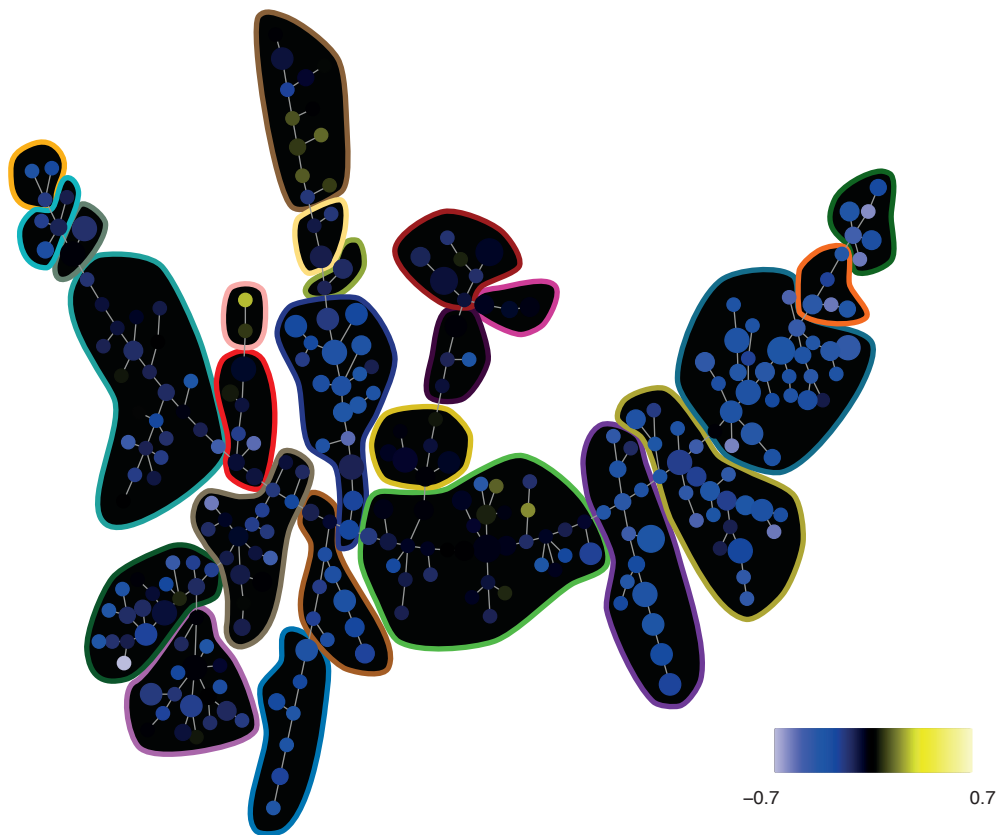


Figure S9A

165-pNFkB --- DMSO vs Ref Ratio

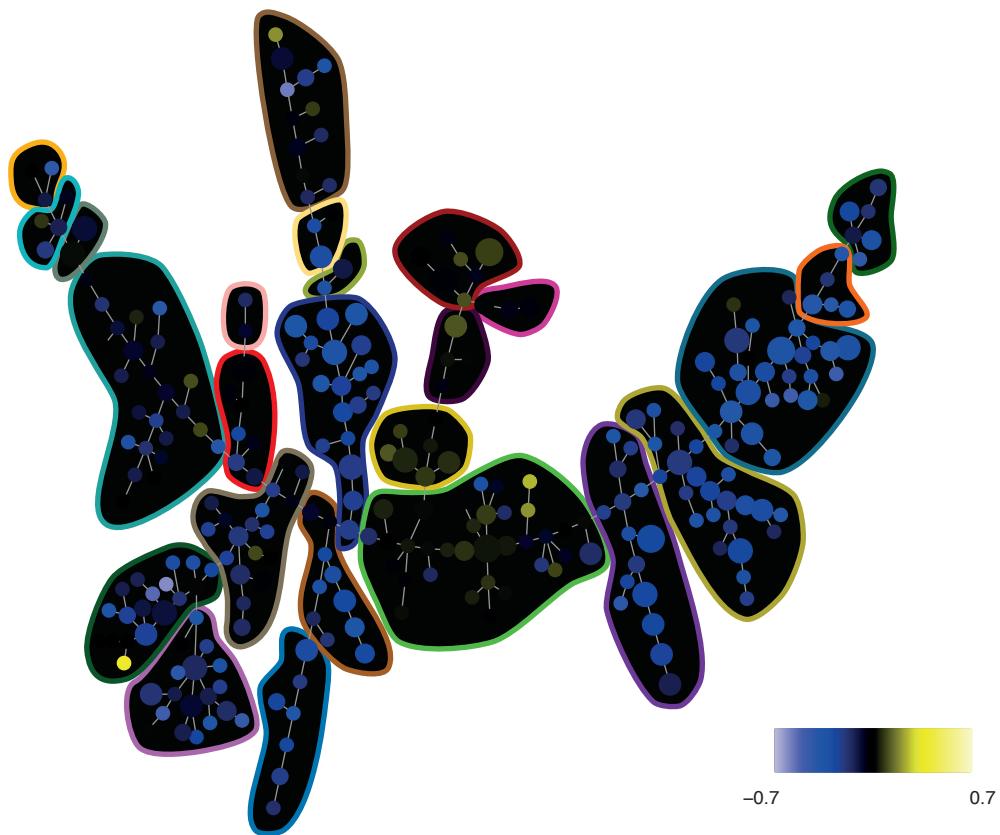


Figure S9A

165-pNFkB ---- Flt3L vs Ref Ratio

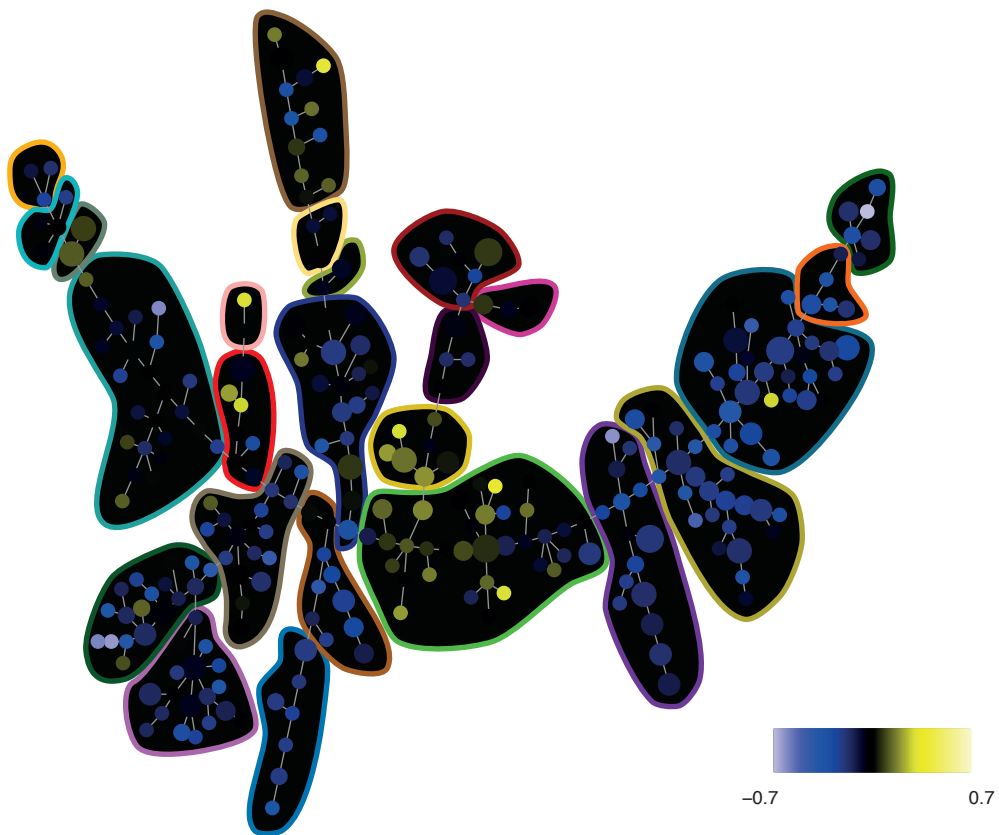


Figure S9A

165-pNFkB ---- GCSF vs Ref Ratio

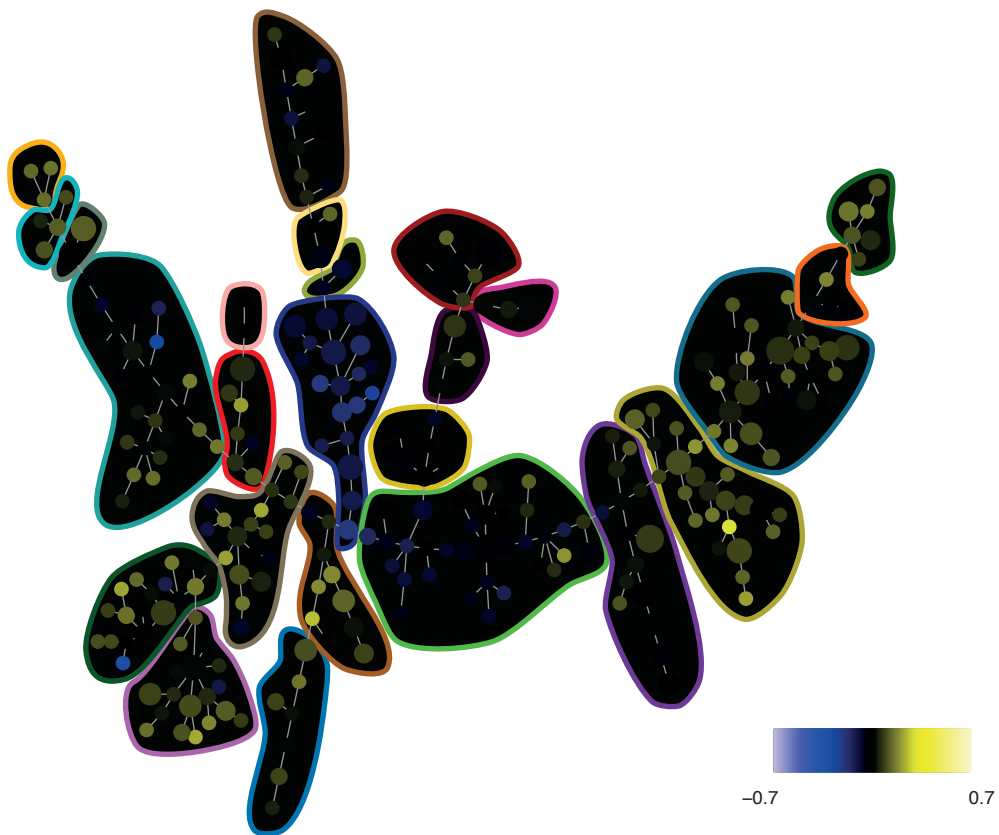


Figure S9A

165-pNFkB ---- GMCSF vs Ref Ratio

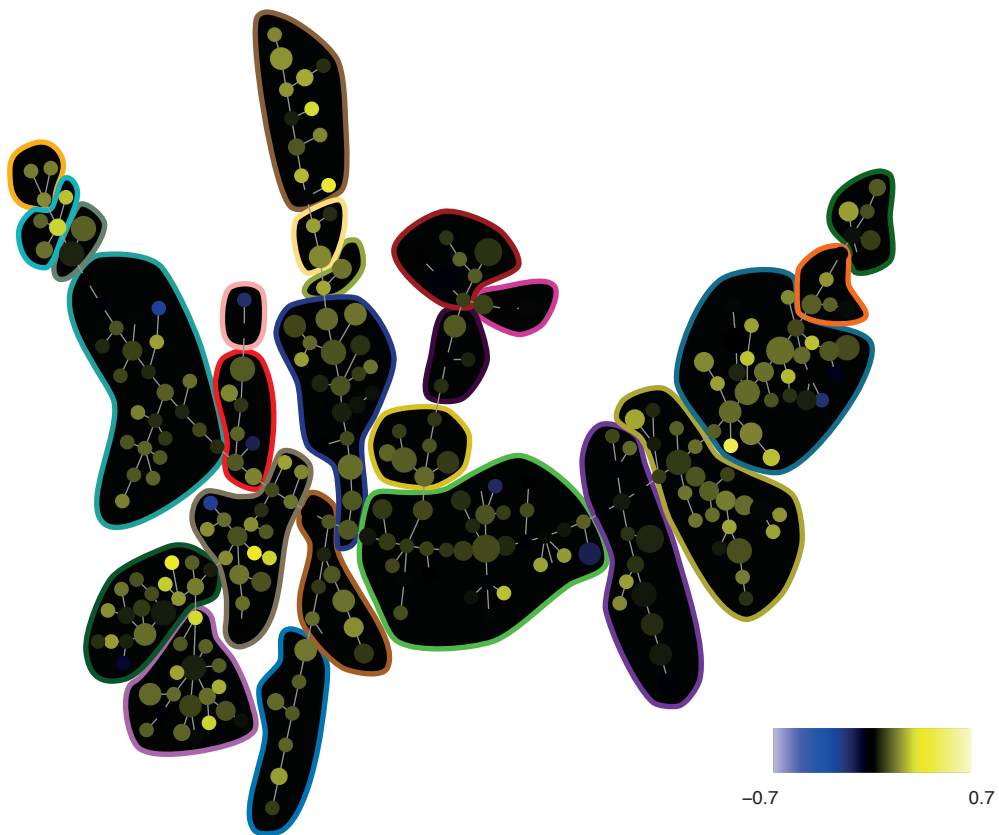


Figure S9A

165-pNFkB ---- IFNad vs Ref Ratio

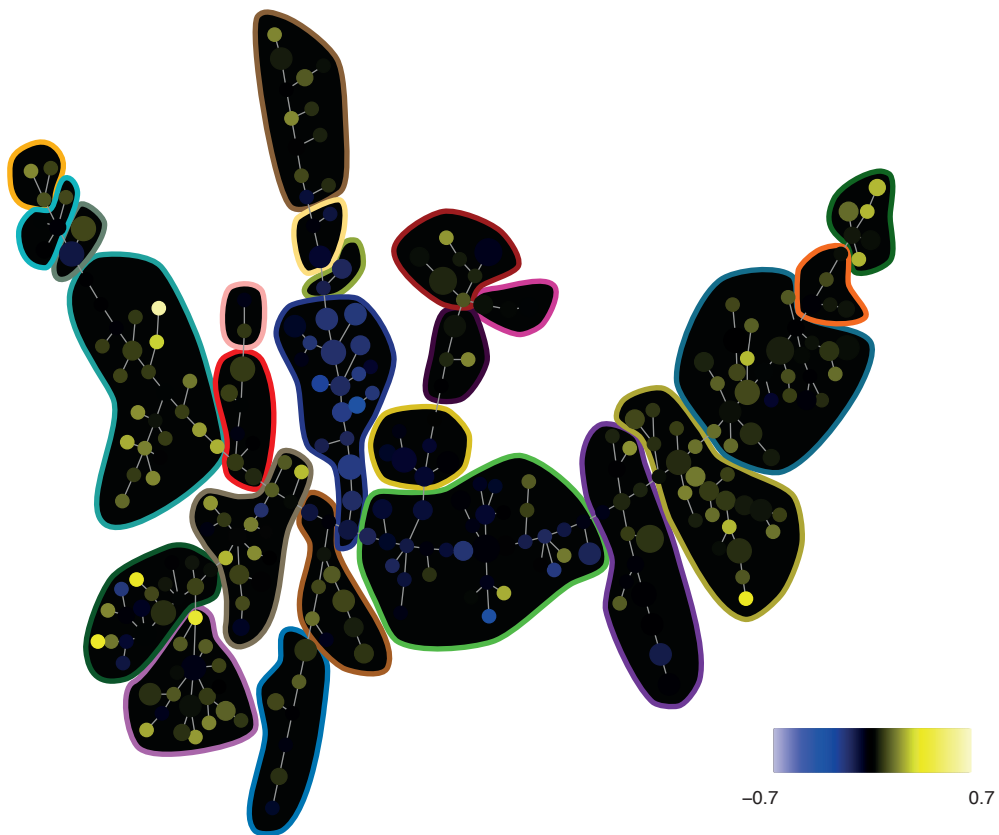


Figure S9A

165-pNFkB ---- IL3 vs Ref Ratio

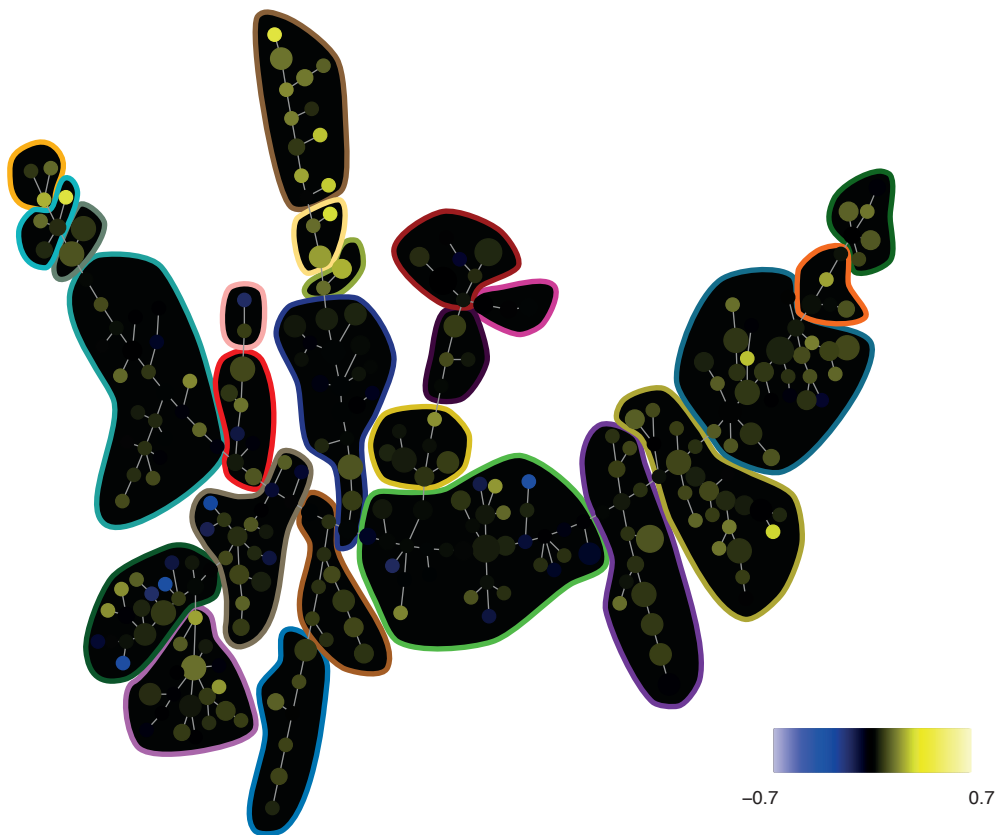


Figure S9A

165-pNFkB ---- IL7 vs Ref Ratio

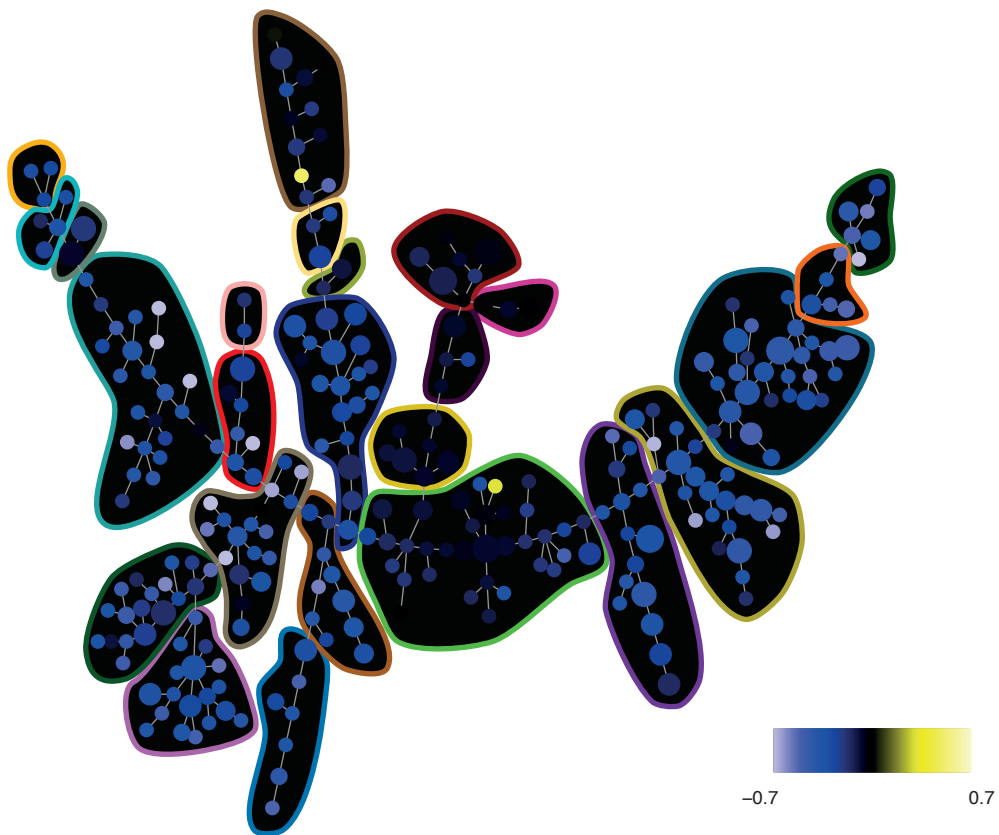


Figure S9A

165-pNFkB --- LPS vs Ref Ratio

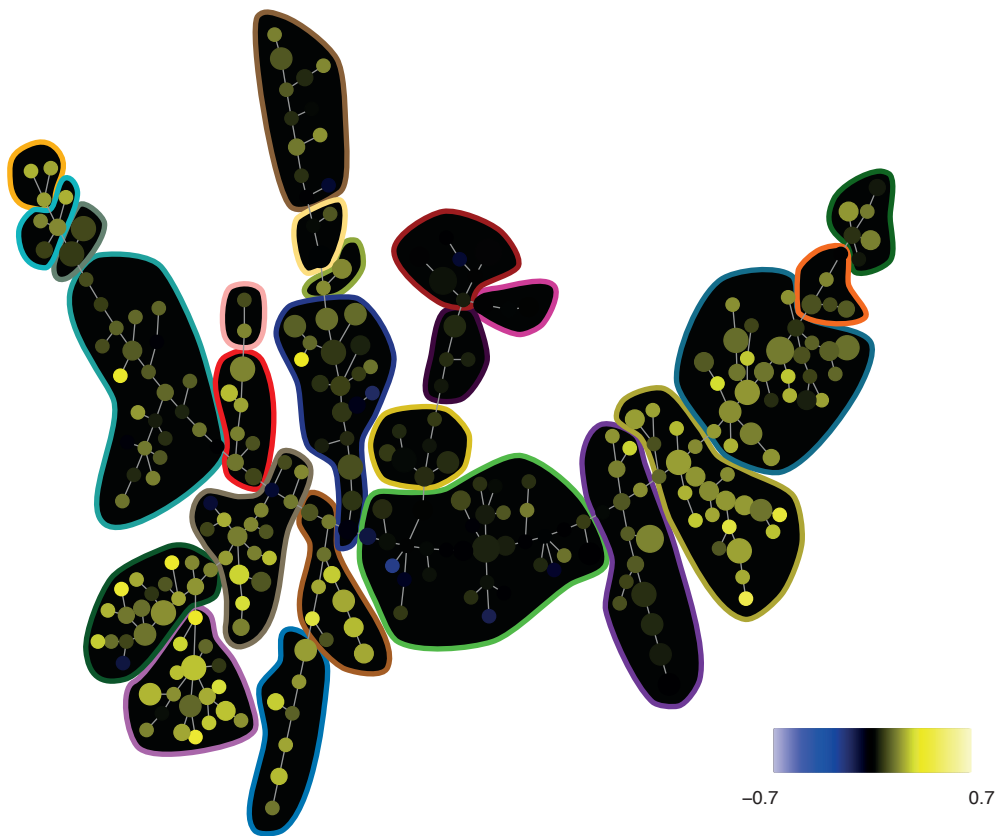


Figure S9A

165-pNFkB ---- PMAiono vs Ref Ratio



Figure S9A

165-pNFkB ---- PVO4 vs Ref Ratio

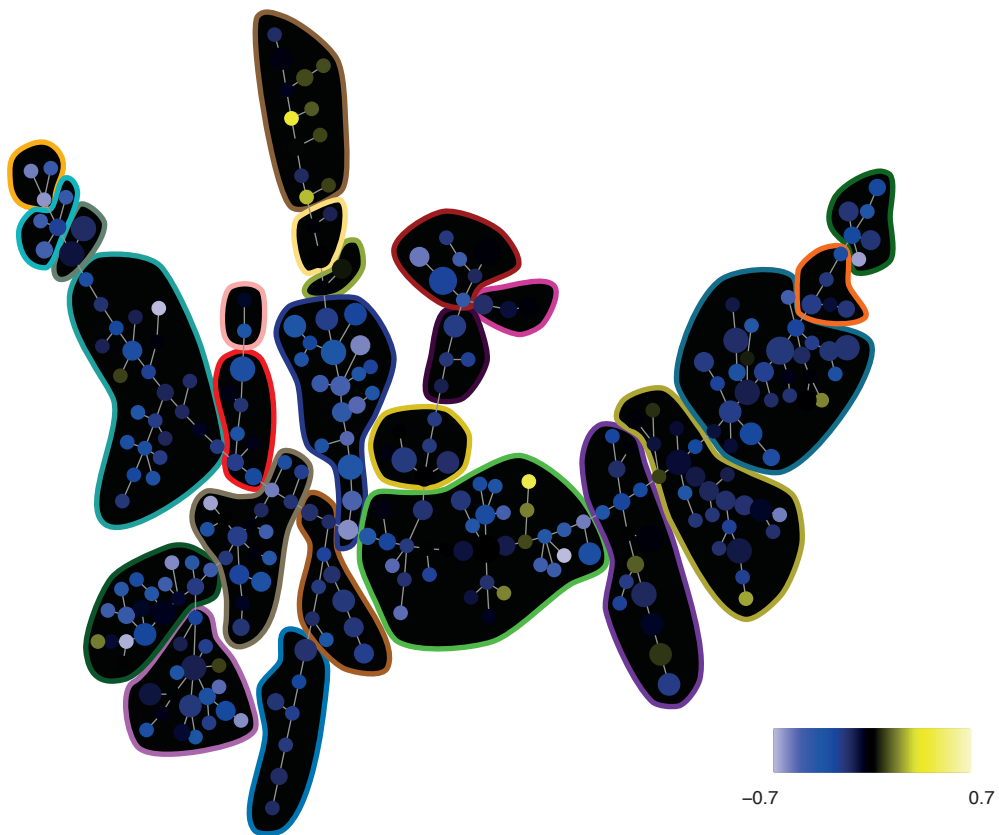


Figure S9A

165-pNFkB --- SCF vs Ref Ratio

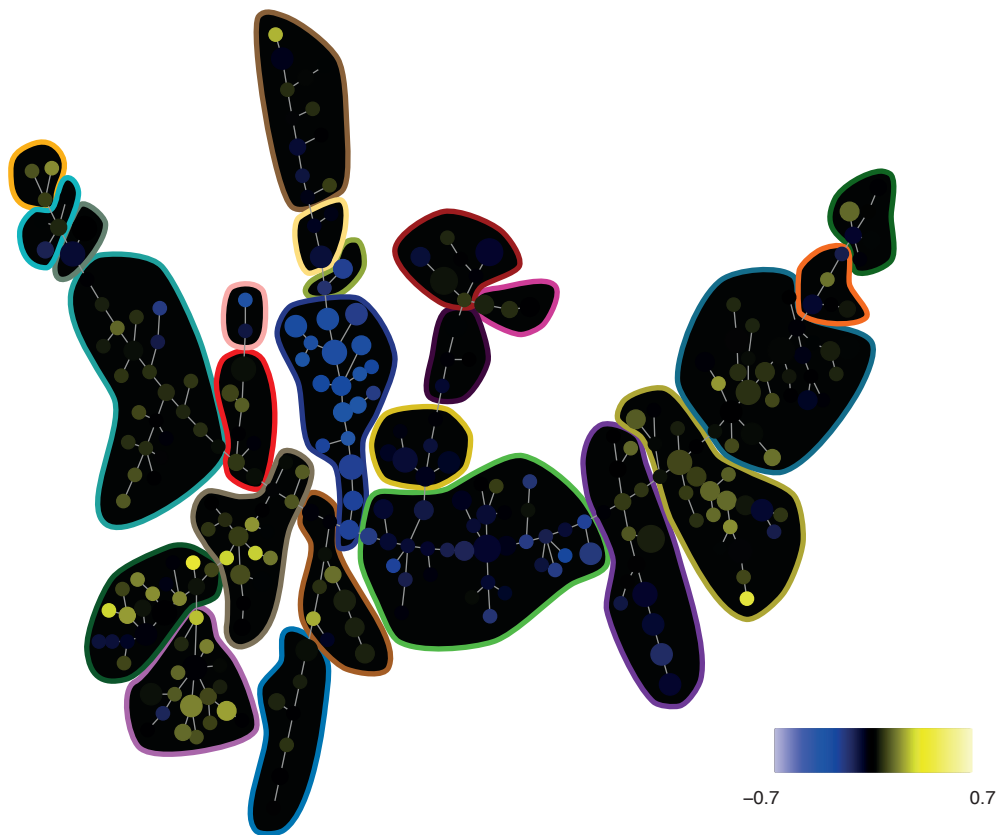


Figure S9A

165-pNFkB ---- TNFa vs Ref Ratio



Figure S9A

165-pNFkB --- TPO vs Ref Ratio

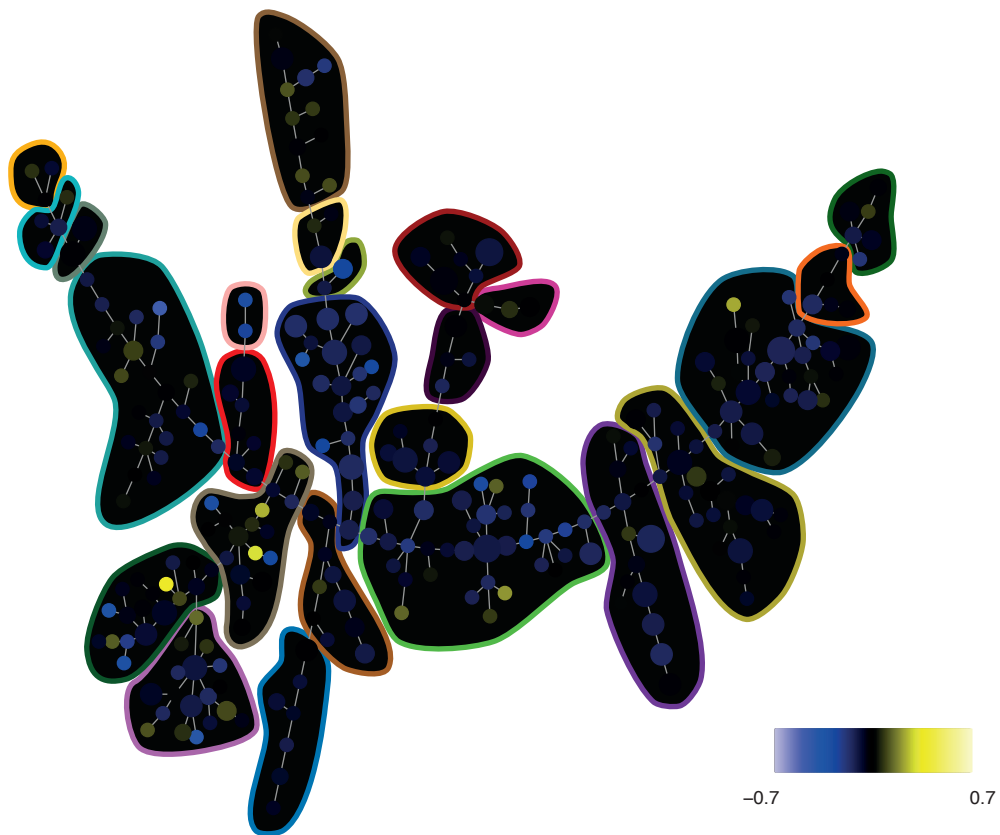


Figure S9A

166-lkBalpha ---- BCR vs Ref Ratio

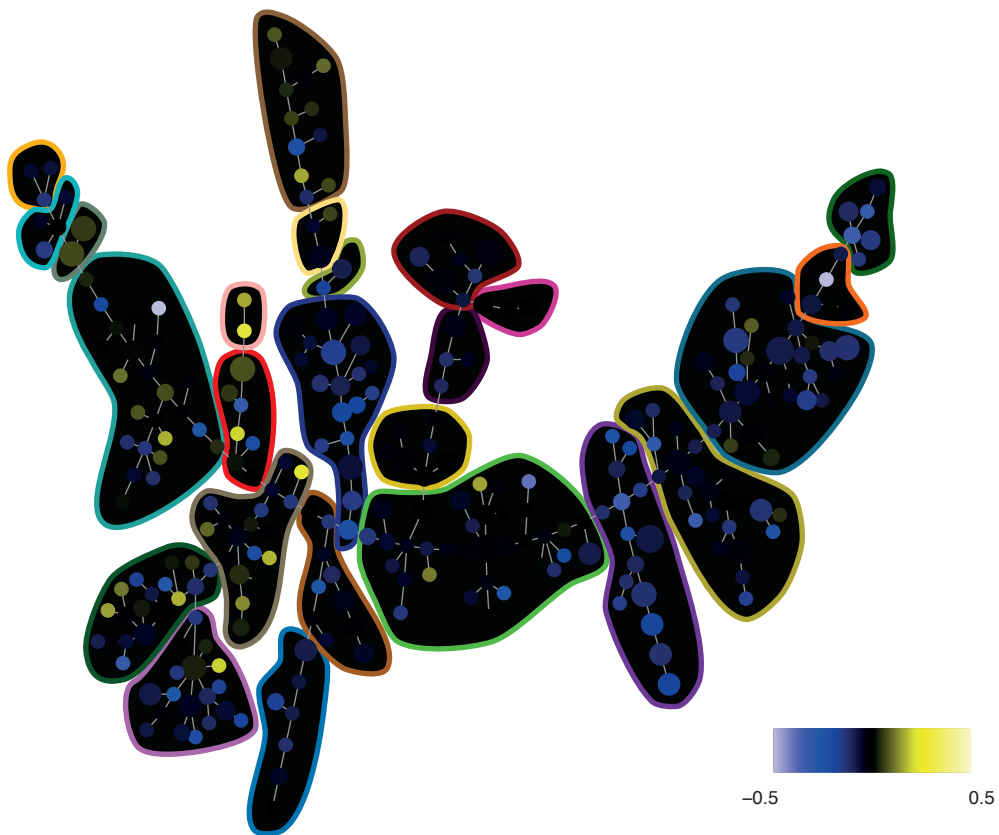


Figure S9A

166-IkBalpha ---- DMSO vs Ref Ratio

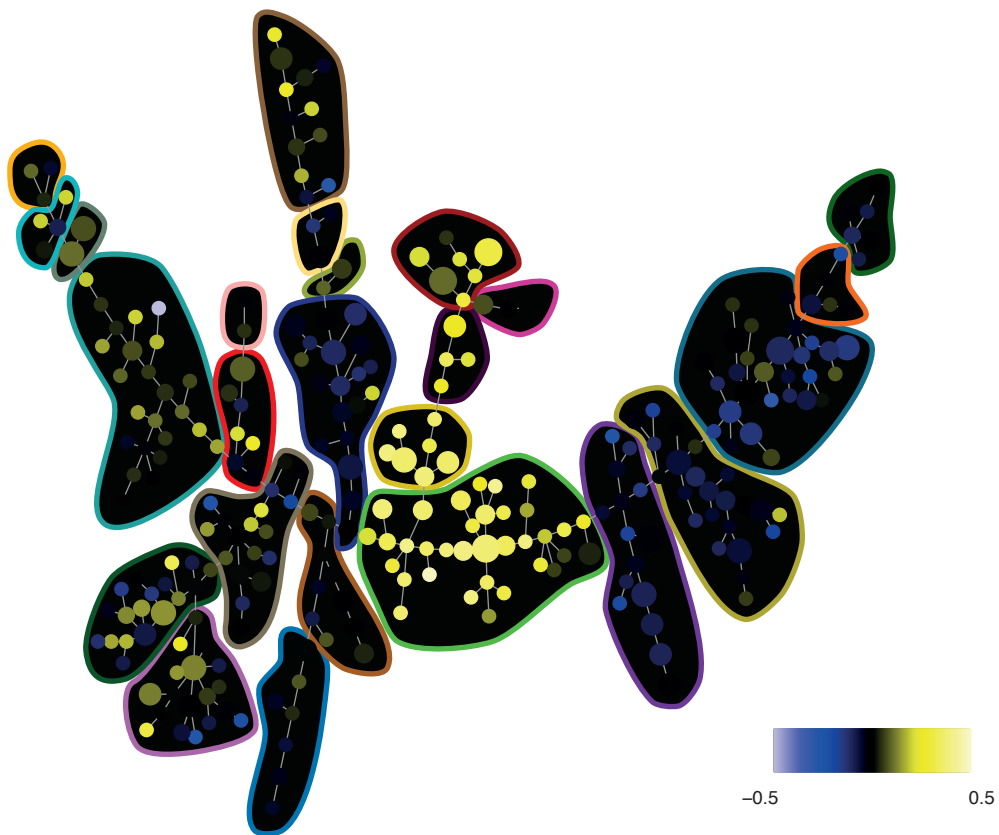


Figure S9A

166-lkBalpha ---- Flt3L vs Ref Ratio

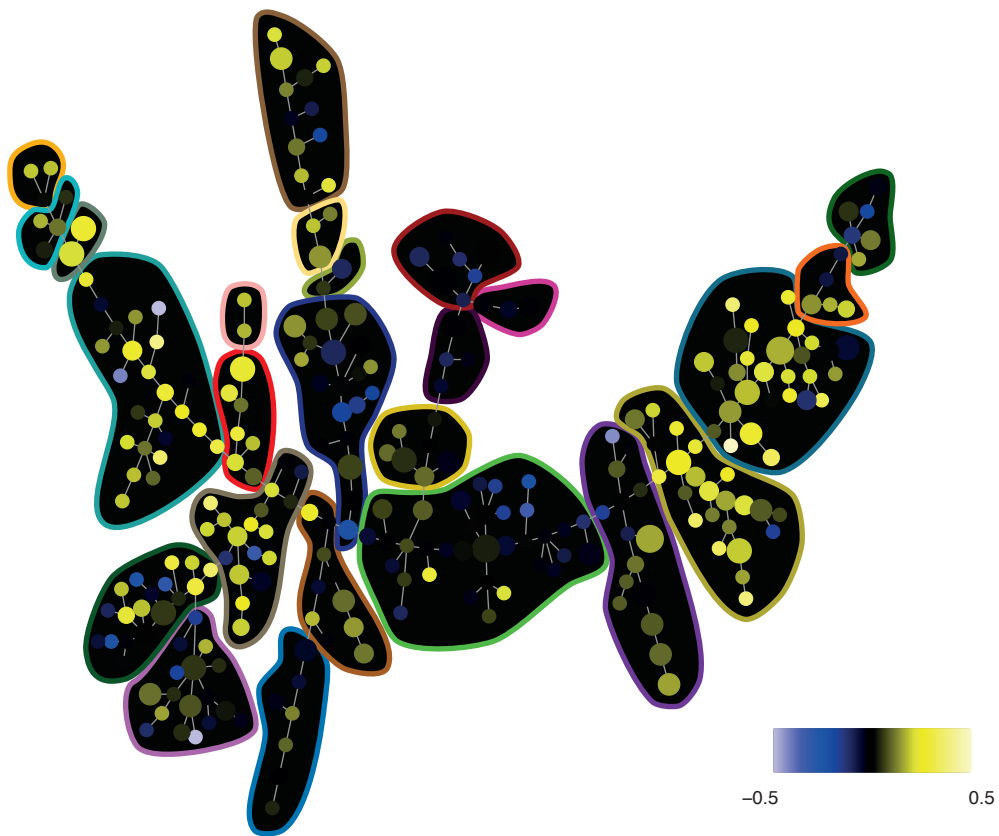


Figure S9A

166-IkBalpha --- GCSF vs Ref Ratio

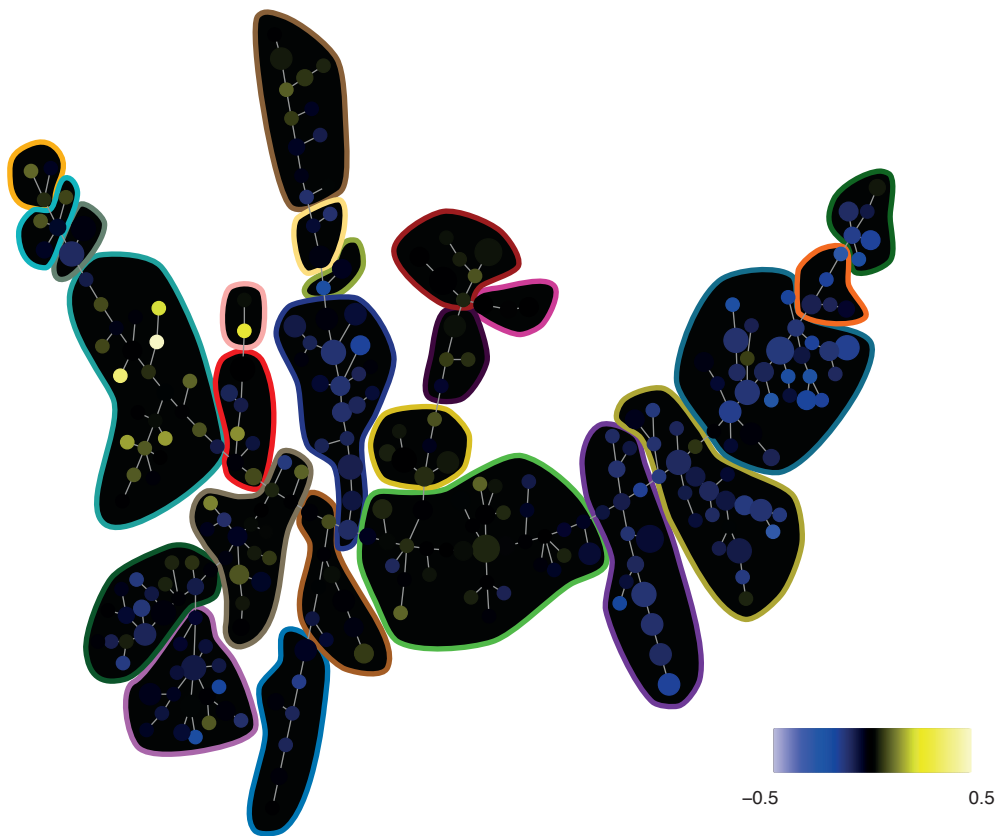


Figure S9A

166-lkBalpha ---- GMCSF vs Ref Ratio

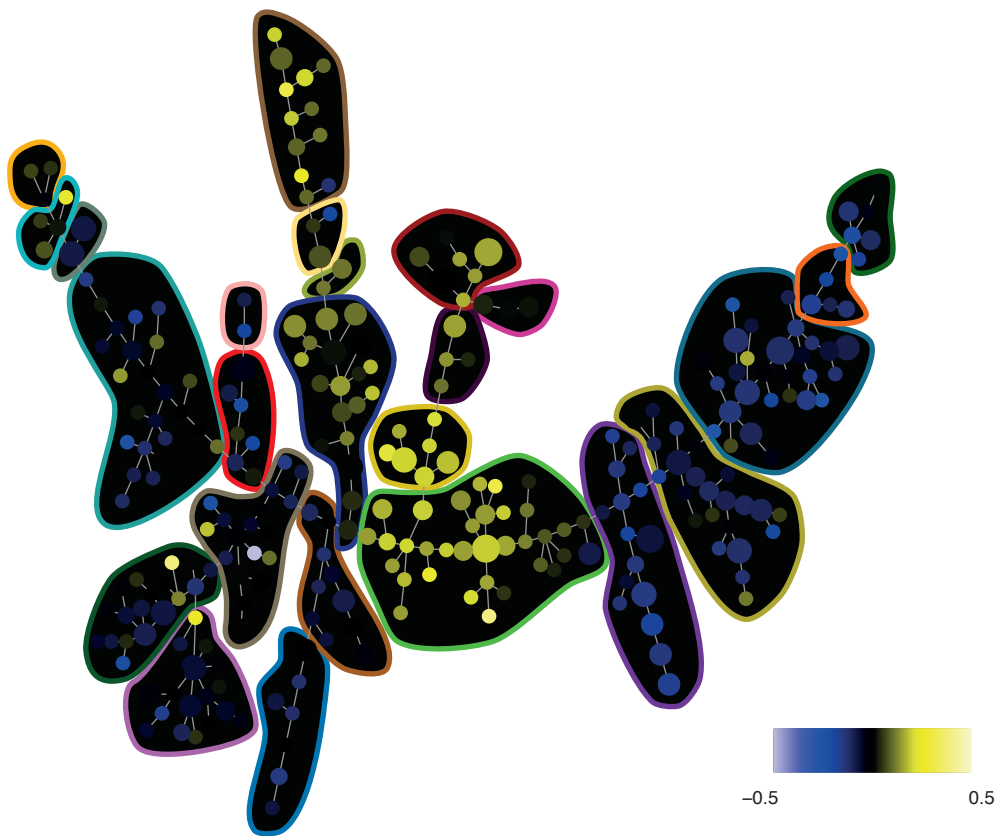


Figure S9A

166-IkBalpa --- IFNad vs Ref Ratio

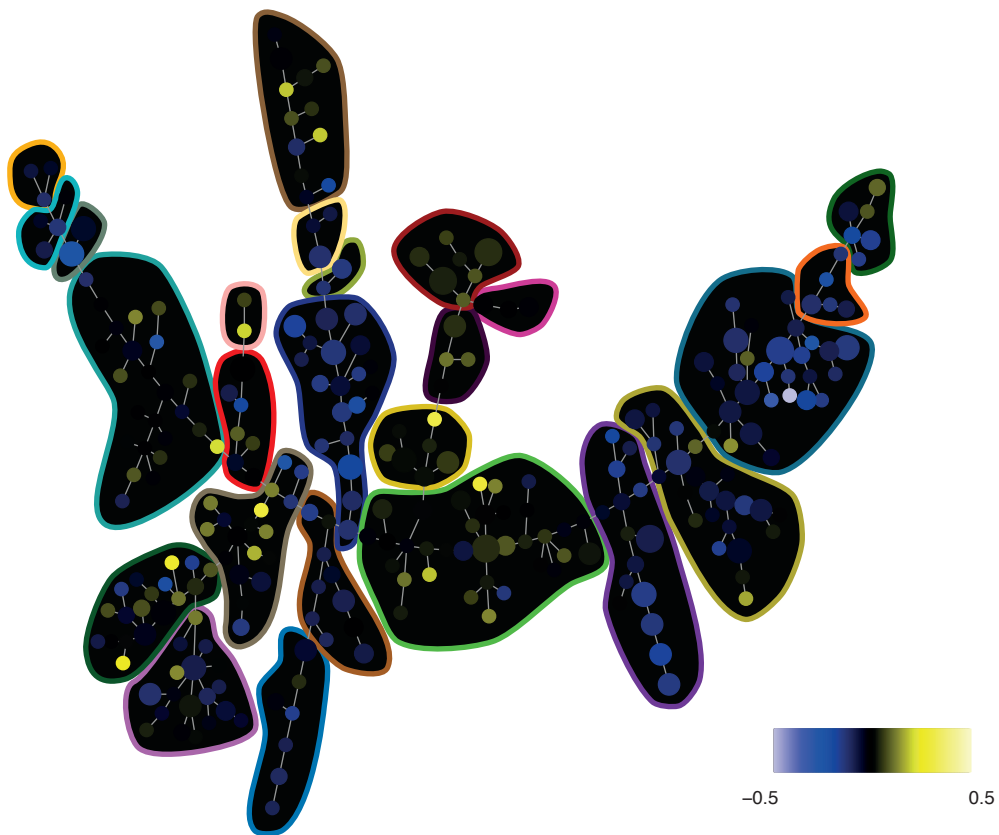


Figure S9A

166-IkBalpha ---- IL3 vs Ref Ratio

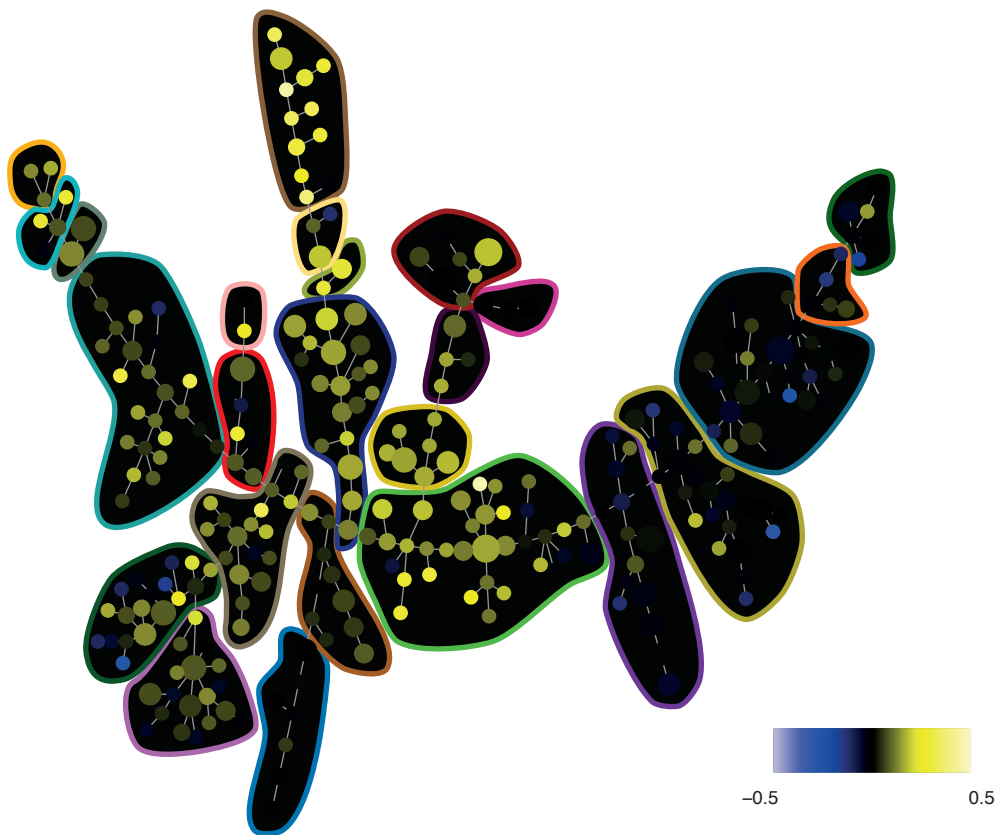


Figure S9A

166-IkBalpha ---- IL7 vs Ref Ratio

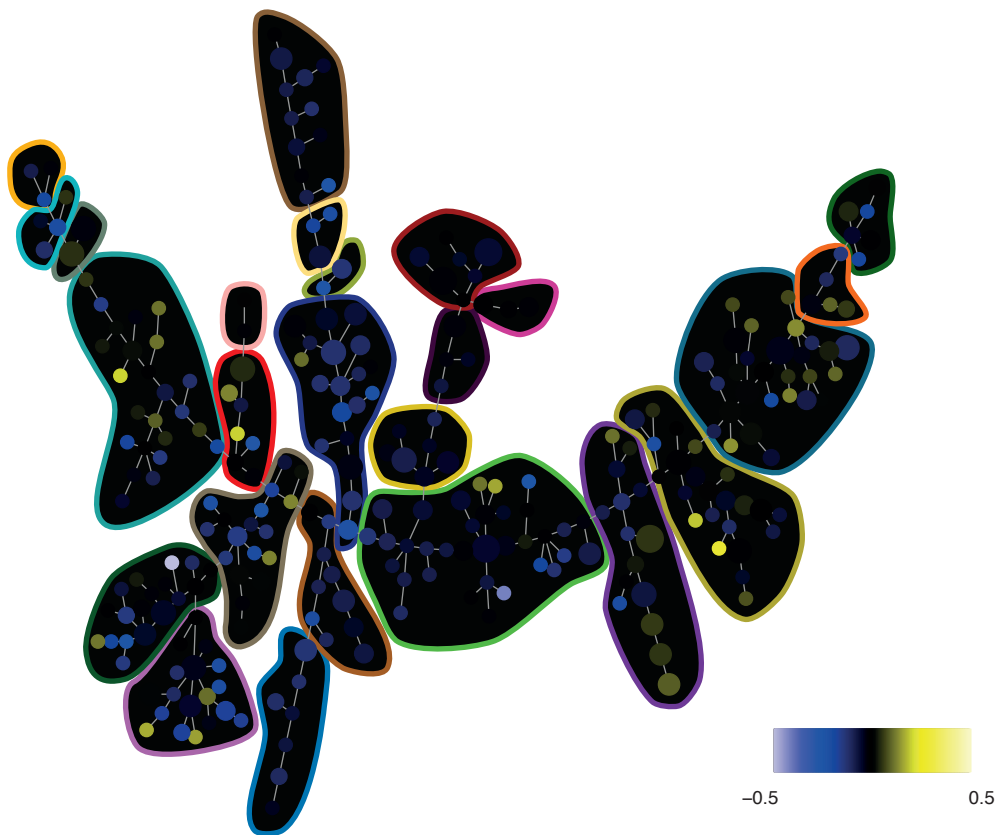


Figure S9A

166-lkBalpha ---- LPS vs Ref Ratio

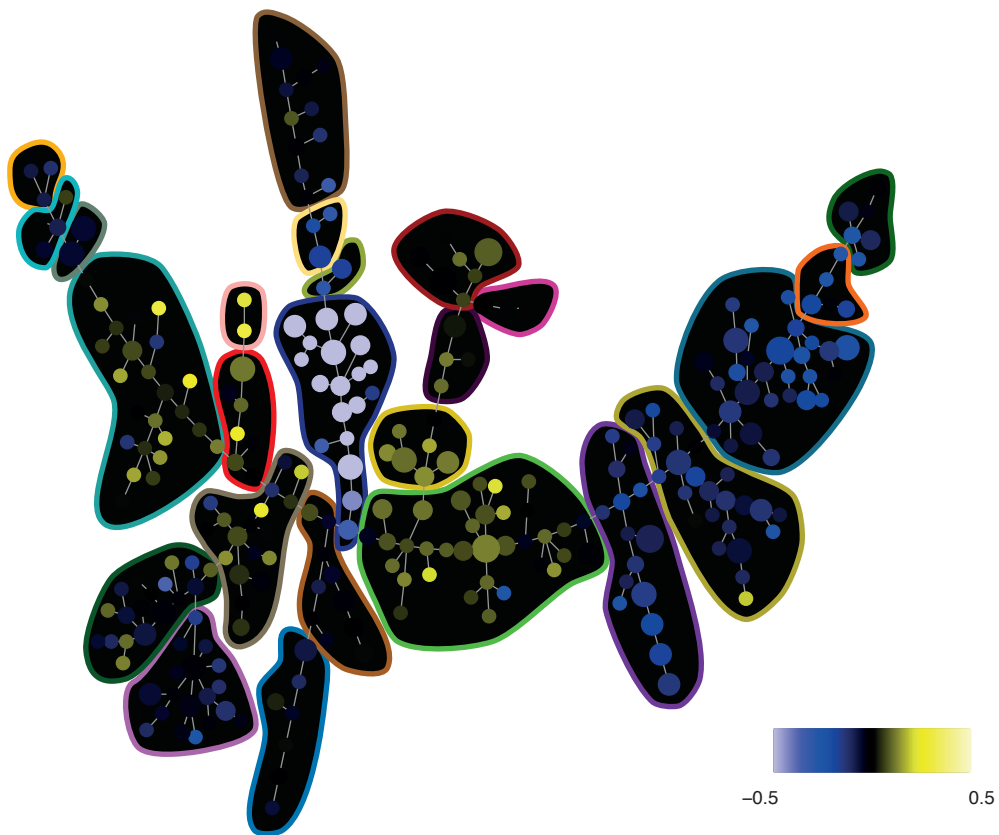


Figure S9A

166-IkBalpha ---- PMAiono vs Ref Ratio

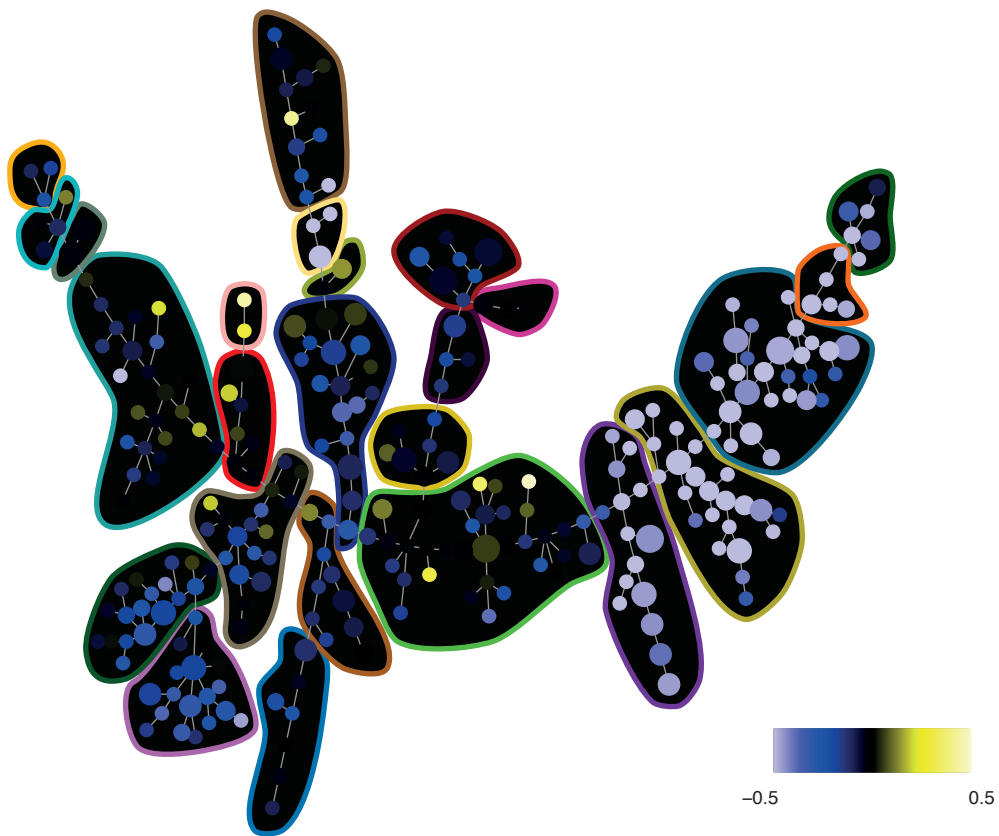


Figure S9A

166-IkBalpa ---- PVO4 vs Ref Ratio

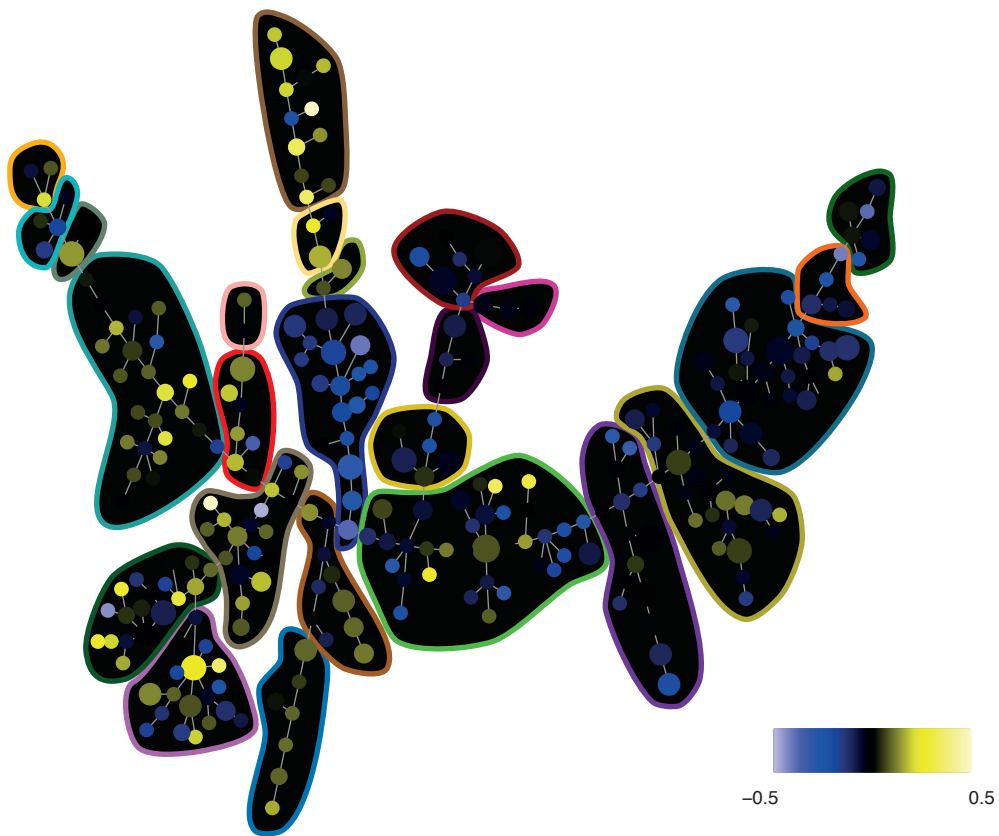


Figure S9A

166-lkBalpha ---- SCF vs Ref Ratio

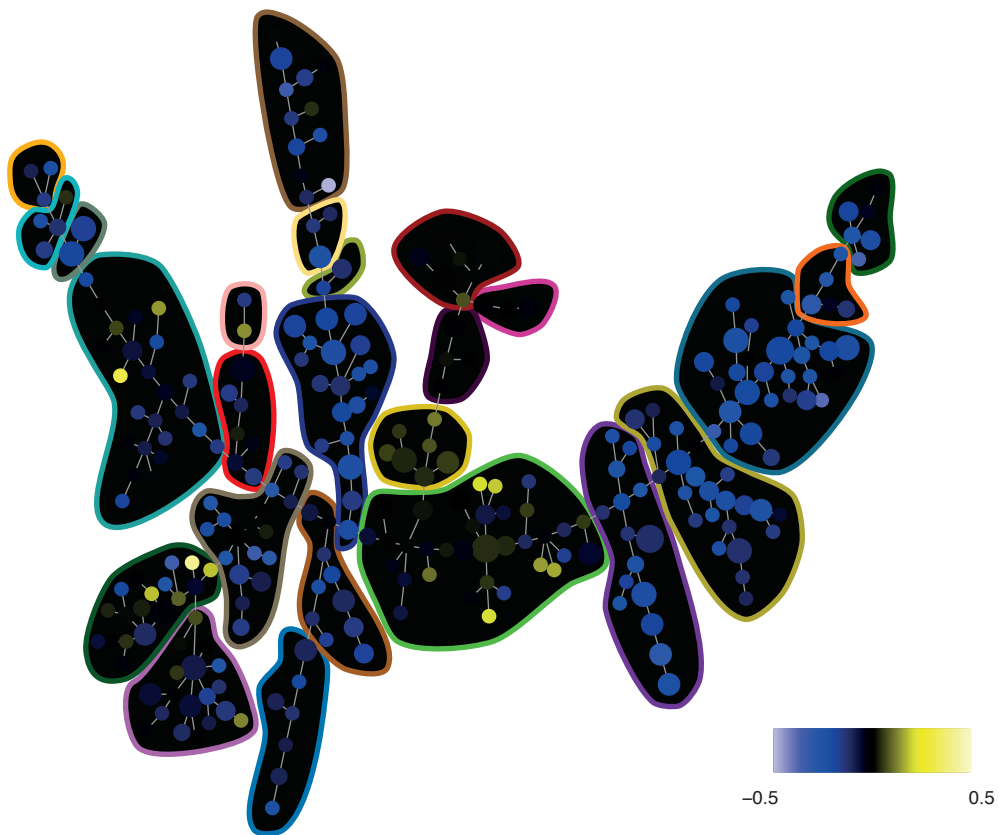


Figure S9A

166-lkBaIpha ---- TNFa vs Ref Ratio

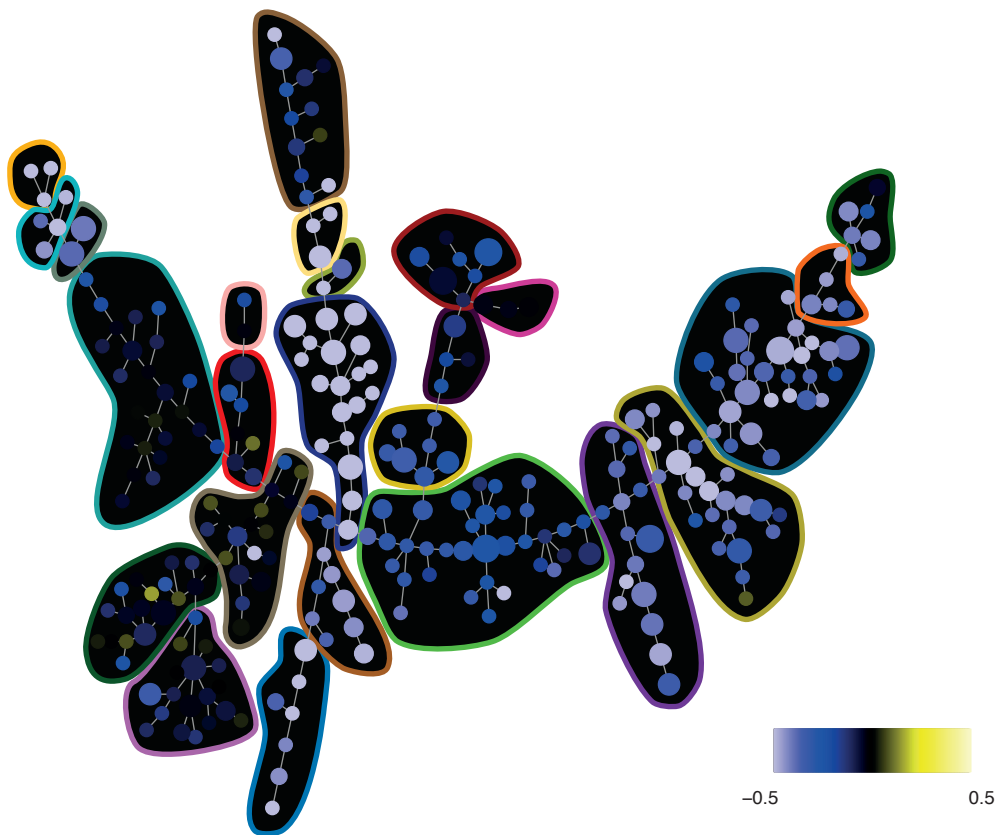


Figure S9A

166-lkBalpha ---- TPO vs Ref Ratio

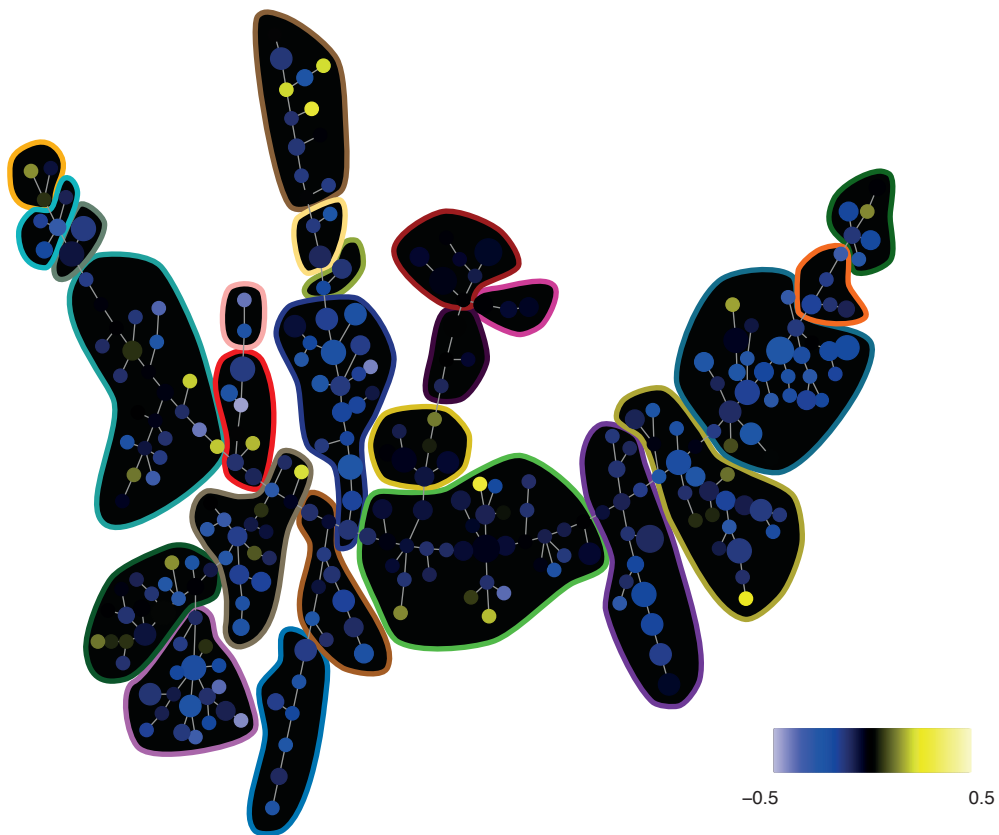


Figure S9A

168-pH3 ---- BCR vs Ref Ratio

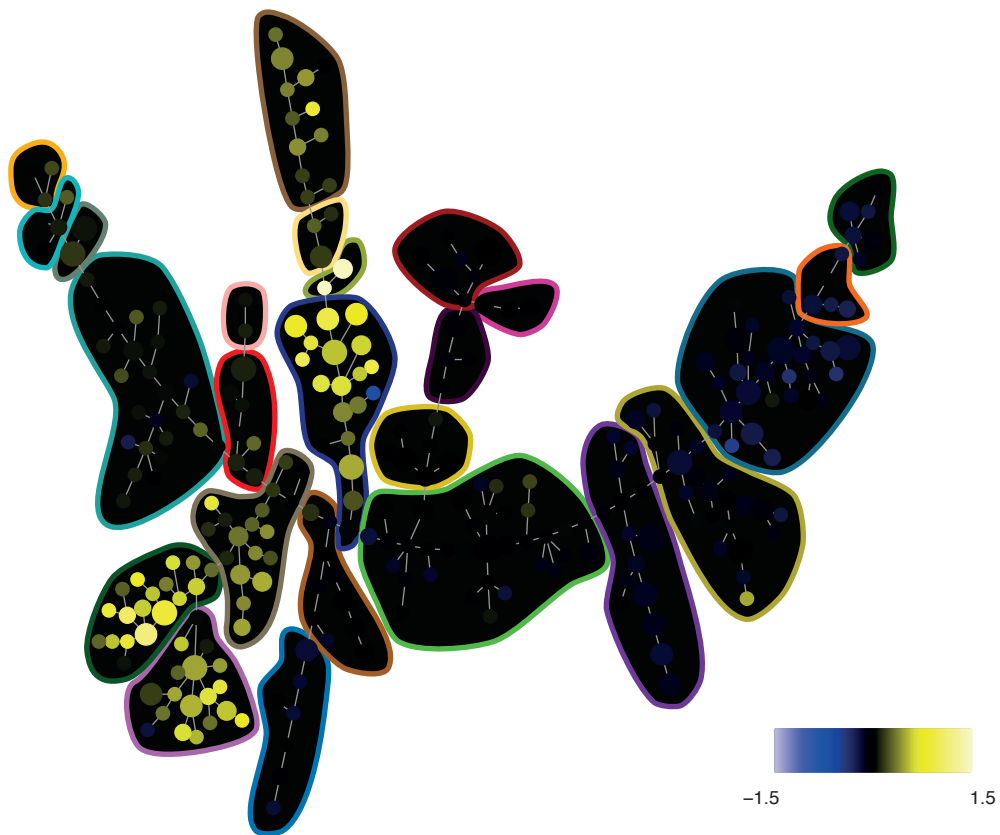


Figure S9A

168-pH3 --- DMSO vs Ref Ratio

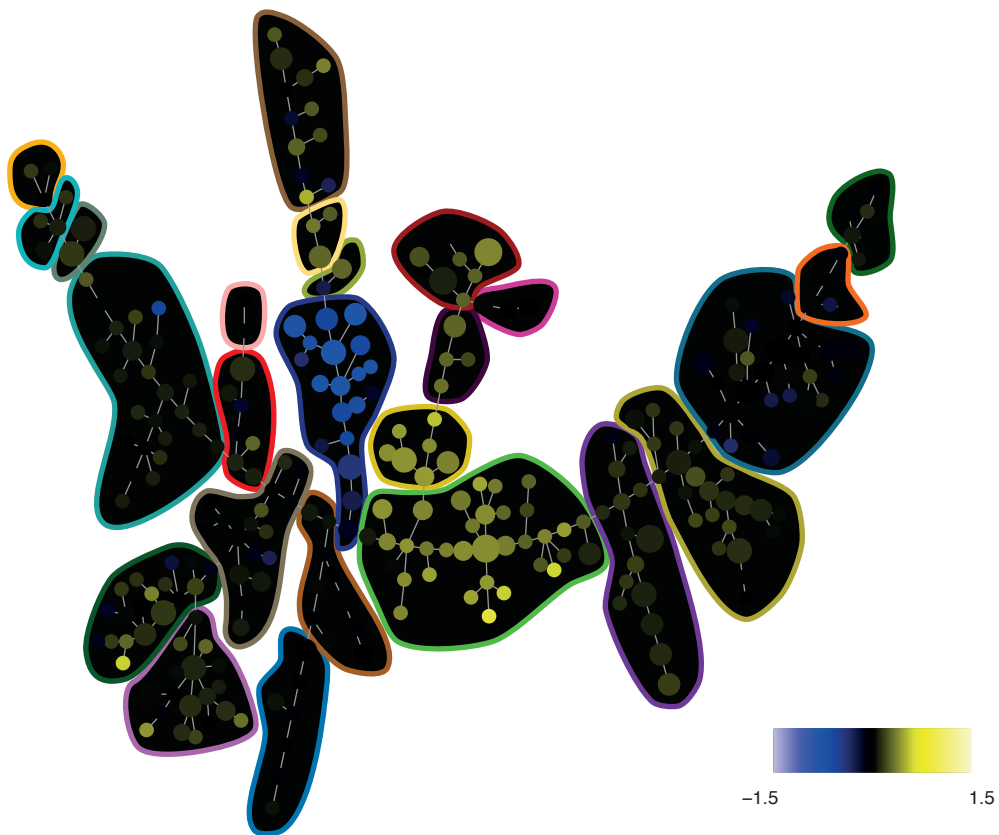


Figure S9A

168-pH3 ---- Flt3L vs Ref Ratio

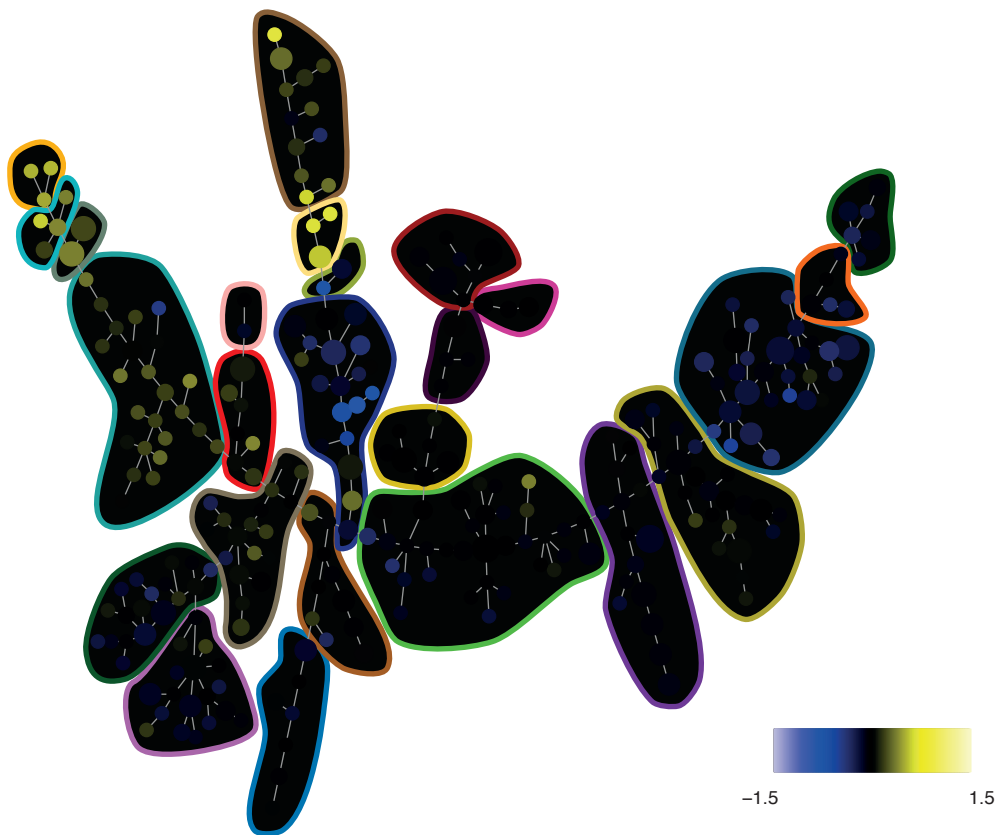


Figure S9A

168-pH3 ---- GCSF vs Ref Ratio

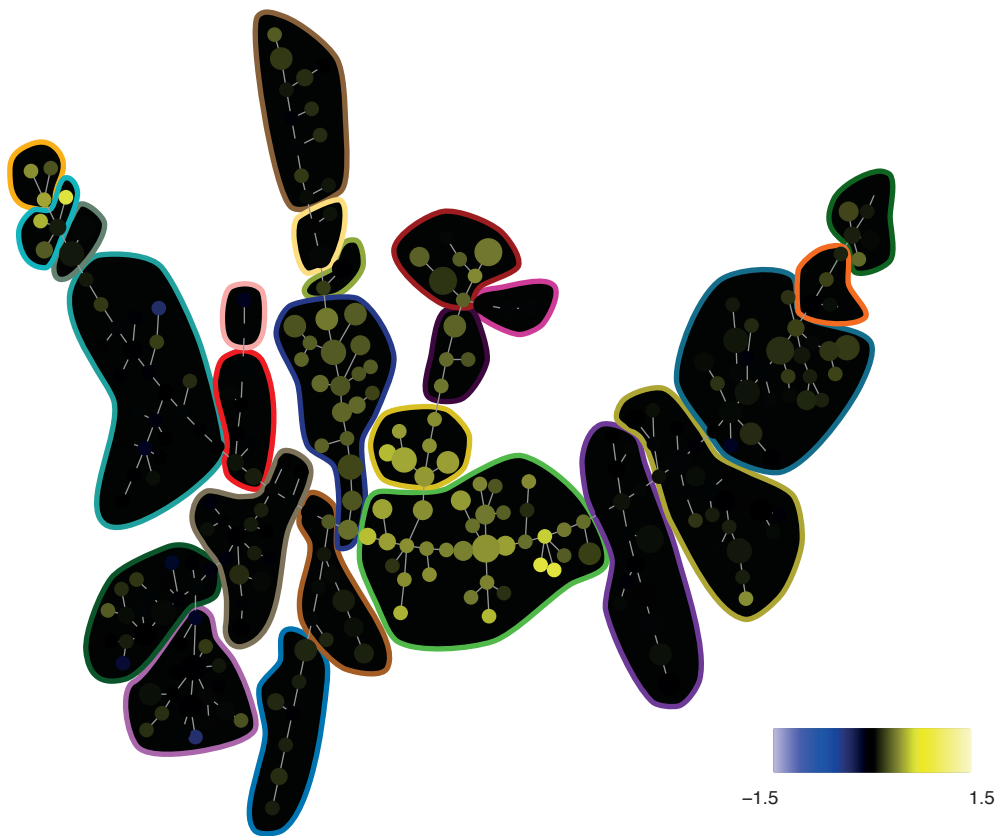


Figure S9A

168-pH3 ---- GMCSF vs Ref Ratio

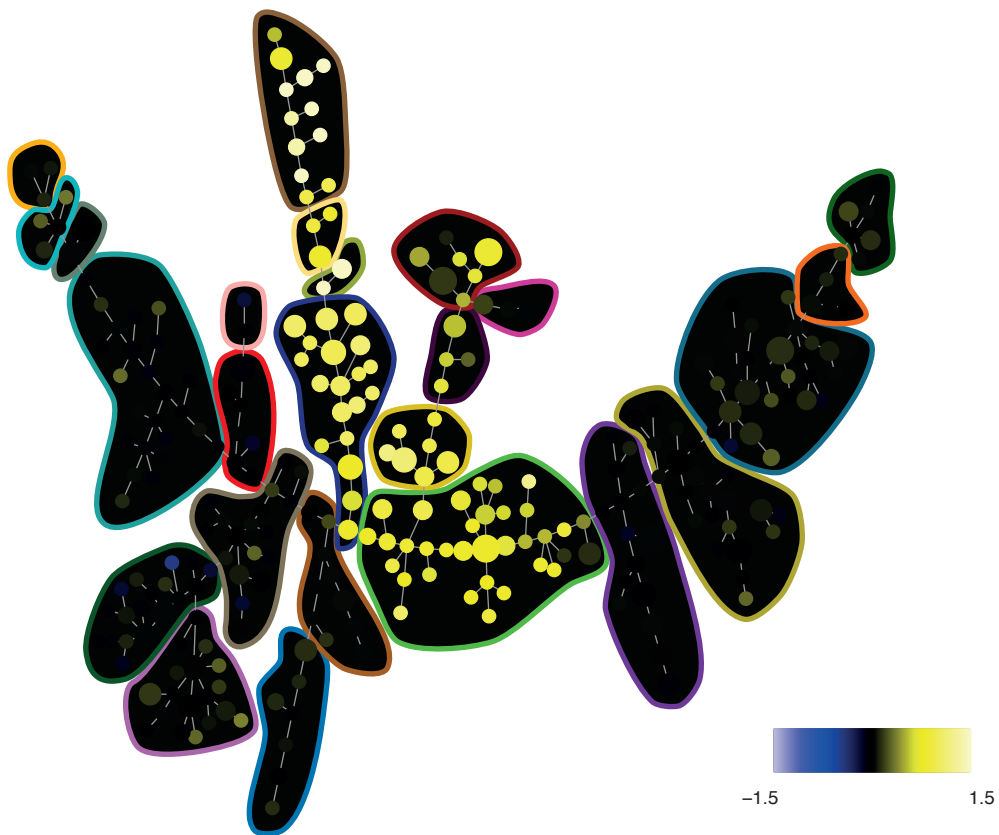


Figure S9A

168-pH3 ---- IFNad vs Ref Ratio

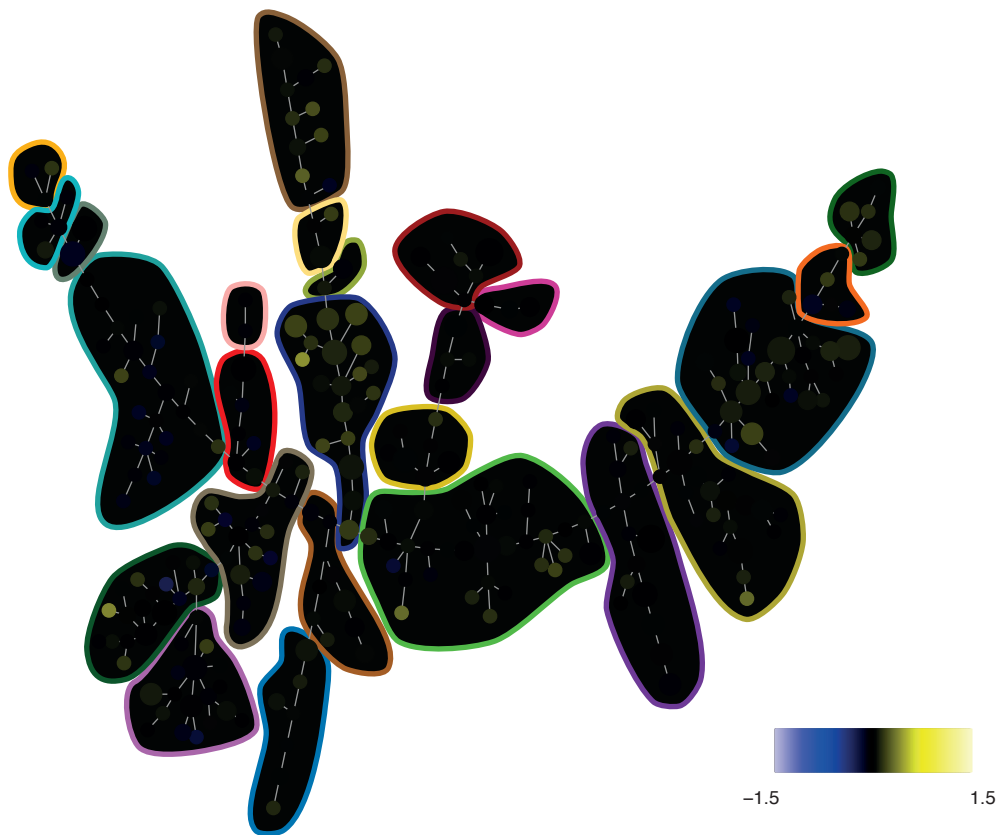


Figure S9A

168-pH3 ---- IL3 vs Ref Ratio



Figure S9A

168-pH3 ---- IL7 vs Ref Ratio

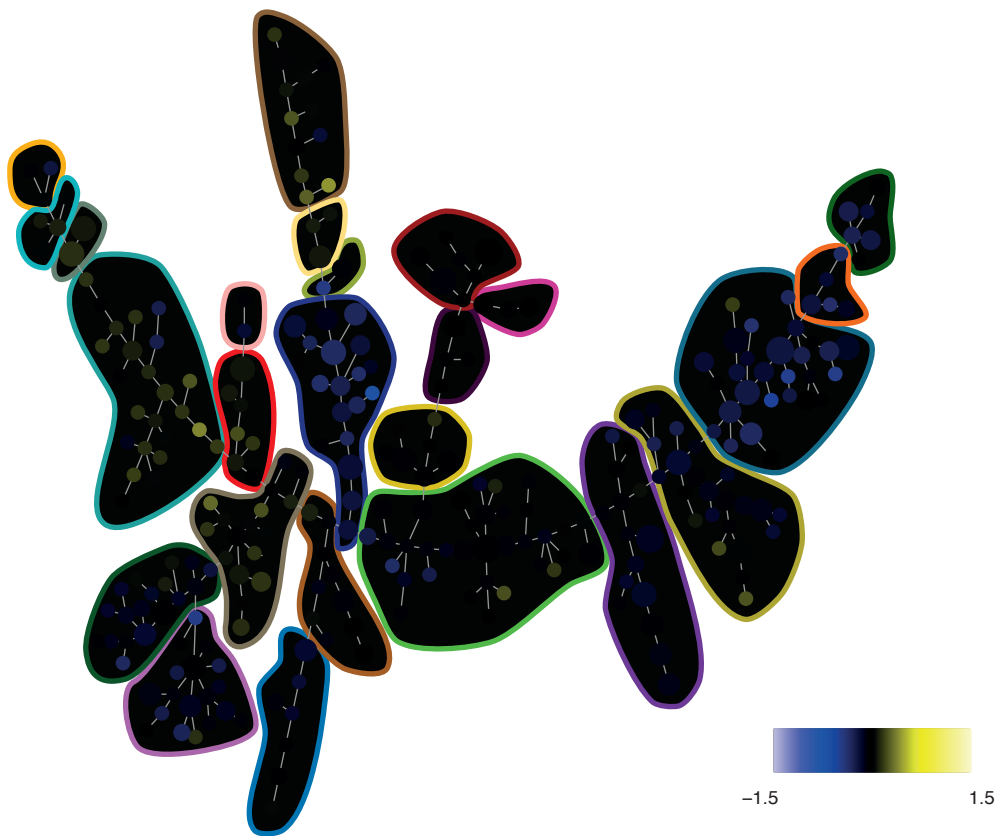


Figure S9A

168-pH3 --- LPS vs Ref Ratio

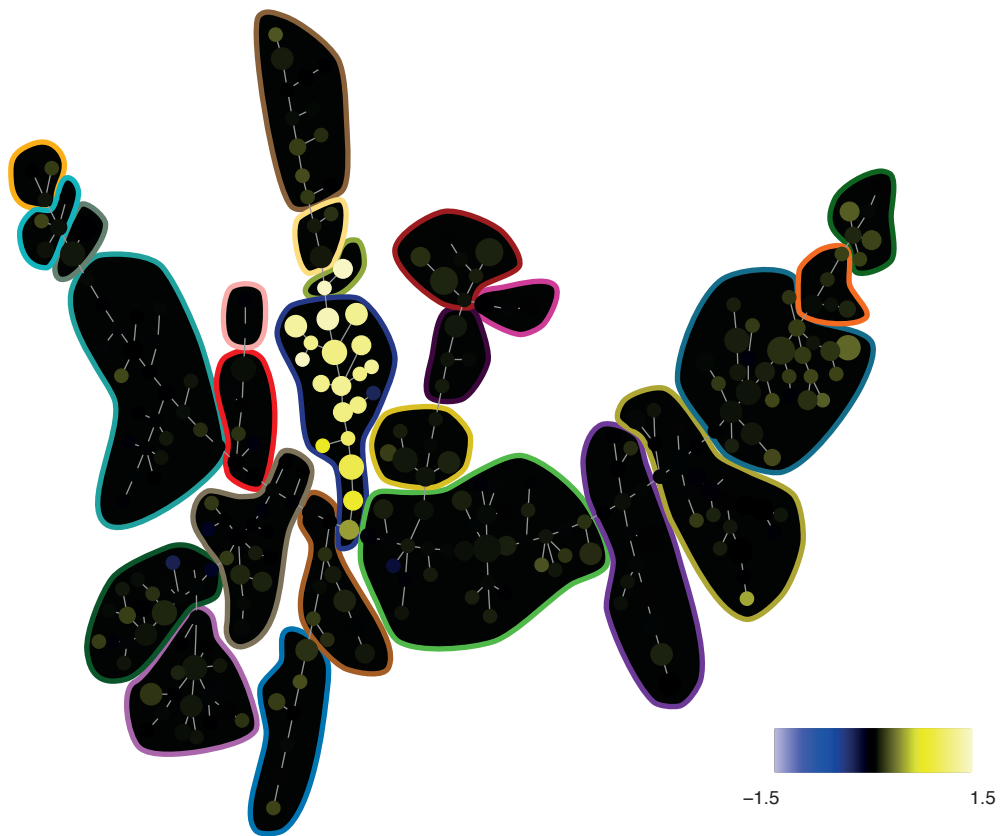


Figure S9A

168-pH3 ---- PMAiono vs Ref Ratio

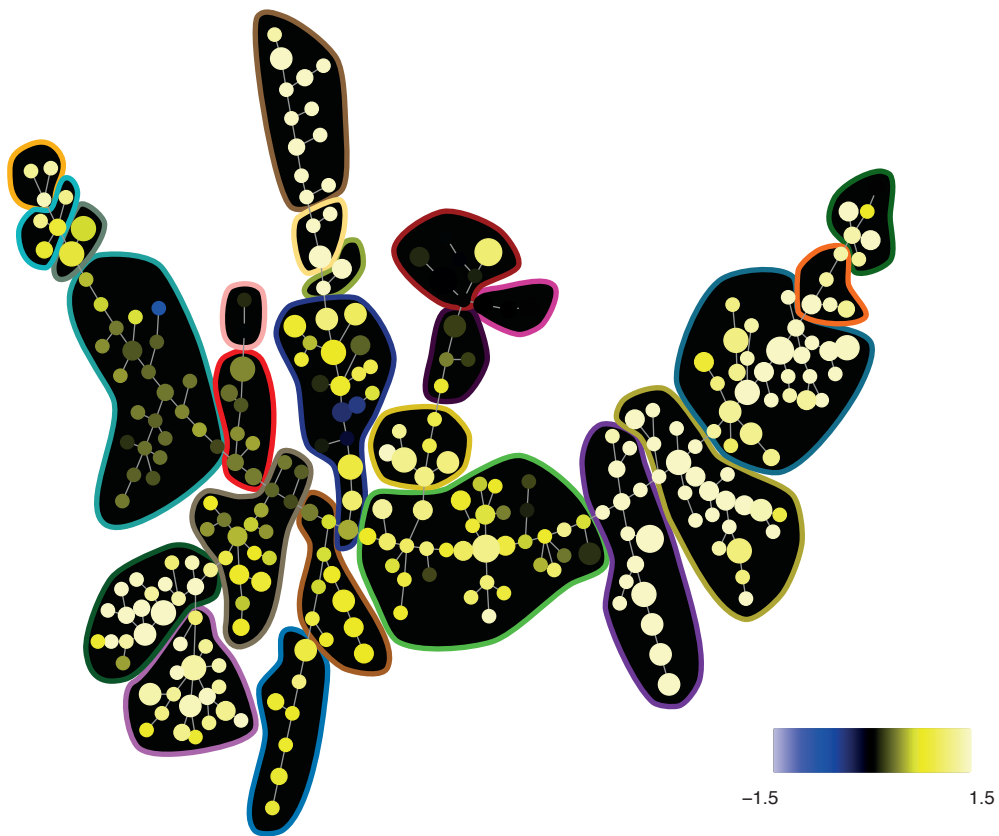


Figure S9A

168-pH3 ---- PVO4 vs Ref Ratio

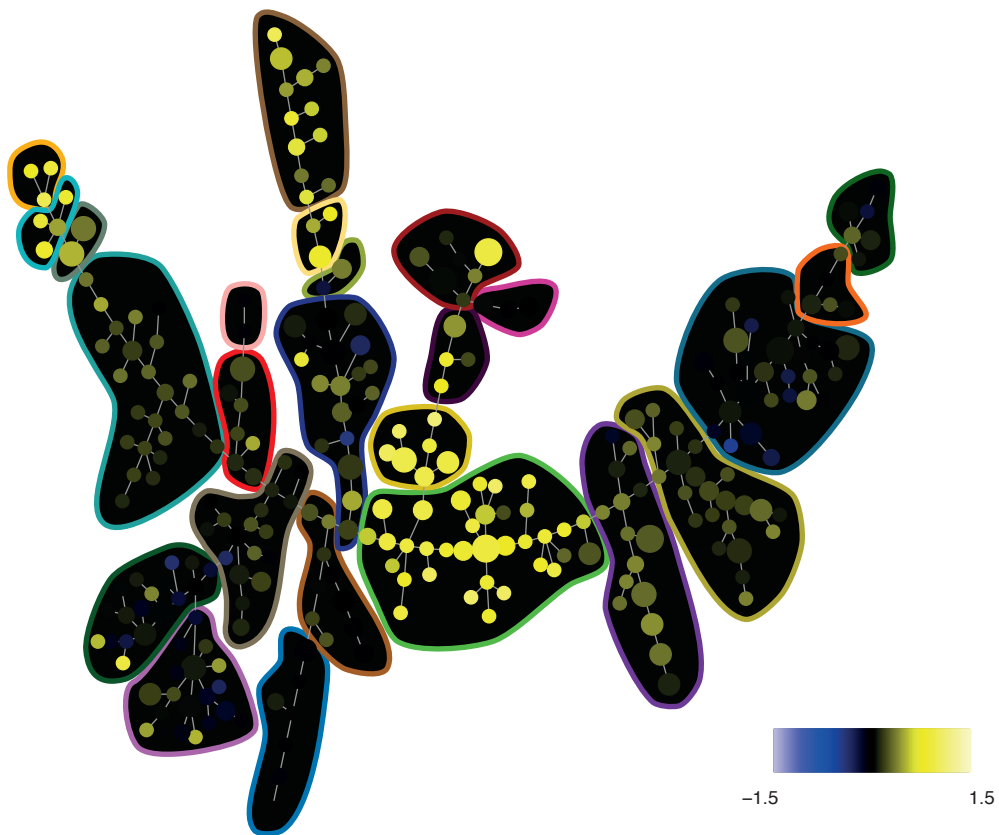


Figure S9A

168-pH3 --- SCF vs Ref Ratio

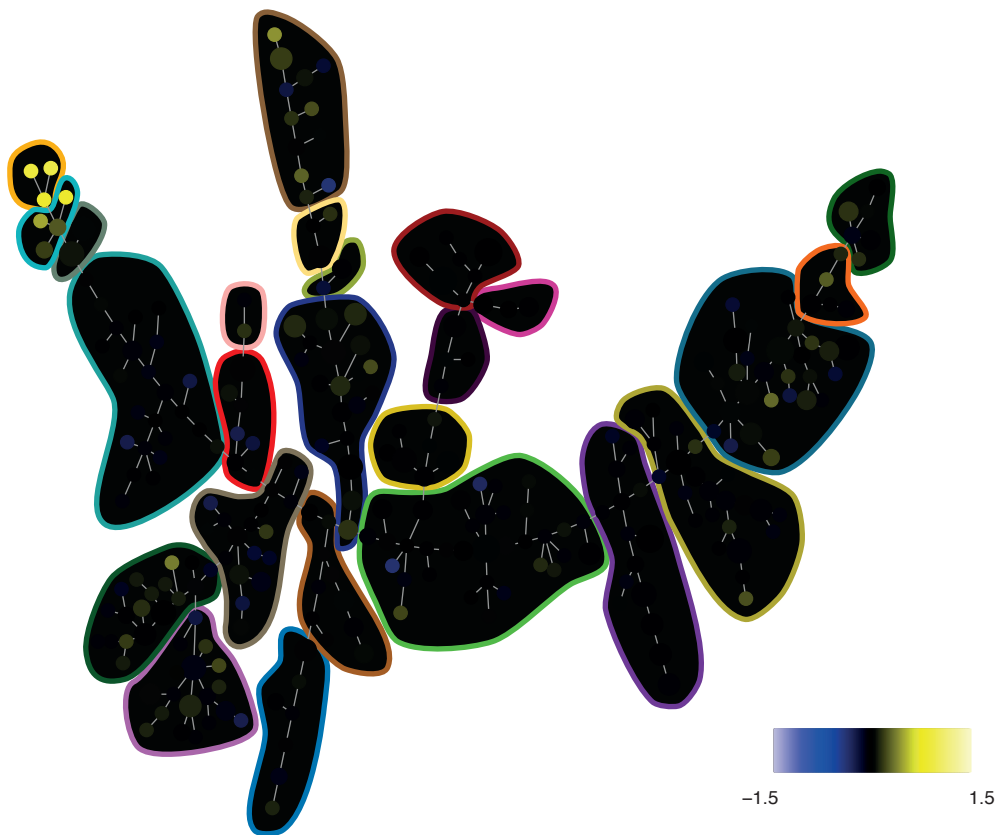


Figure S9A

168-pH3 ---- TNFa vs Ref Ratio

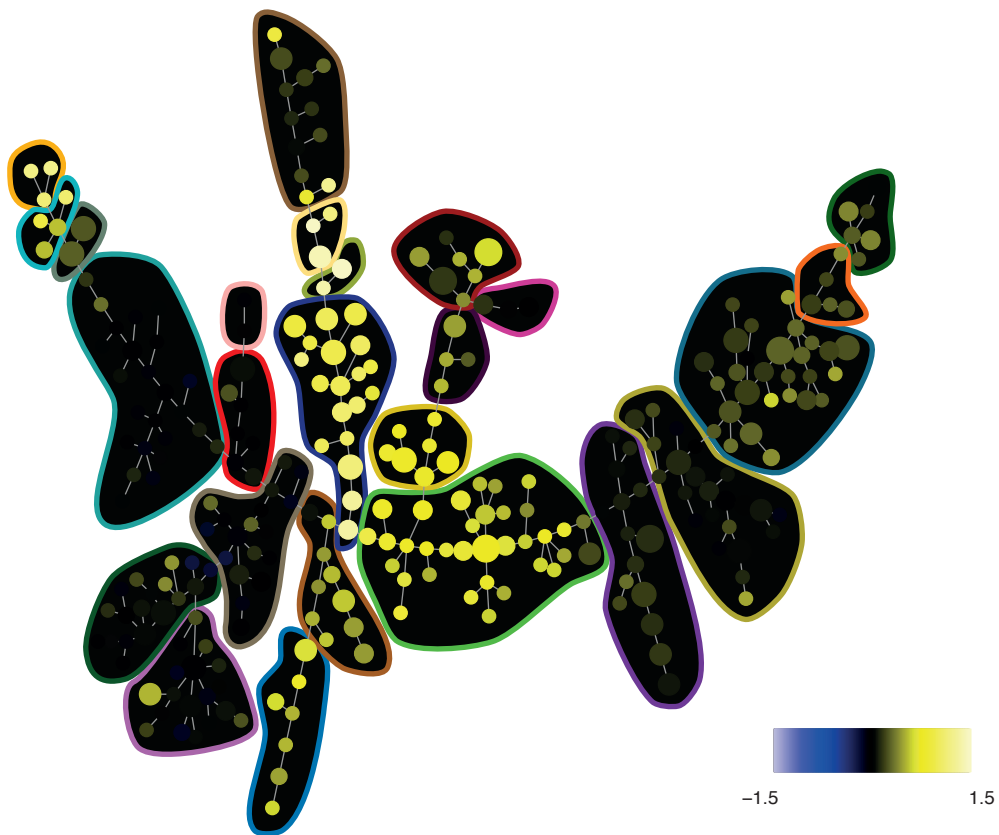


Figure S9A

168-pH3 --- TPO vs Ref Ratio

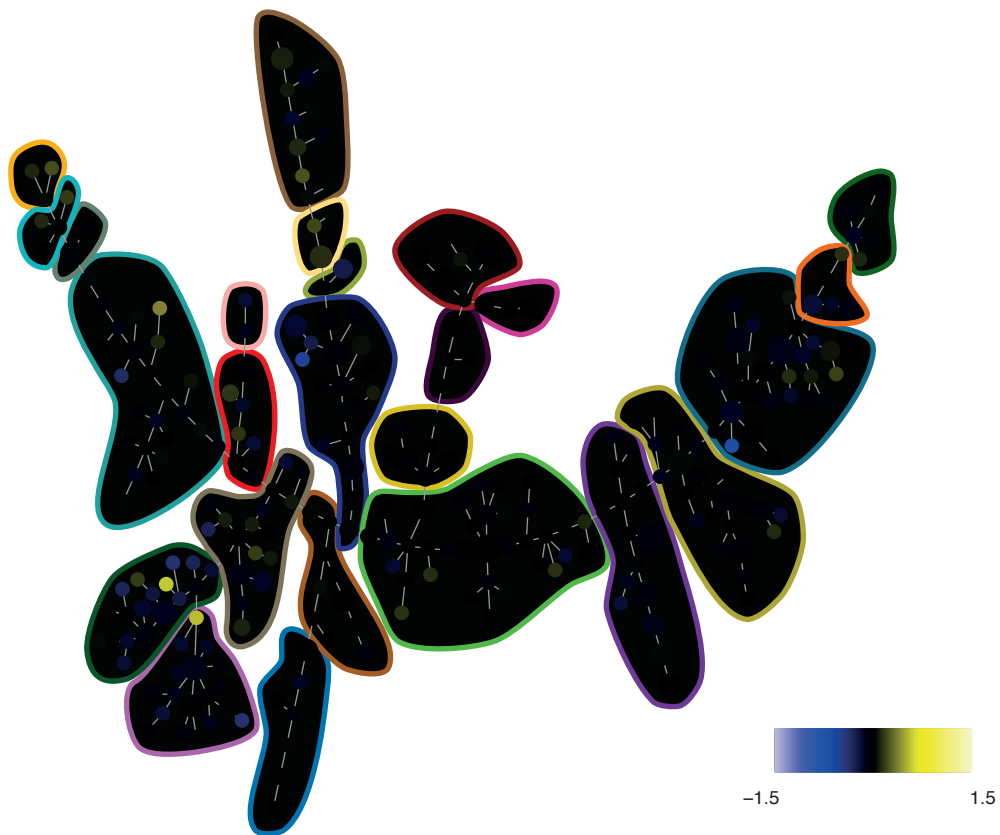


Figure S9A

169-pP38 ---- BCR vs Ref Ratio

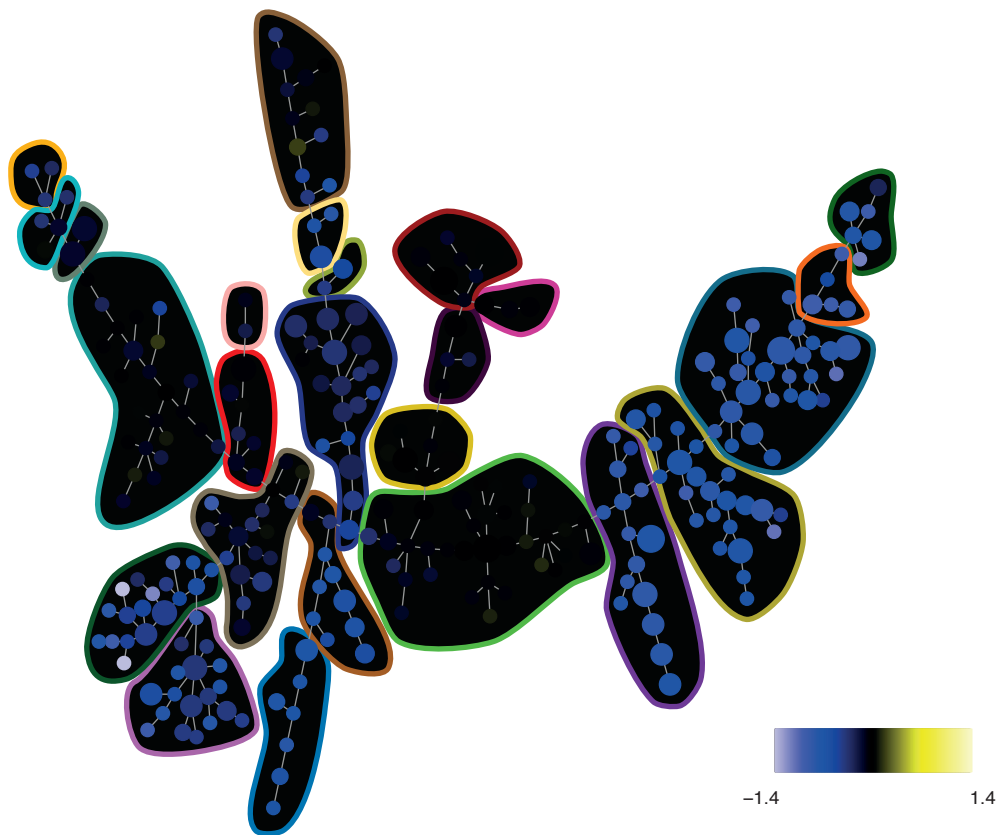


Figure S9A

169-pP38 ---- DMSO vs Ref Ratio

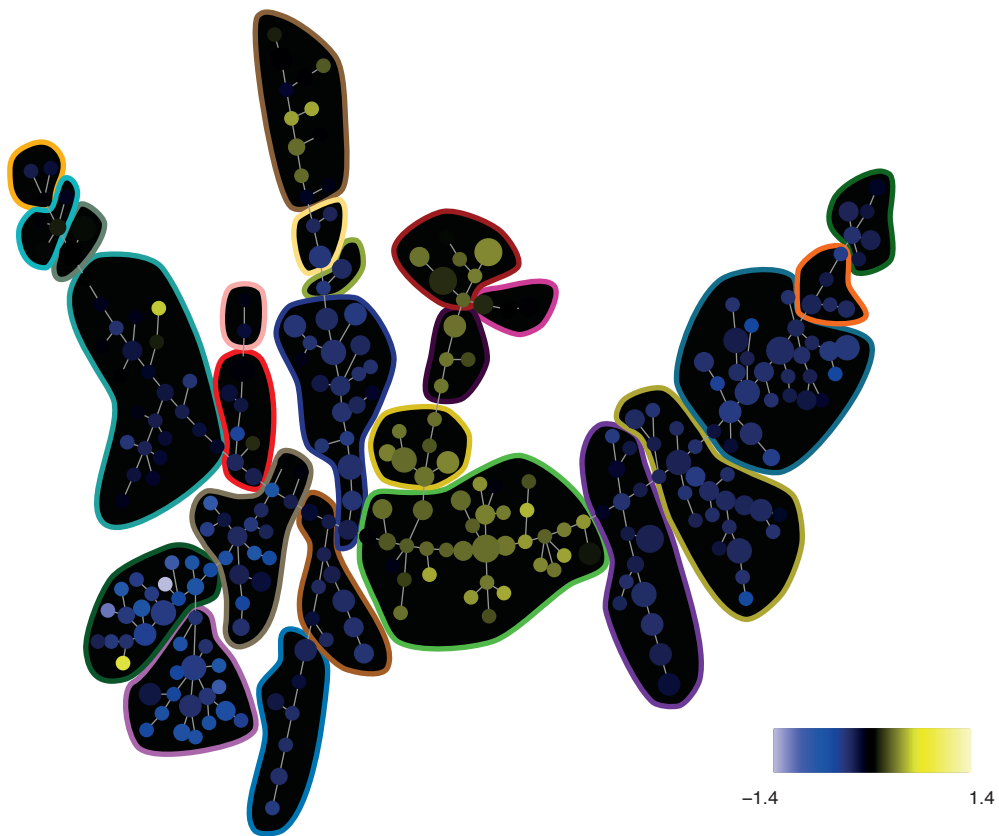


Figure S9A

169-pP38 ---- Flt3L vs Ref Ratio

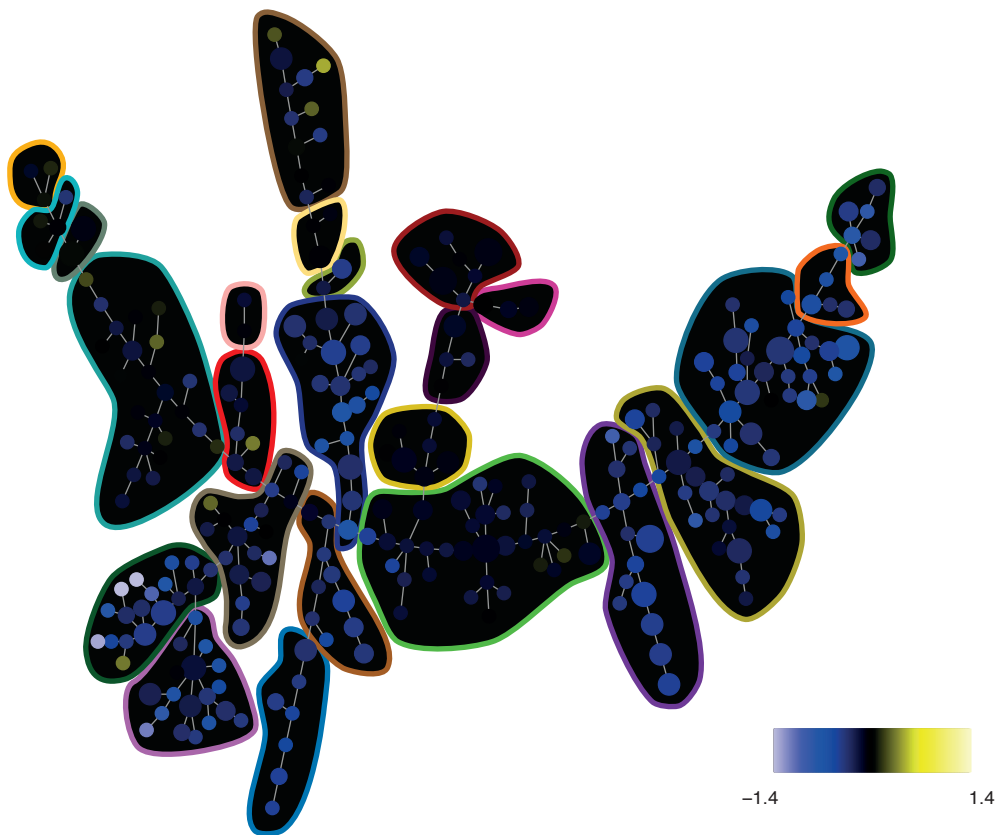


Figure S9A

169-pP38 — GCSF vs Ref Ratio

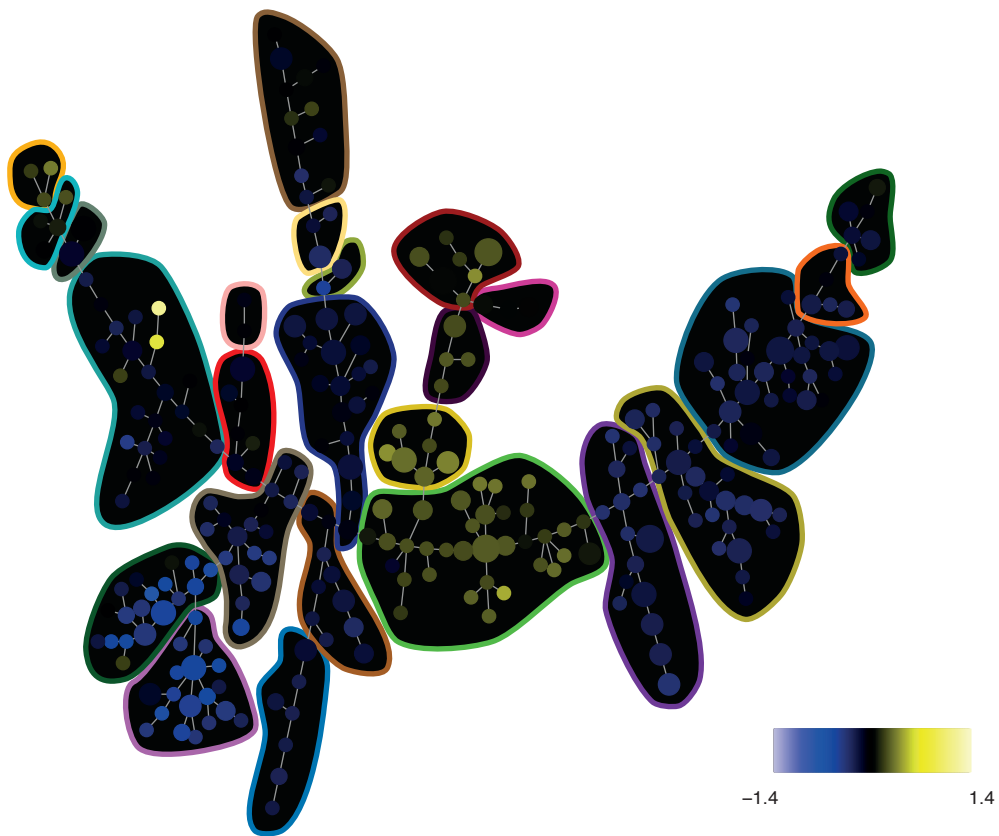


Figure S9A

169-pP38 --- GMCSF vs Ref Ratio

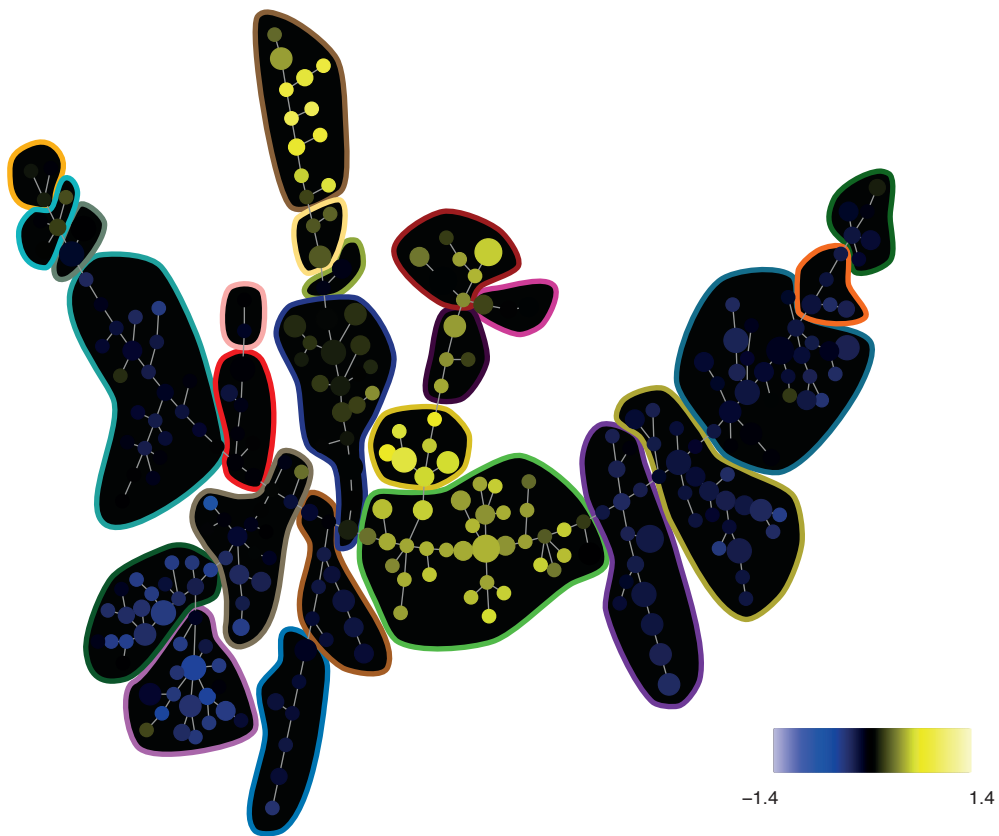


Figure S9A

169-pP38 ---- IFNad vs Ref Ratio

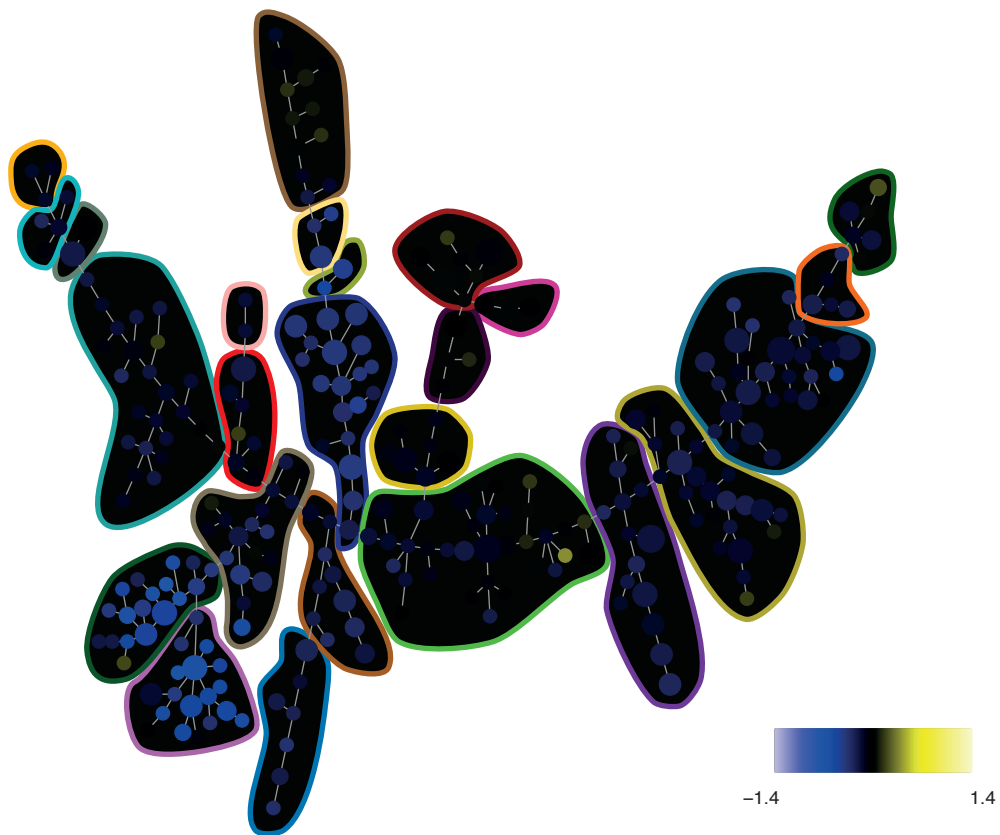


Figure S9A

169-pP38 ---- IL3 vs Ref Ratio



Figure S9A

169-pP38 ---- IL7 vs Ref Ratio

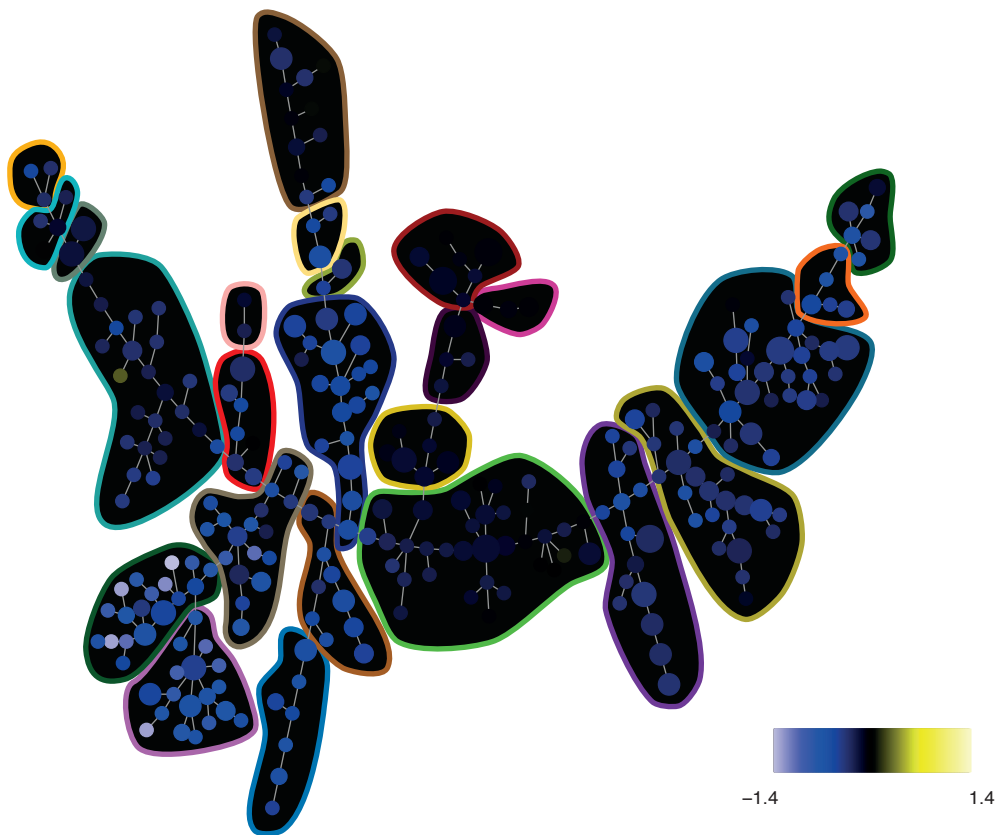


Figure S9A

169-pP38 ---- LPS vs Ref Ratio

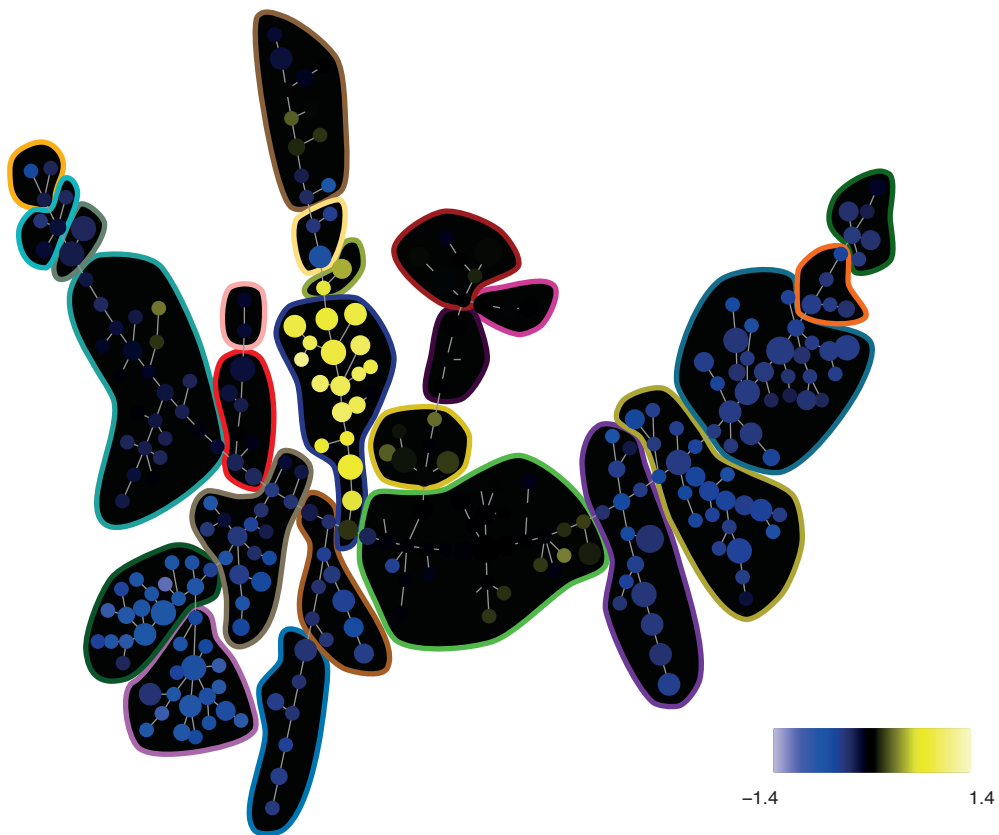


Figure S9A

169-pP38 ---- PMAiono vs Ref Ratio

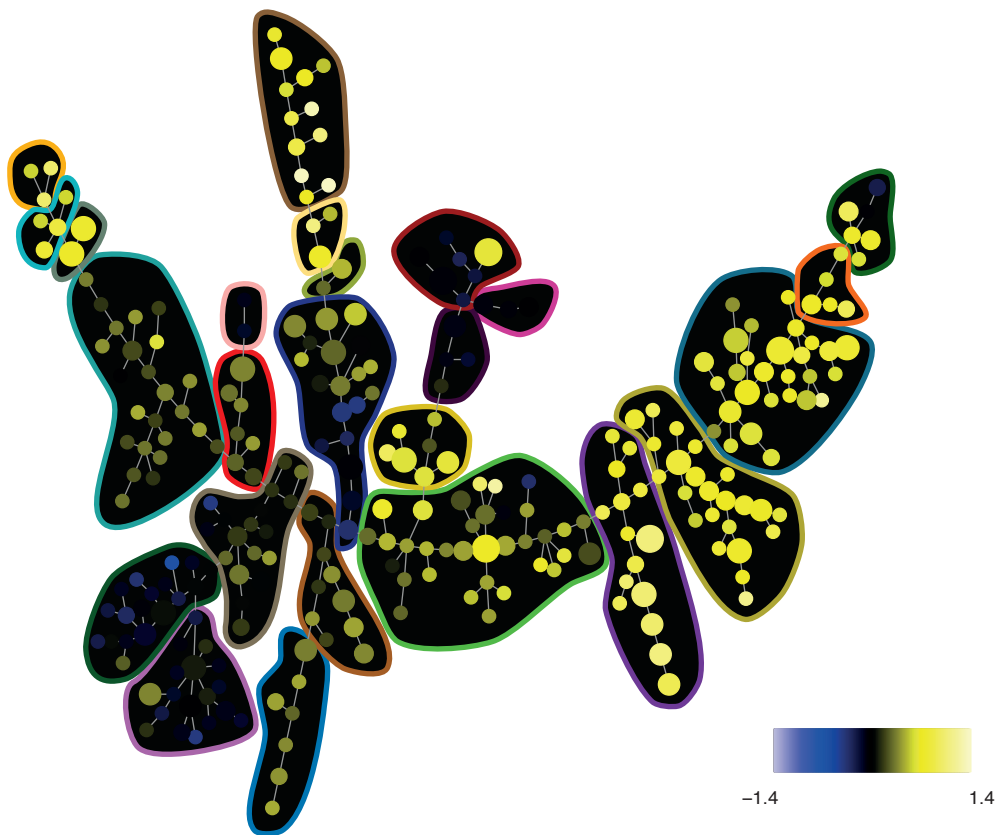


Figure S9A

169-pP38 ---- PVO4 vs Ref Ratio

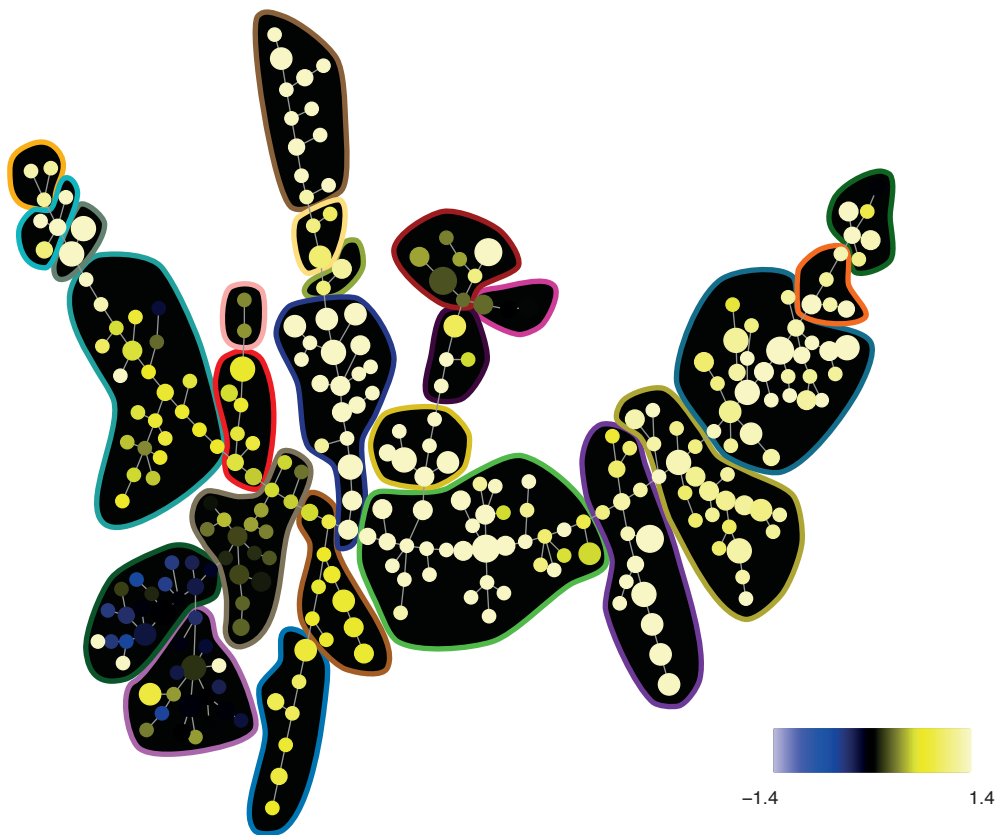


Figure S9A

169-pP38 ---- SCF vs Ref Ratio

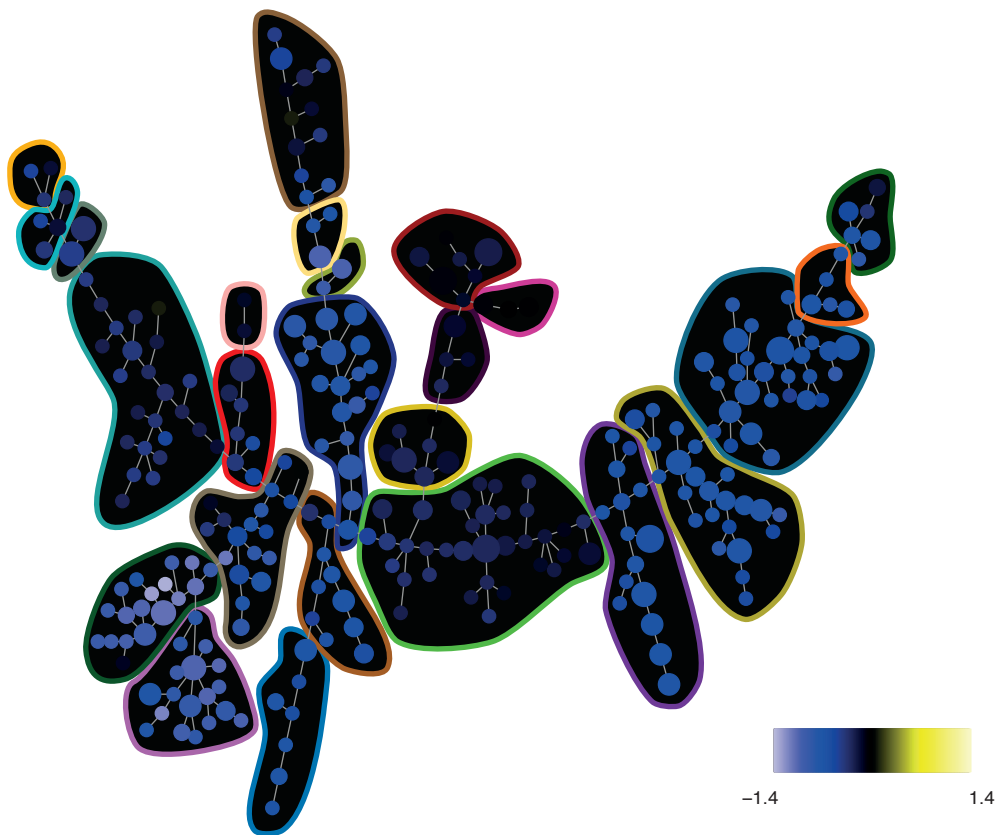


Figure S9A

169-pP38 --- TNFa vs Ref Ratio

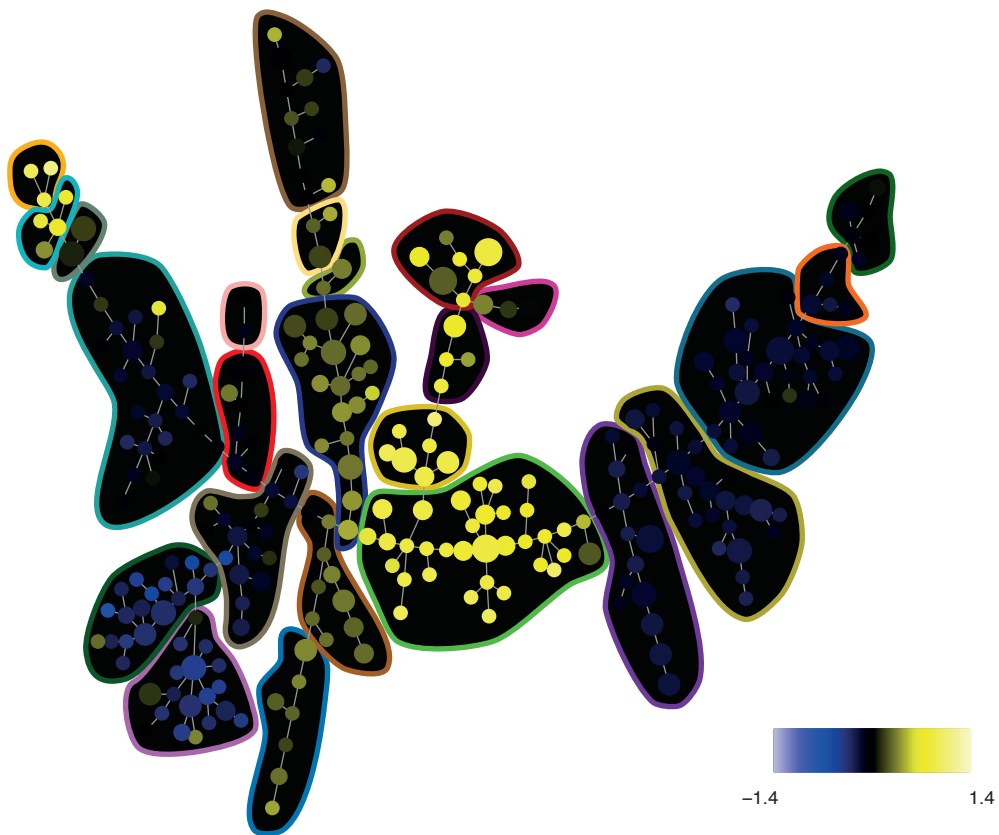


Figure S9A

169-pP38 ---- TPO vs Ref Ratio

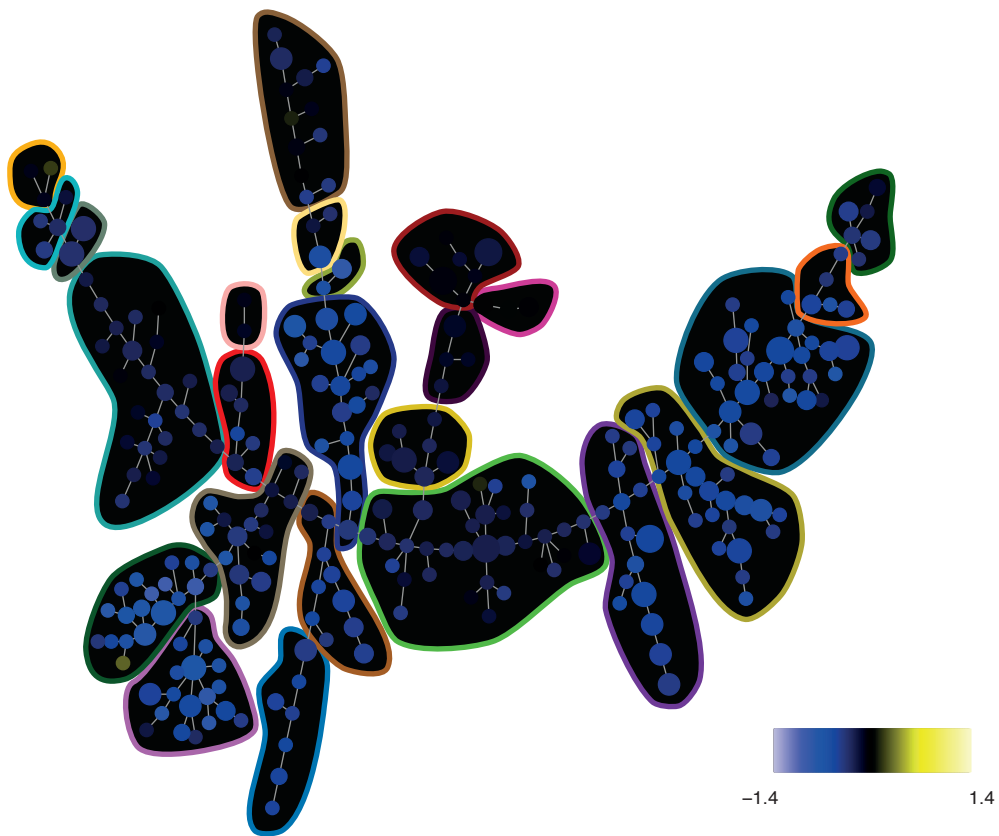


Figure S9A

171-pBtk/Itk --- BCR vs Ref Ratio

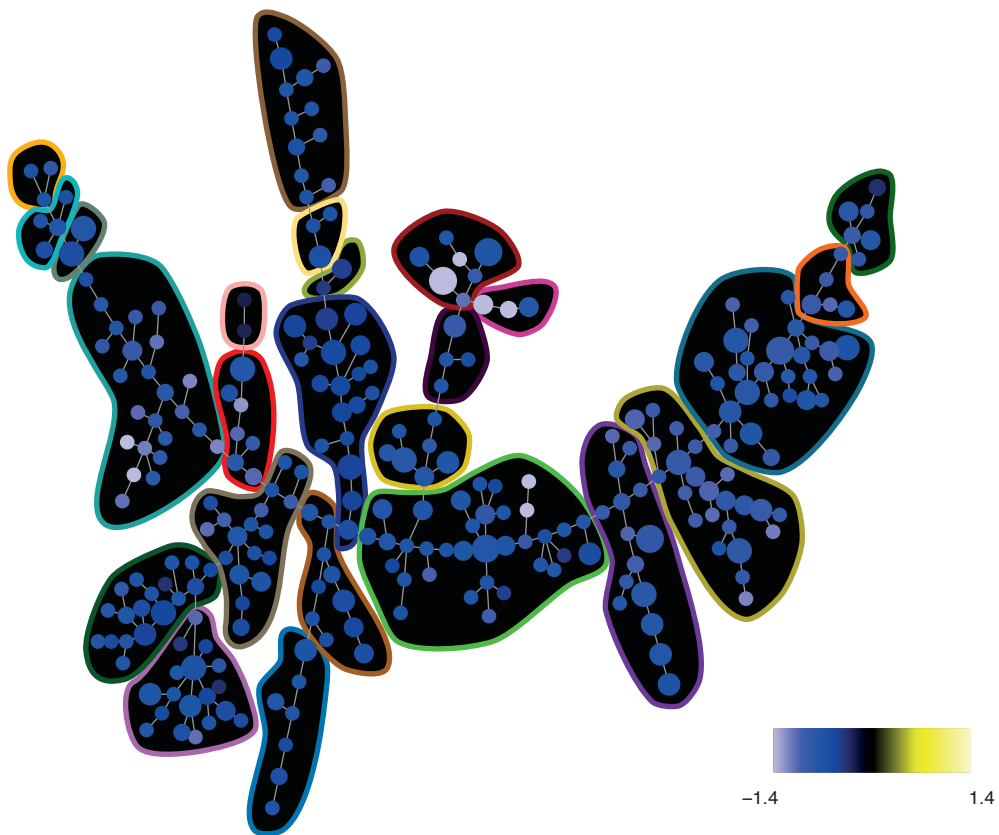


Figure S9A

171-pBtk/Itk --- DMSO vs Ref Ratio

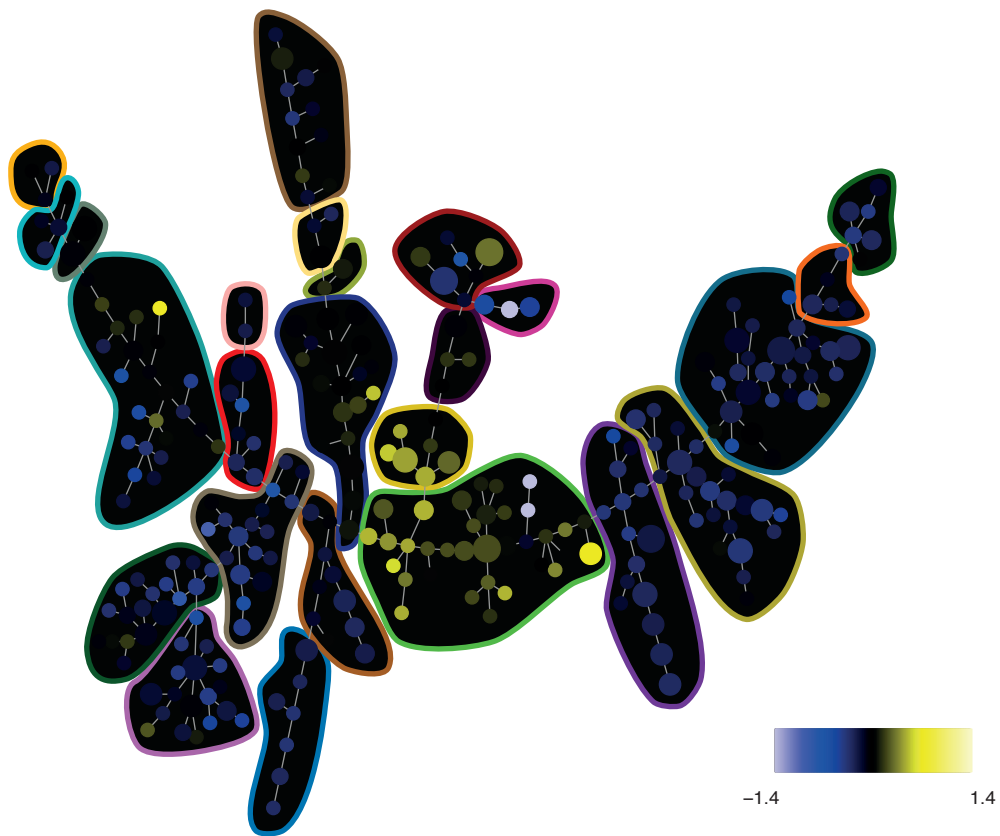


Figure S9A

171-pBtk/Itk --- Flt3L vs Ref Ratio

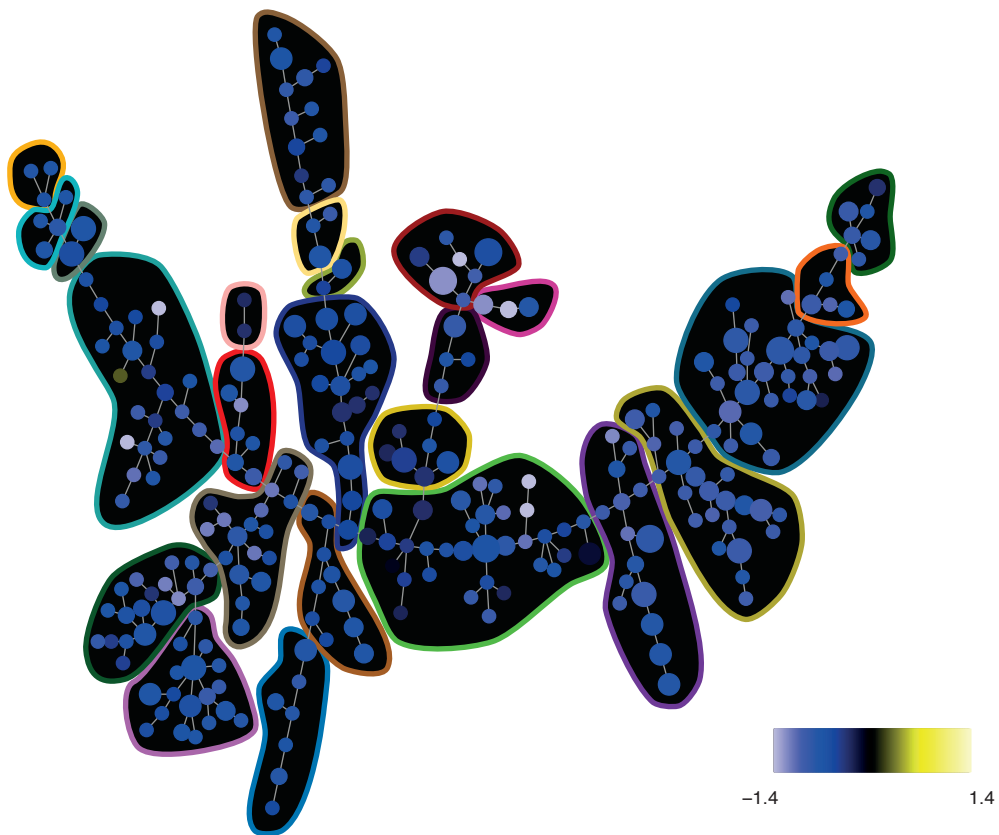


Figure S9A

171-pBtk/Itk ---- GCSF vs Ref Ratio

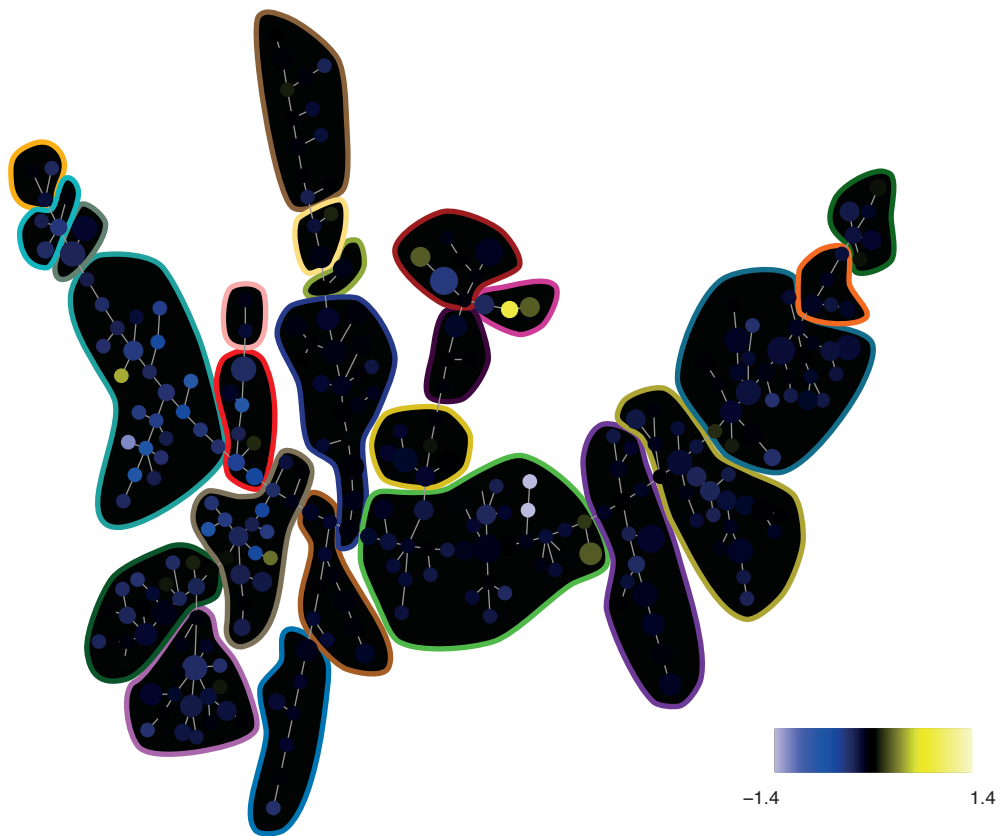


Figure S9A

171-pBtk/Itk ---- GMCSF vs Ref Ratio

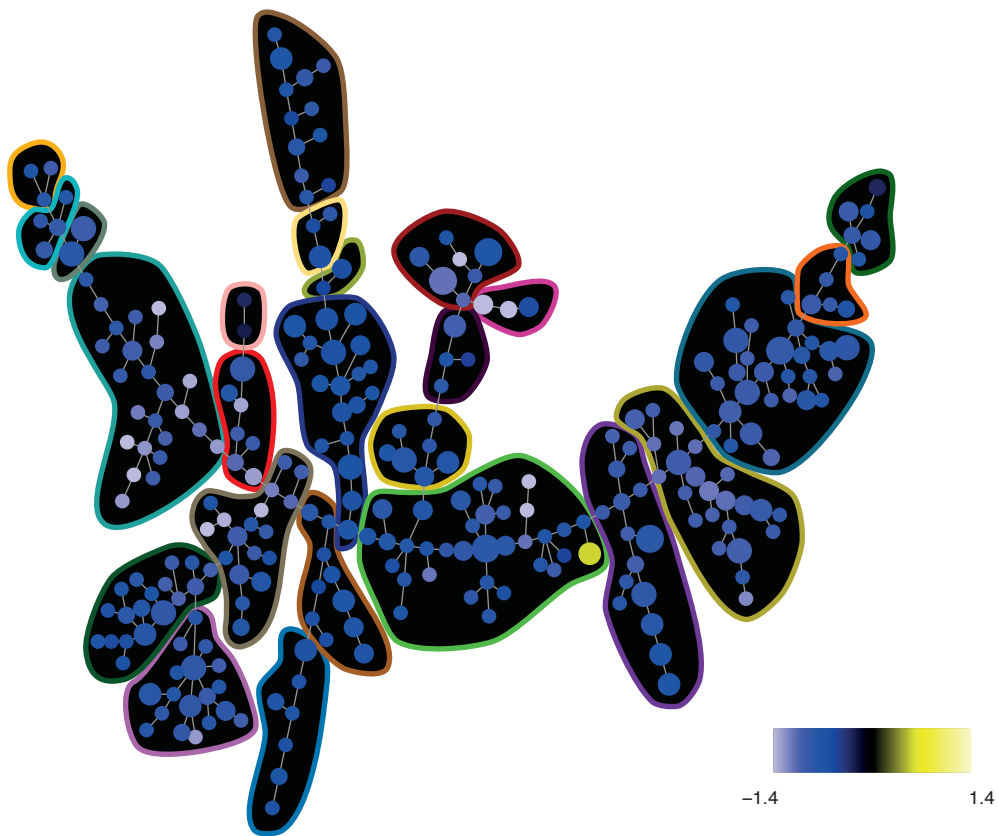


Figure S9A

171-pBtk/Itk ---- IFNad vs Ref Ratio

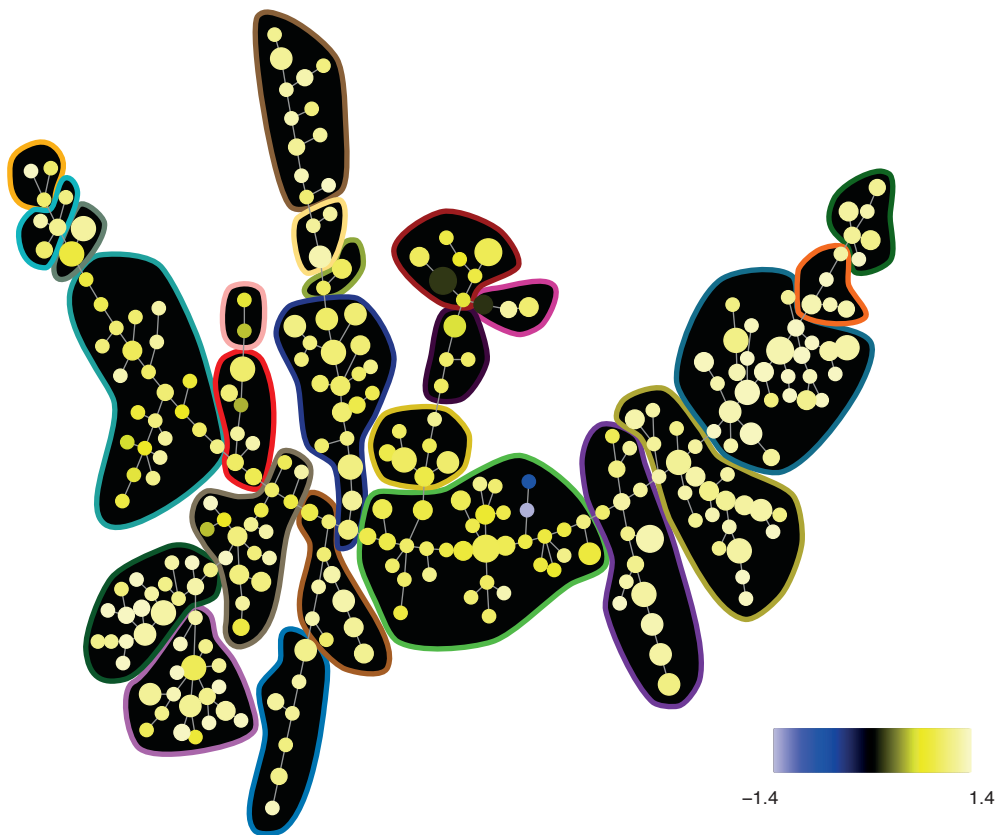


Figure S9A

171-pBtk/Itk — IL3 vs Ref Ratio

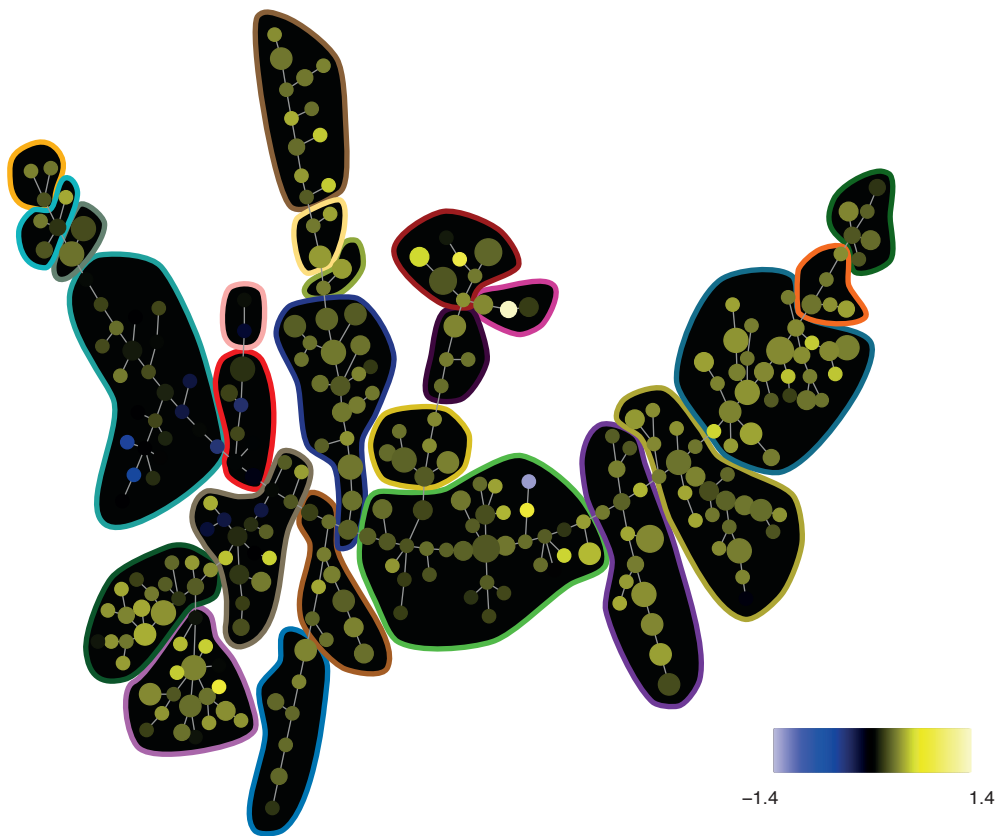


Figure S9A

171-pBtk/Itk — IL7 vs Ref Ratio

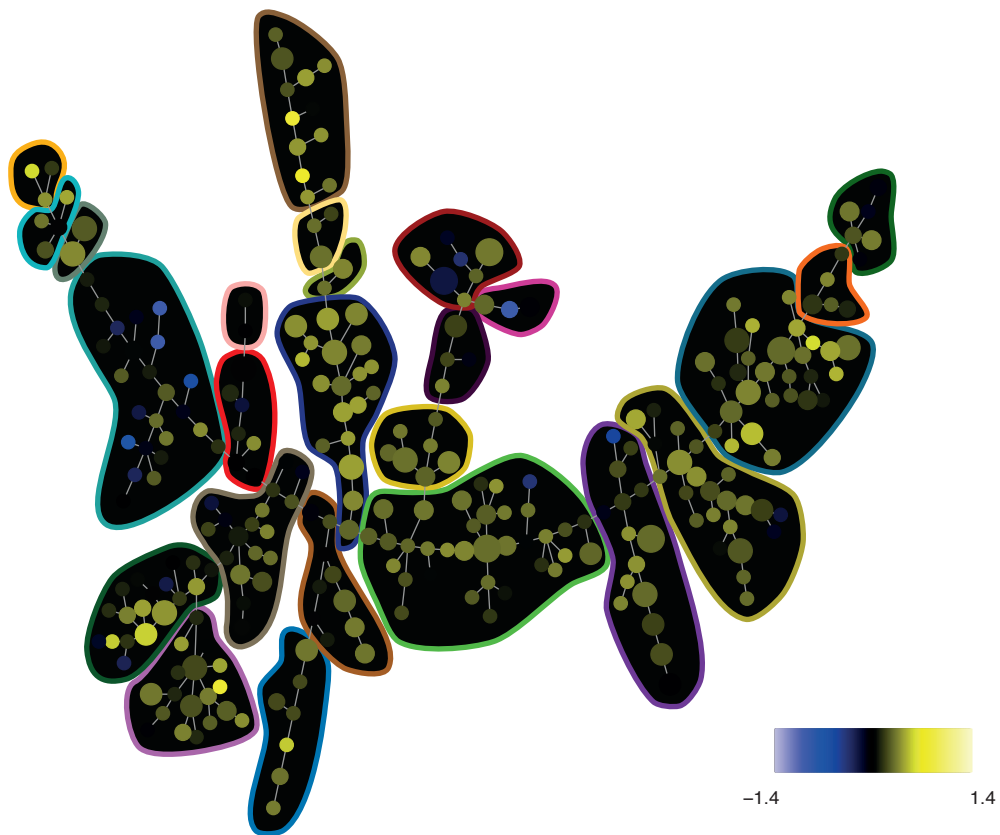


Figure S9A

171-pBtk/Itk --- LPS vs Ref Ratio

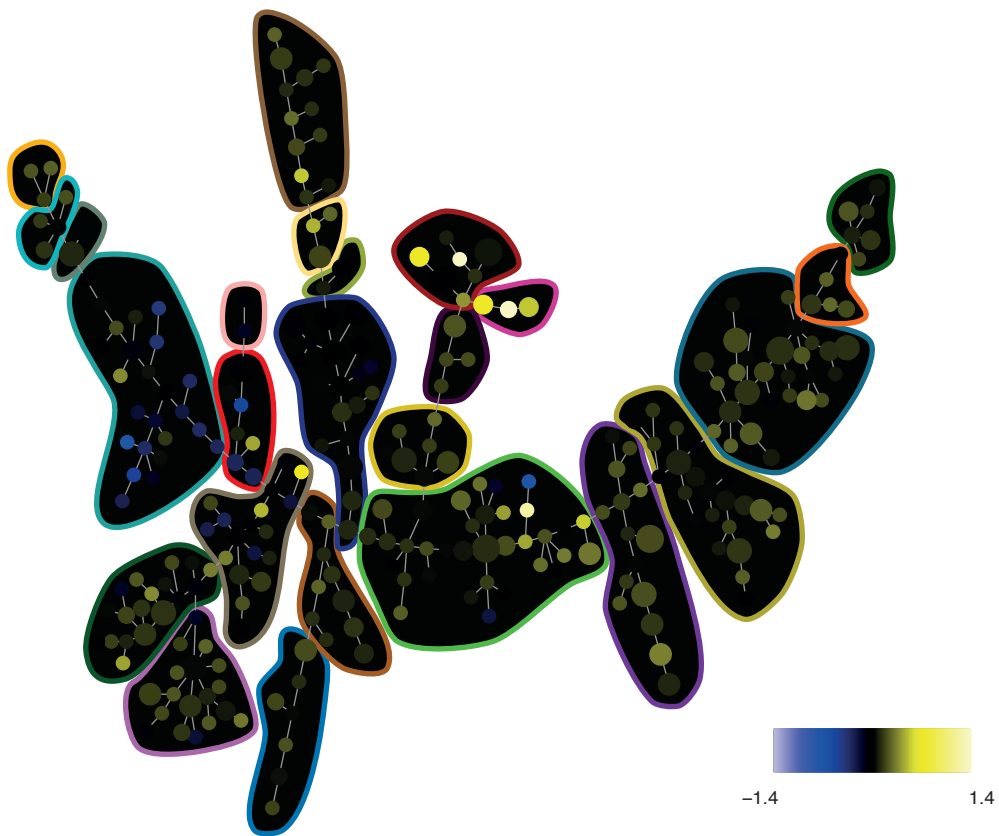


Figure S9A

171-pBtk/Itk ---- PMAiono vs Ref Ratio

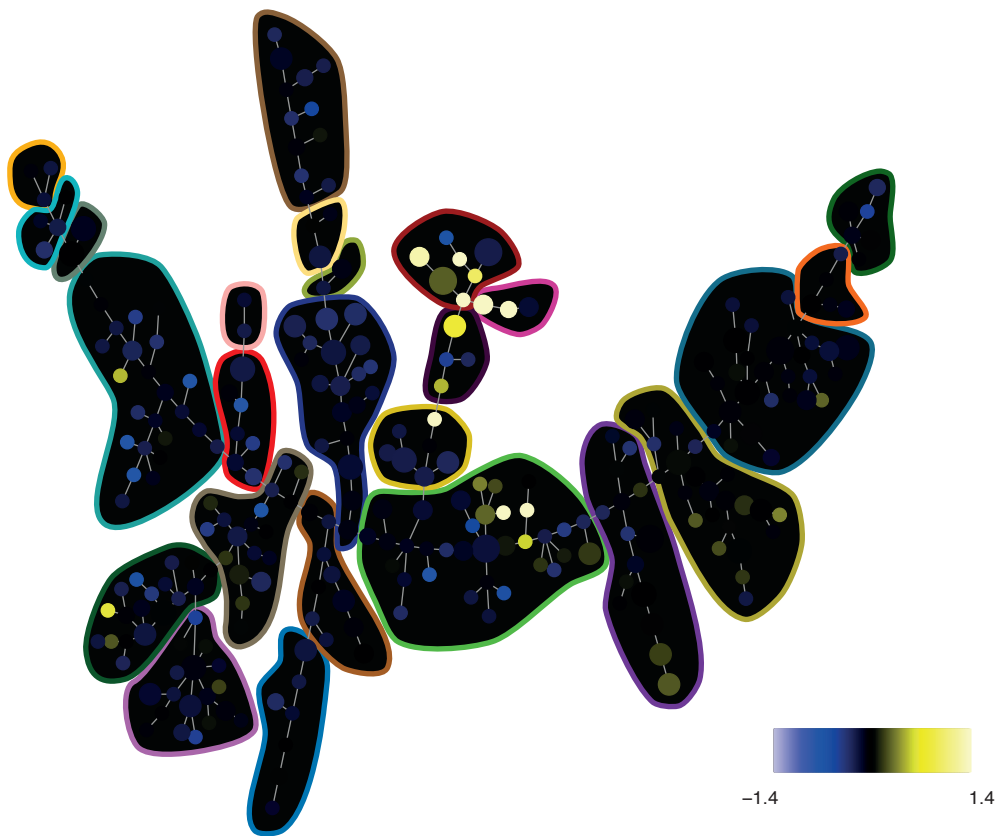


Figure S9A

171-pBtk/Itk — PVO4 vs Ref Ratio

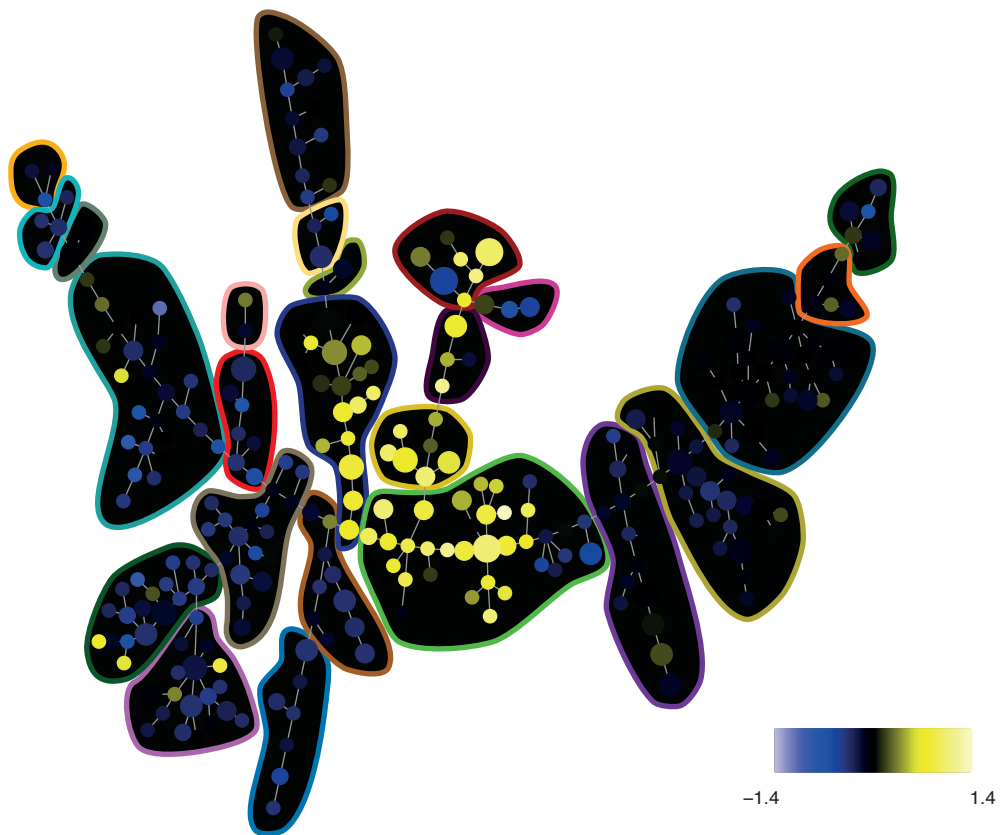


Figure S9A

171-pBtk/Itk ---- SCF vs Ref Ratio

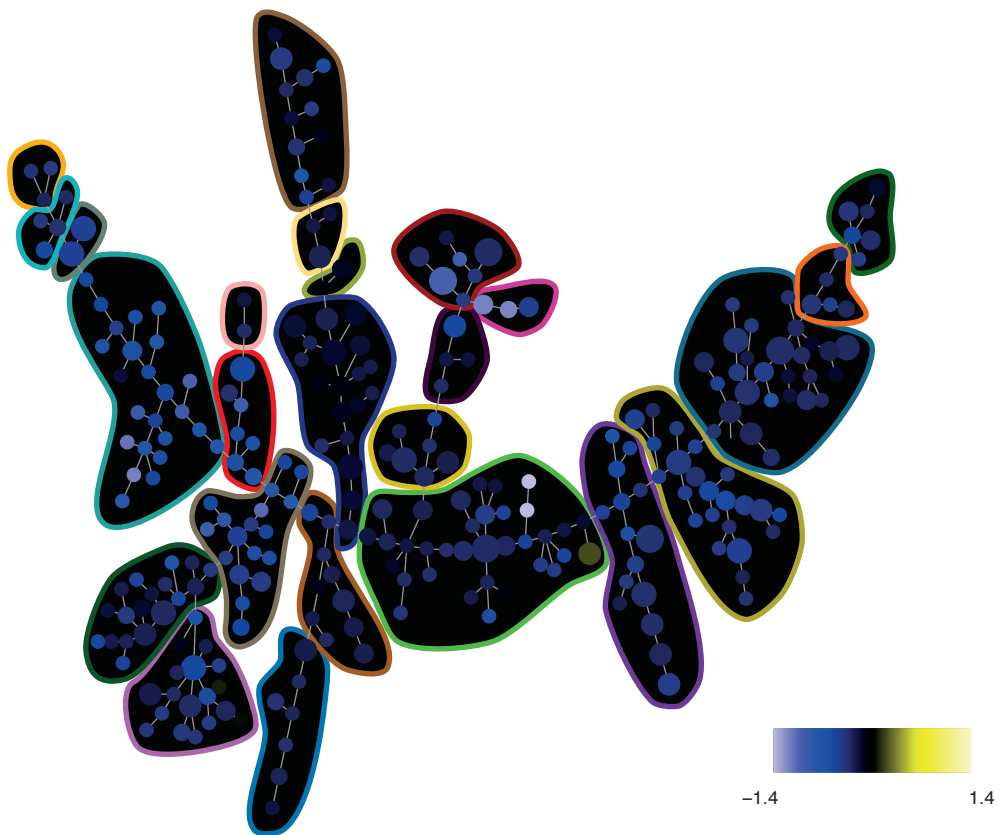


Figure S9A

171-pBtk/Itk --- TNFa vs Ref Ratio

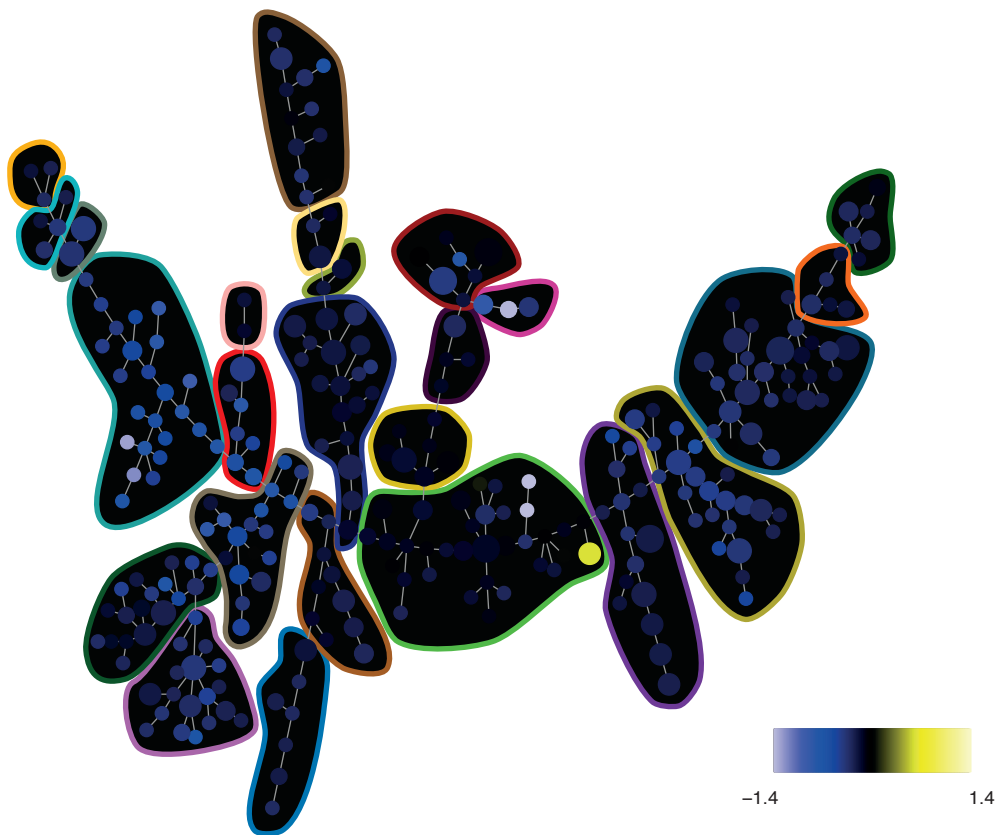


Figure S9A

171-pBtk/Itk ---- TPO vs Ref Ratio

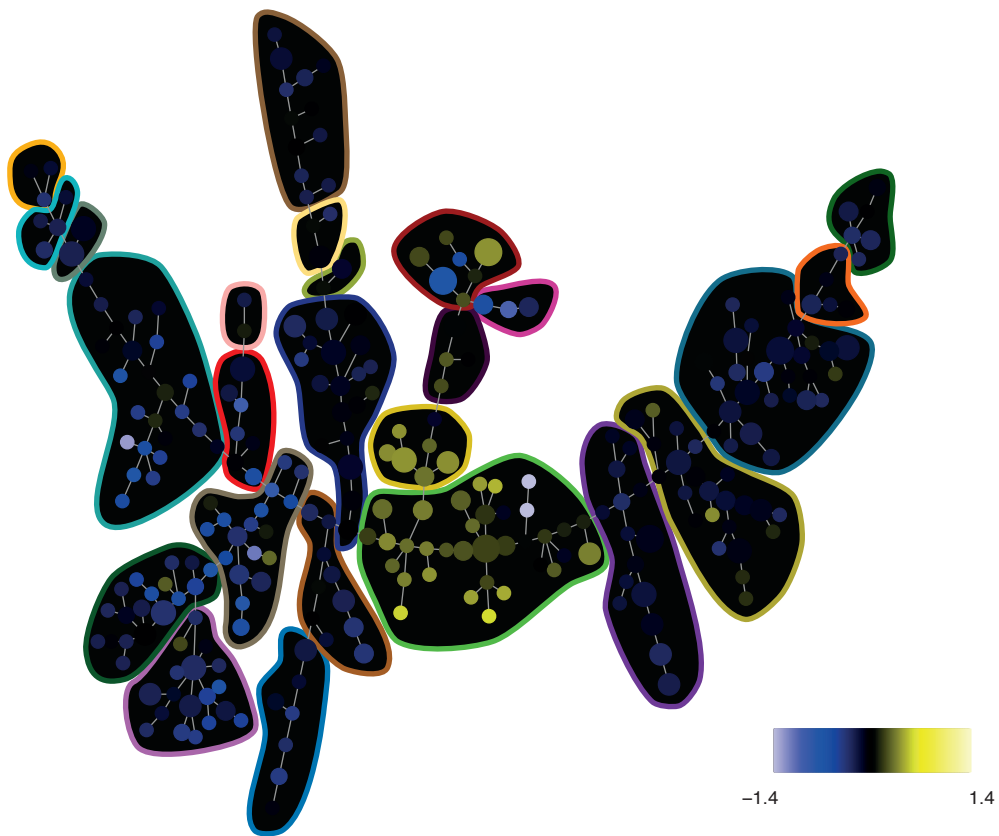


Figure S9A

172-pS6 ---- BCR vs Ref Ratio

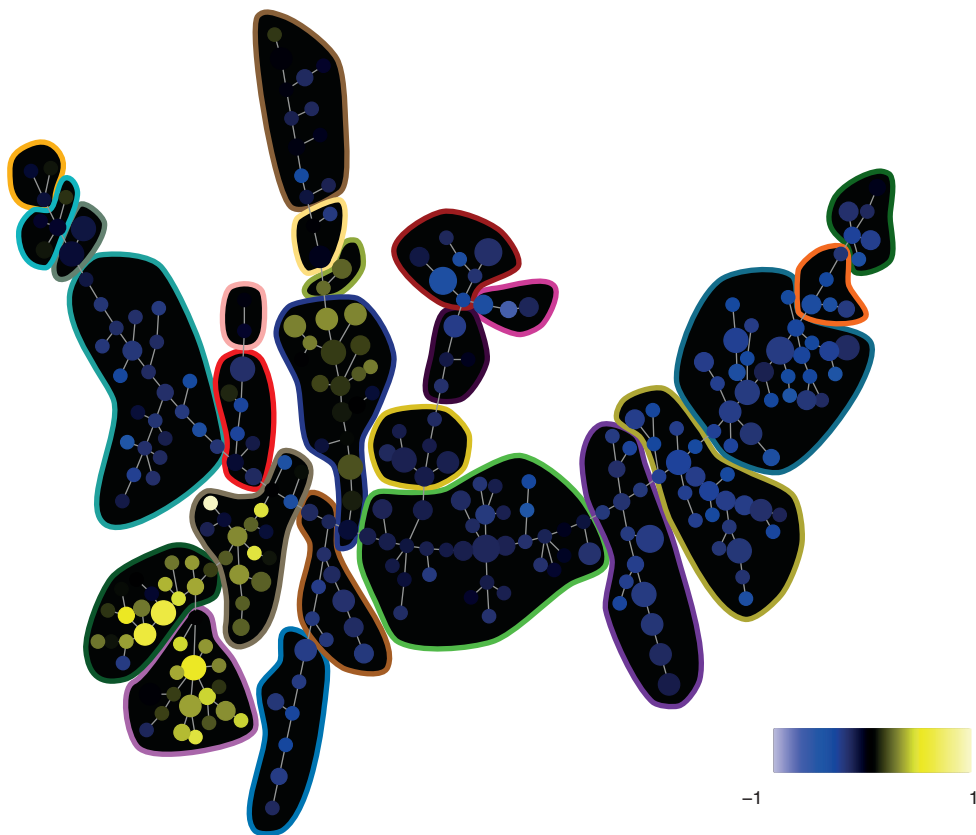


Figure S9A

172-pS6 --- DMSO vs Ref Ratio

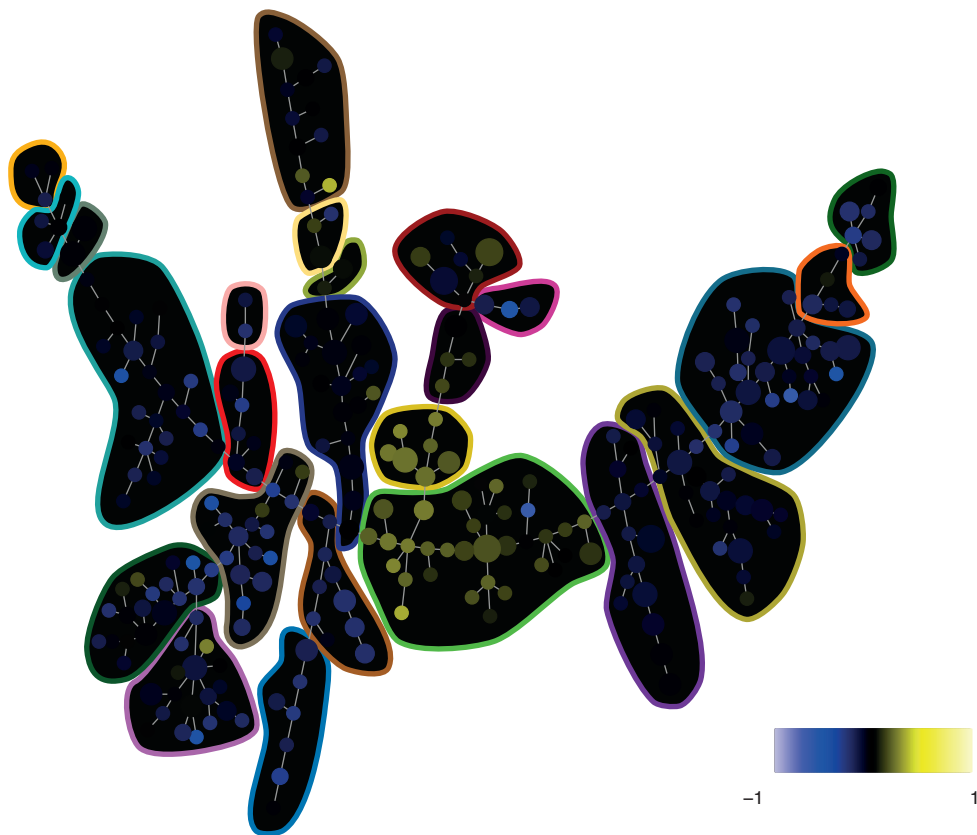


Figure S9A

172-pS6 ---- Flt3L vs Ref Ratio

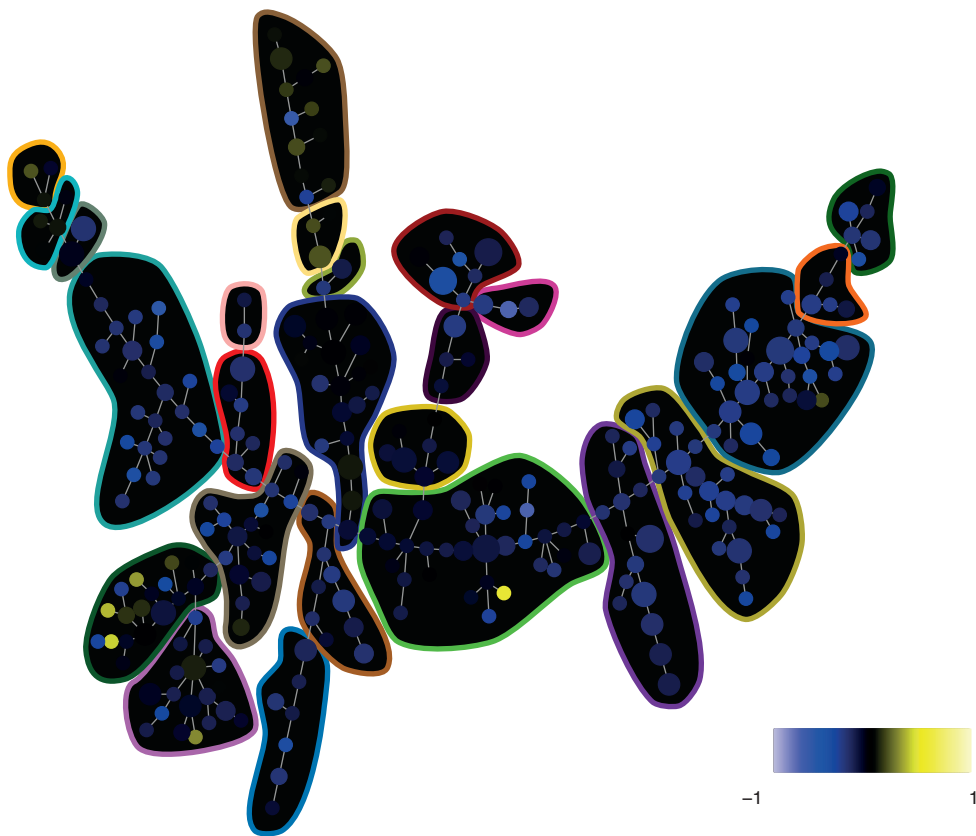


Figure S9A

172-pS6 ---- GCSF vs Ref Ratio

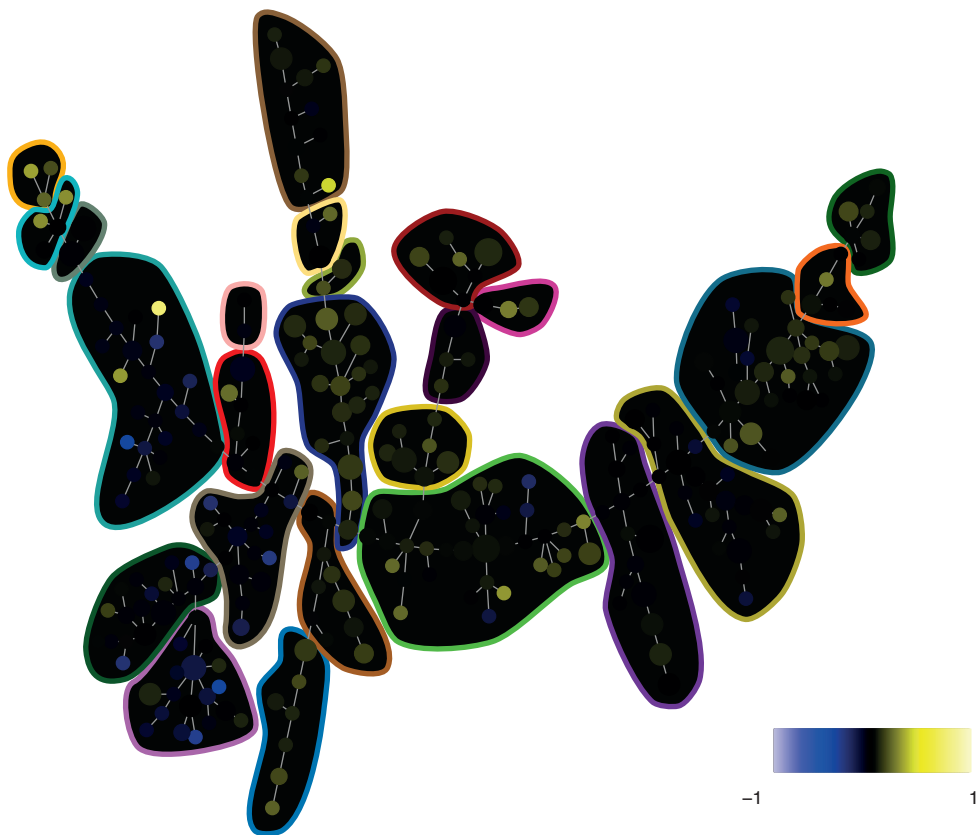


Figure S9A

172-pS6 ---- GMCSF vs Ref Ratio

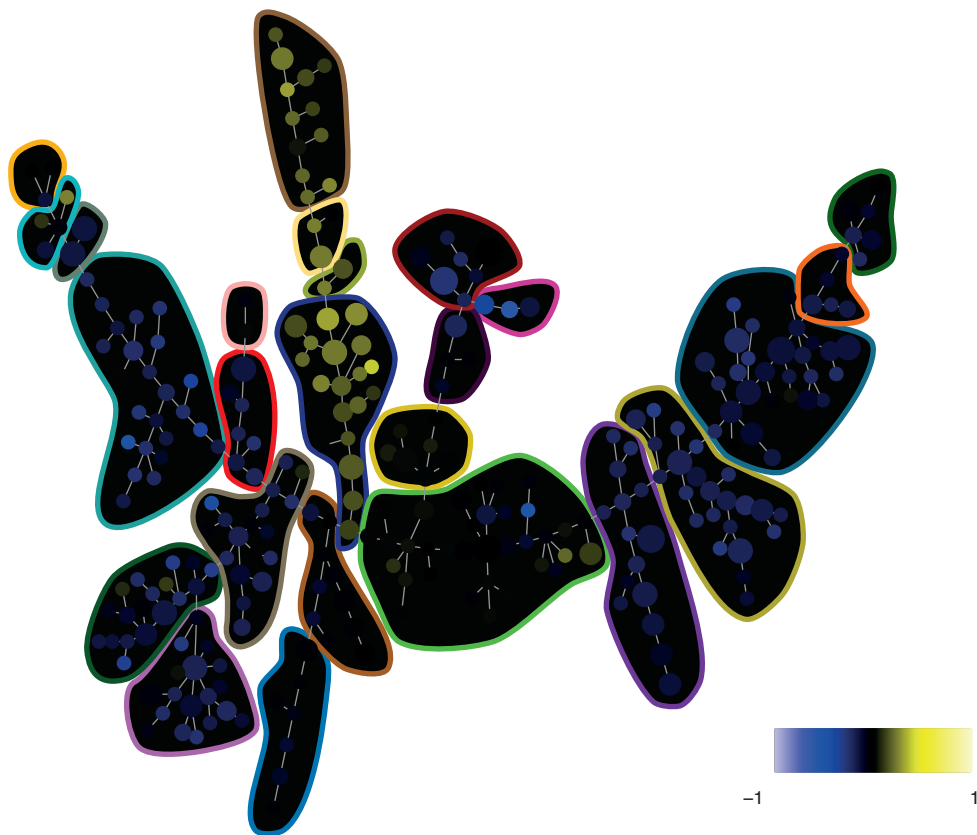


Figure S9A

172-pS6 ---- IFNad vs Ref Ratio

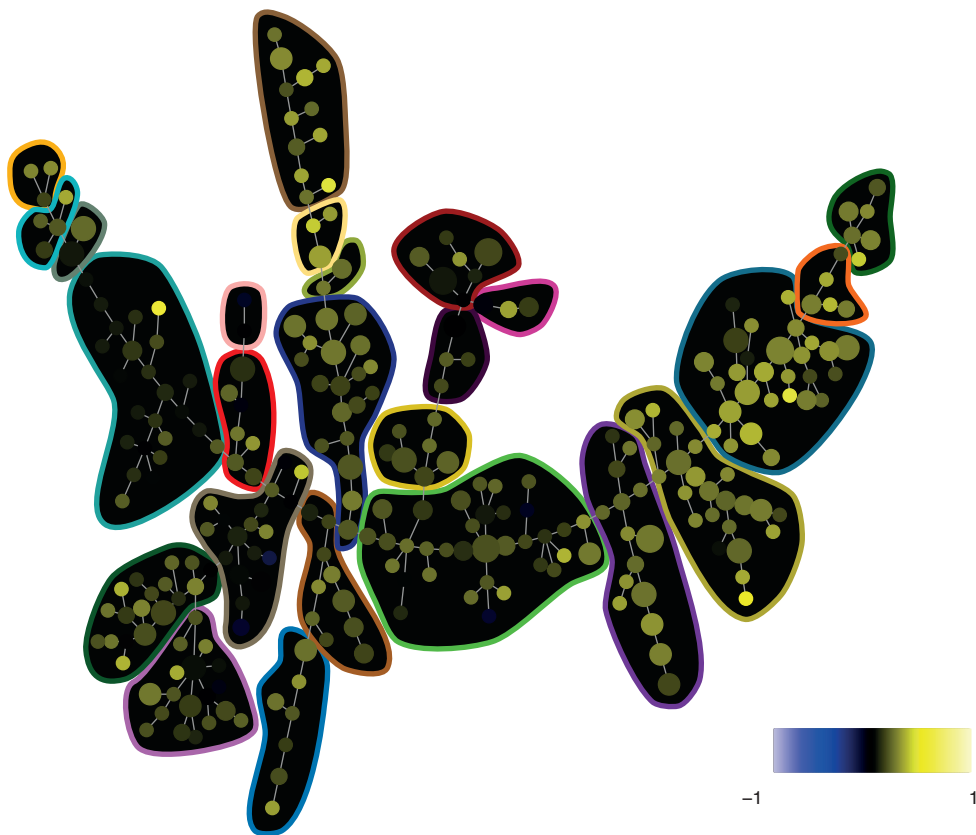


Figure S9A

172-pS6 ---- IL3 vs Ref Ratio

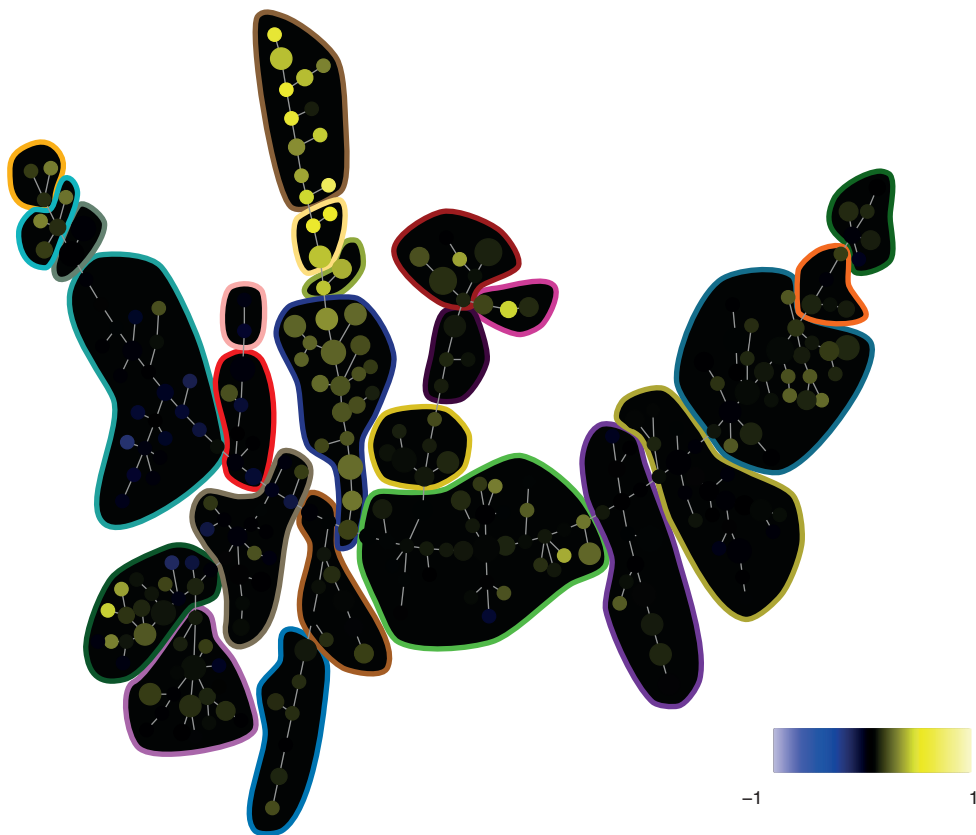


Figure S9A

172-pS6 ---- IL7 vs Ref Ratio

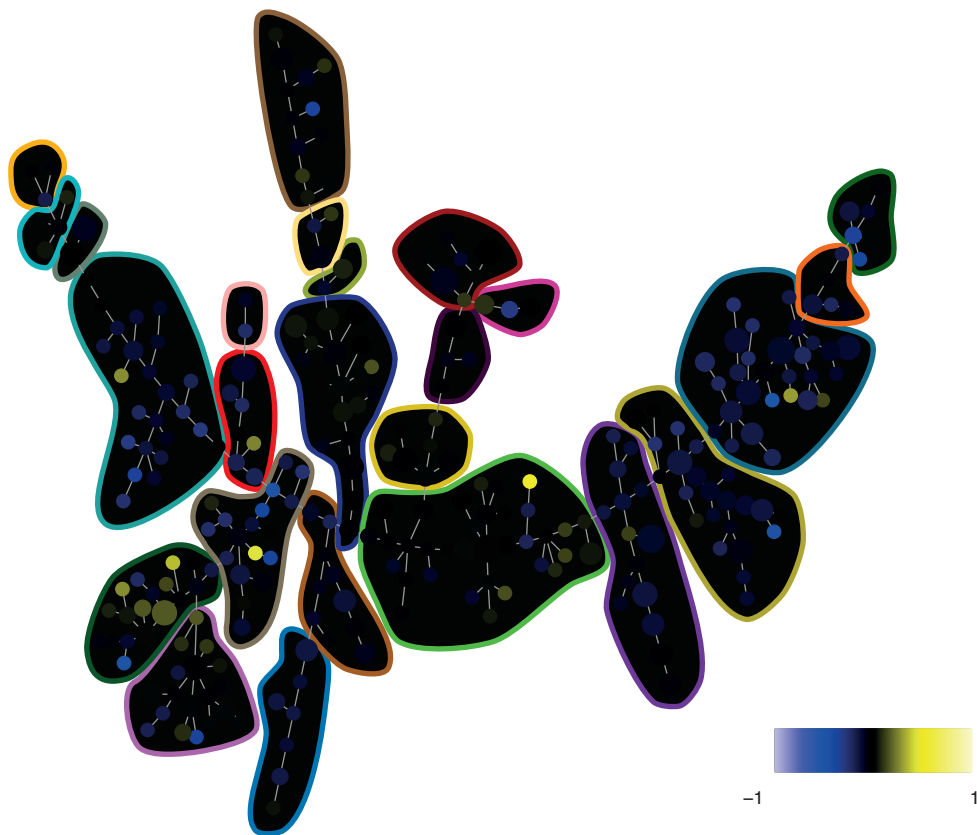


Figure S9A

172-pS6 --- LPS vs Ref Ratio

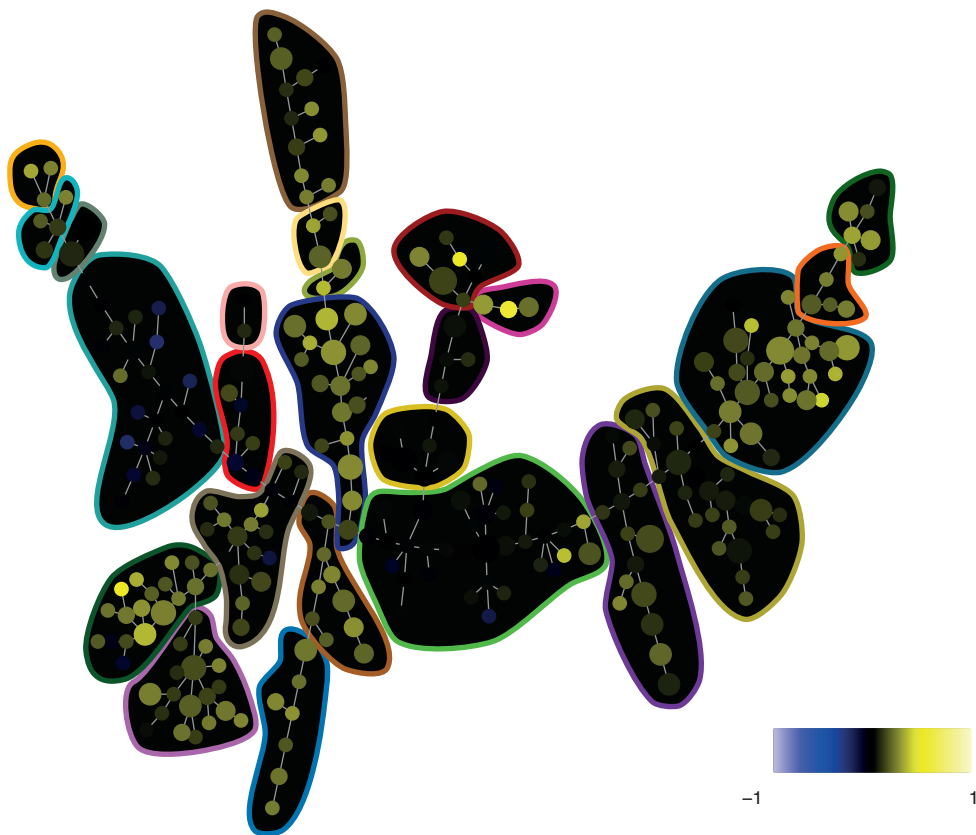


Figure S9A

172-pS6 ---- PMAiono vs Ref Ratio

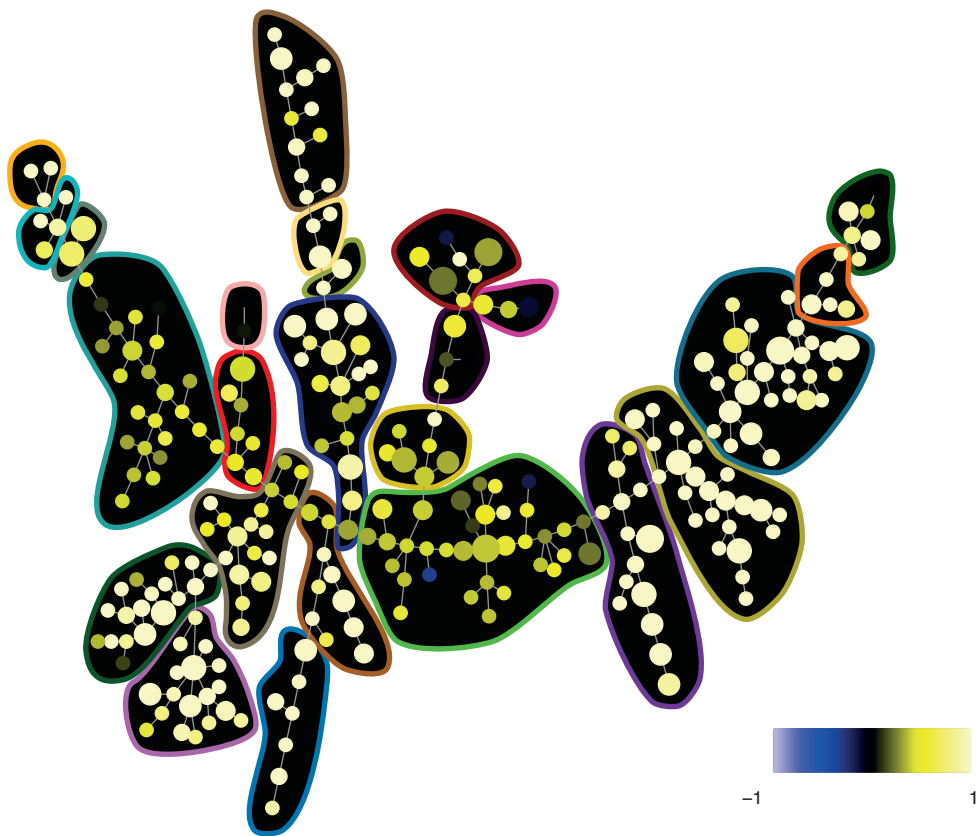


Figure S9A

172-pS6 ---- PVO4 vs Ref Ratio

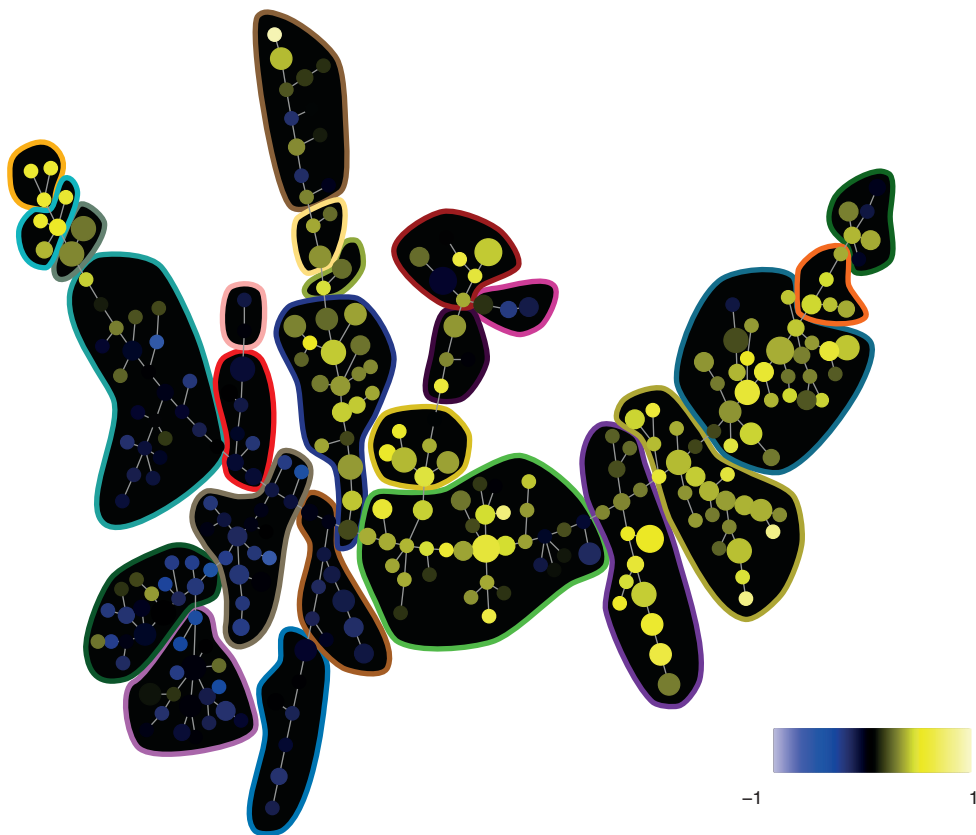


Figure S9A

172-pS6 ---- SCF vs Ref Ratio

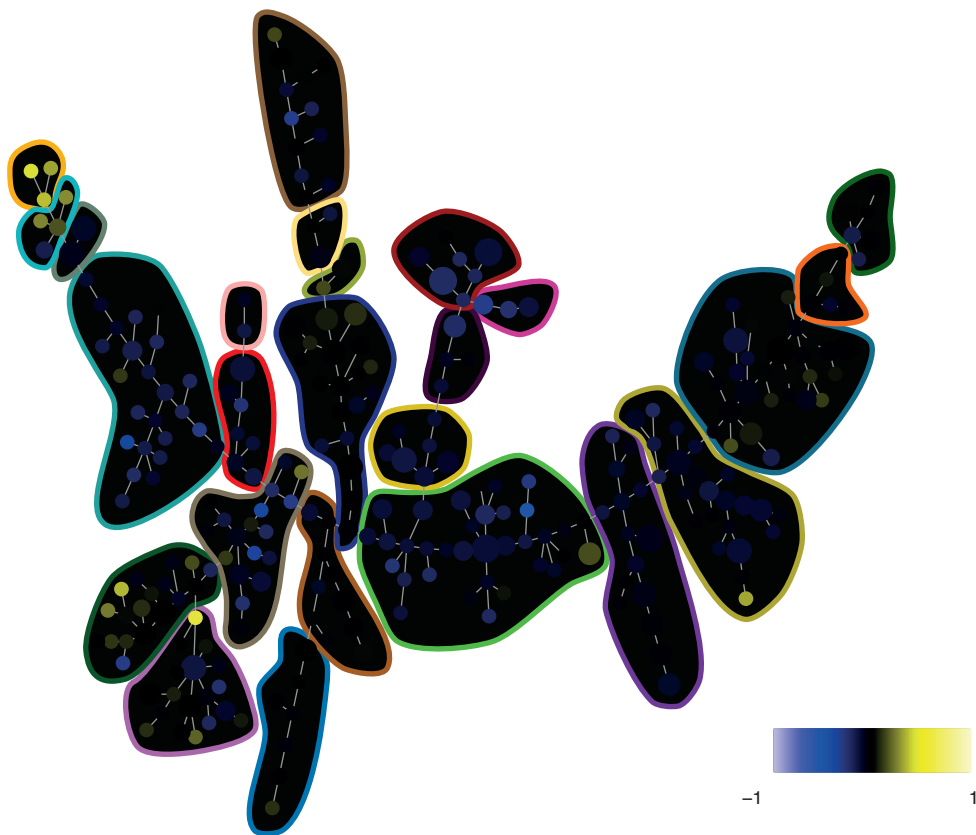


Figure S9A

172-pS6 ---- TNFa vs Ref Ratio

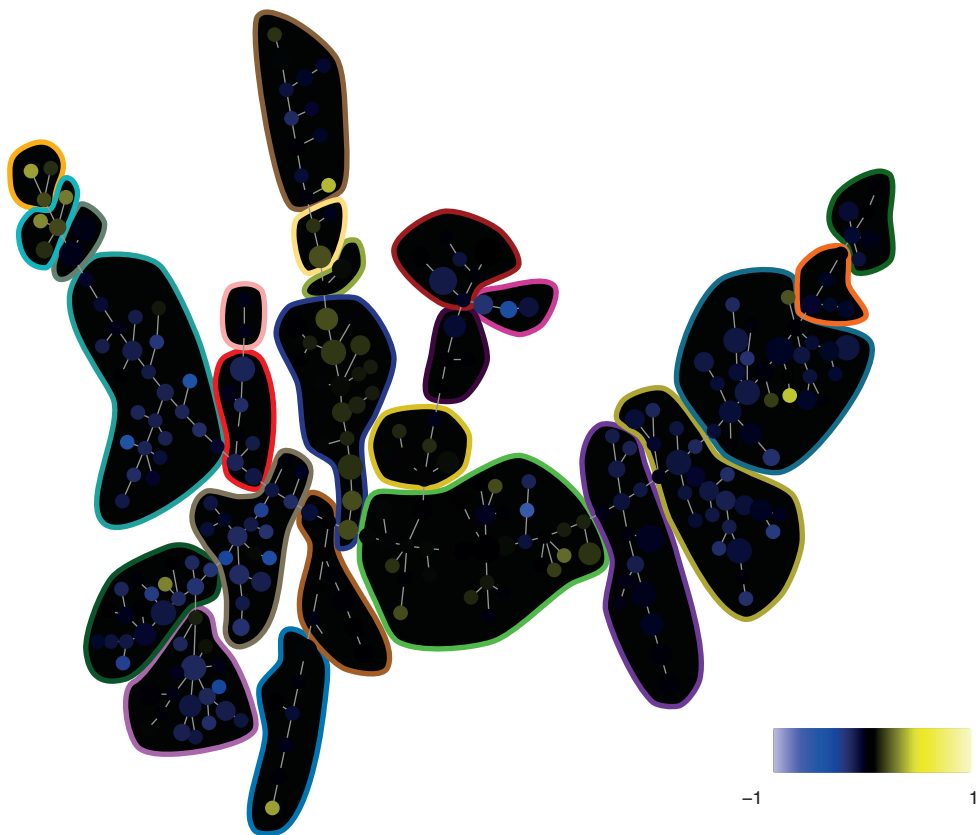


Figure S9A

172-pS6 --- TPO vs Ref Ratio

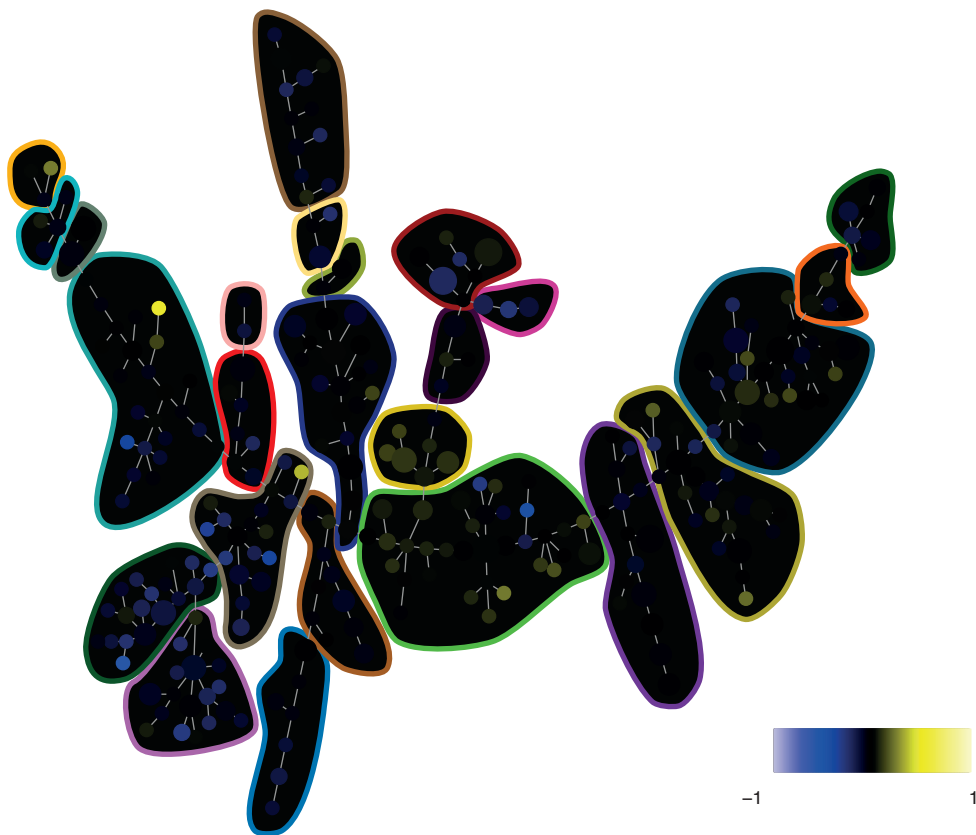


Figure S9A

174-pSrcFK ---- BCR vs Ref Ratio

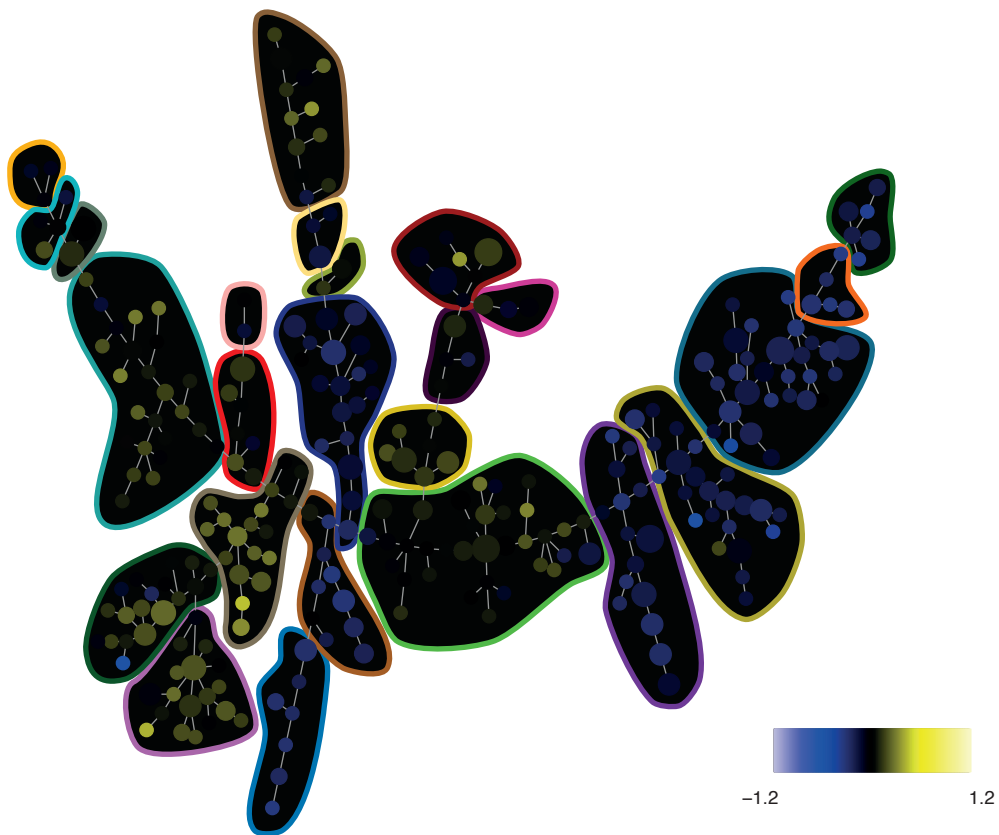


Figure S9A

174-pSrcFK ---- DMSO vs Ref Ratio

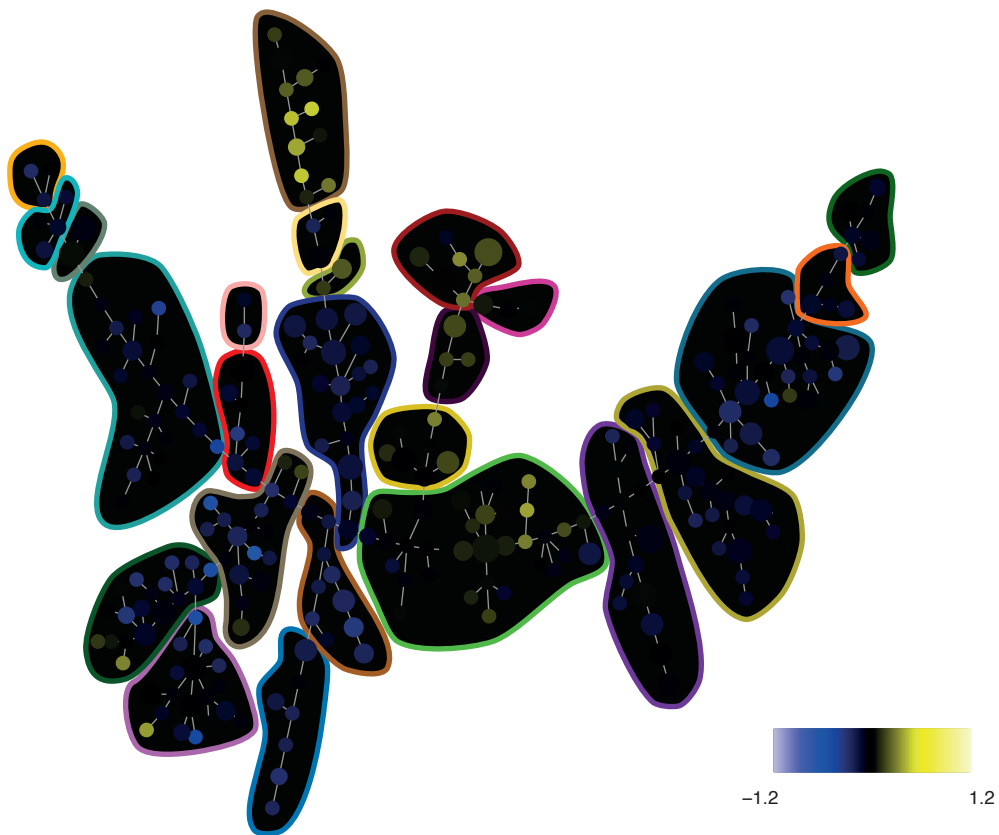


Figure S9A

174-pSrcFK --- Flt3L vs Ref Ratio

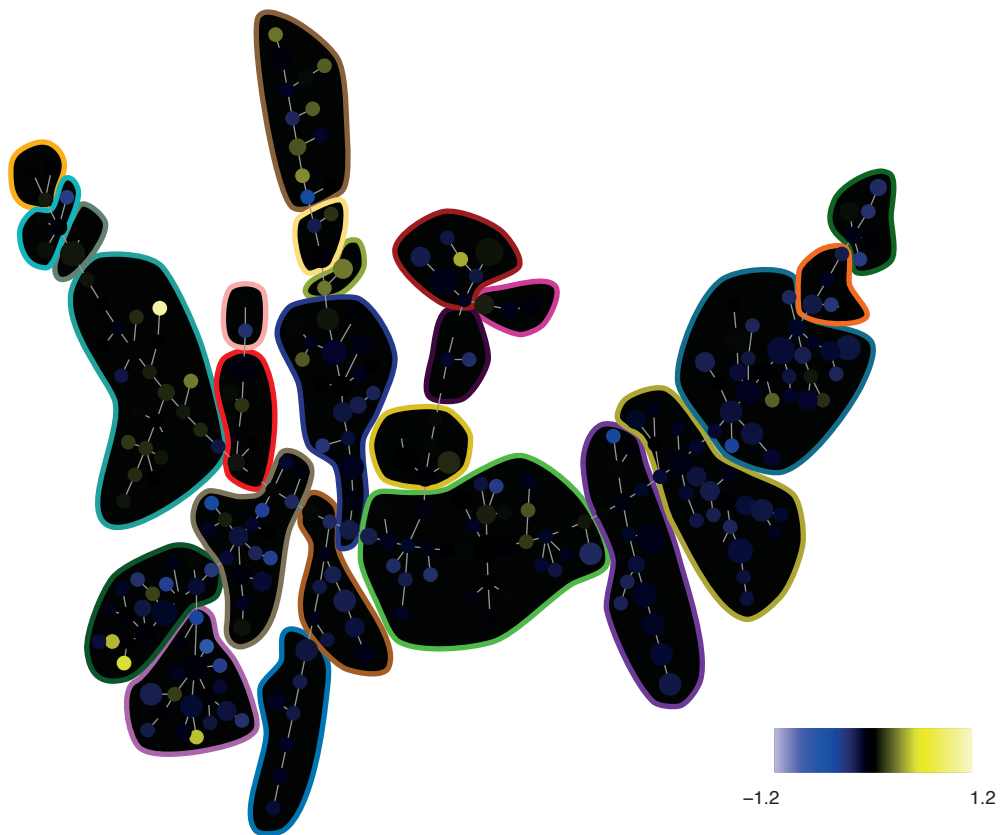


Figure S9A

174-pSrcFK ---- GCSF vs Ref Ratio

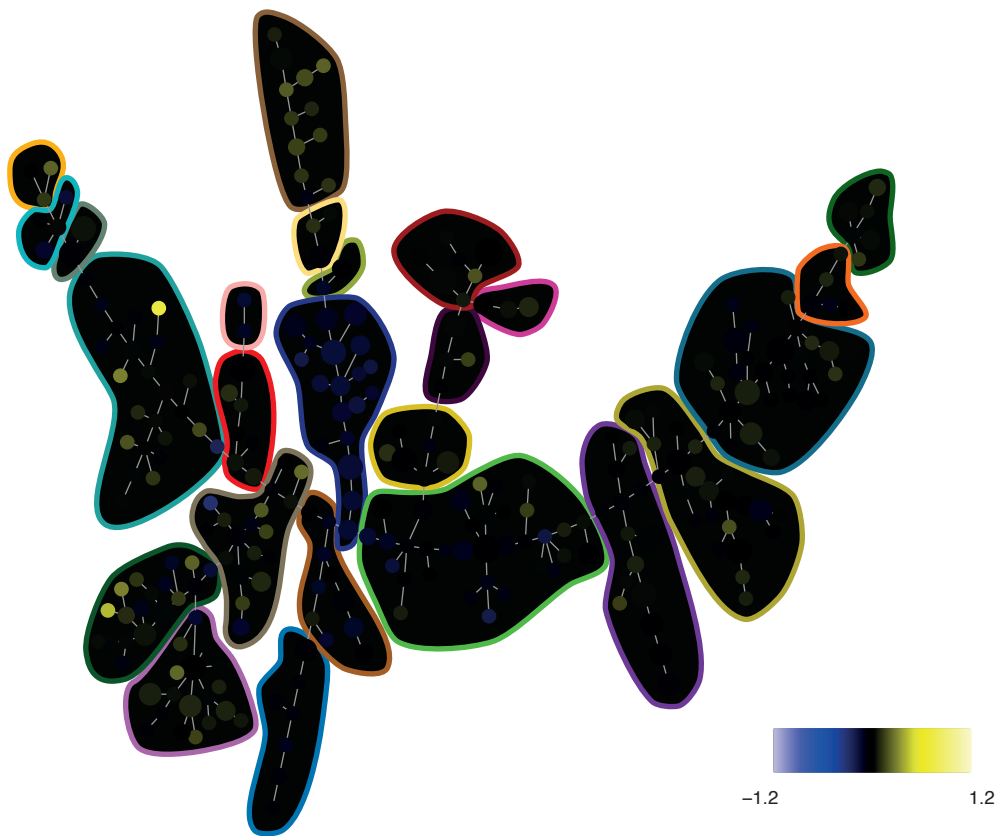


Figure S9A

174-pSrcFK ---- GMCSF vs Ref Ratio

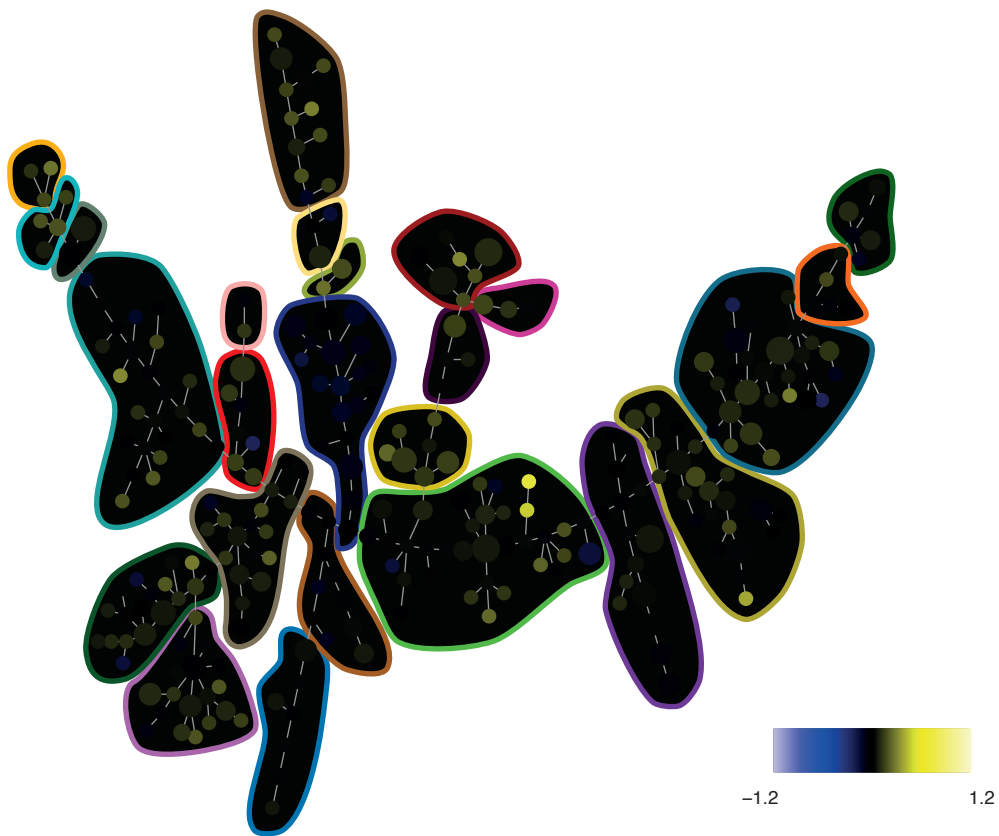


Figure S9A

174-pSrcFK ---- IFNad vs Ref Ratio

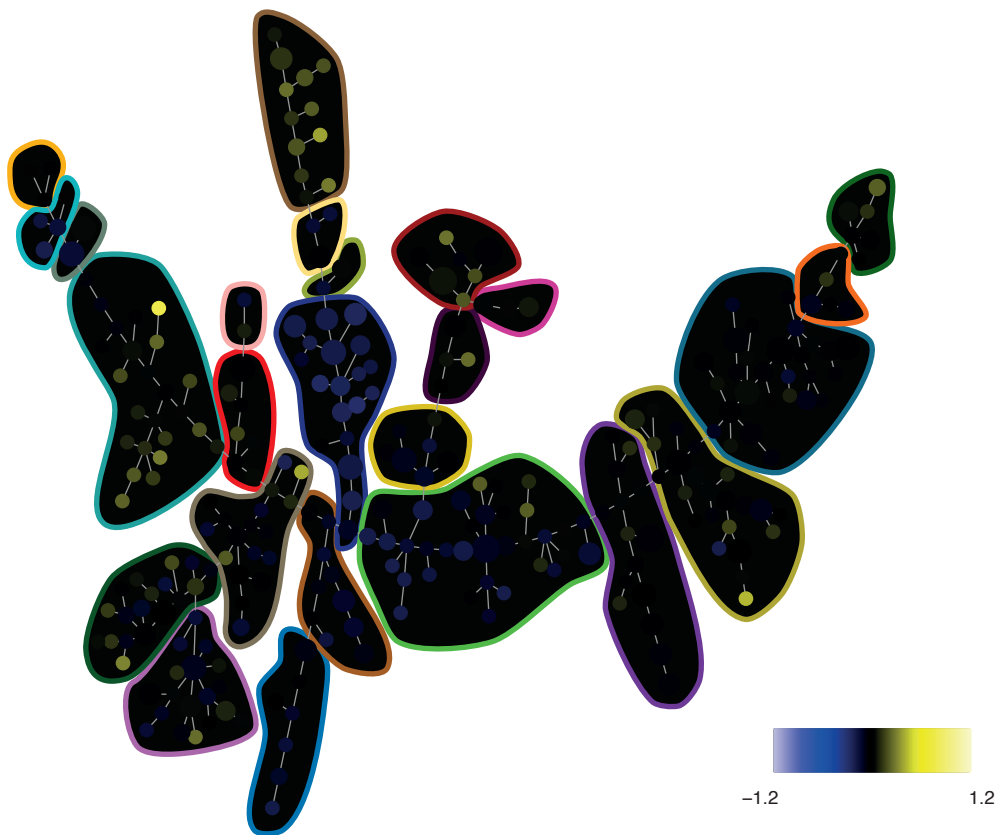


Figure S9A

174-pSrcFK — IL3 vs Ref Ratio

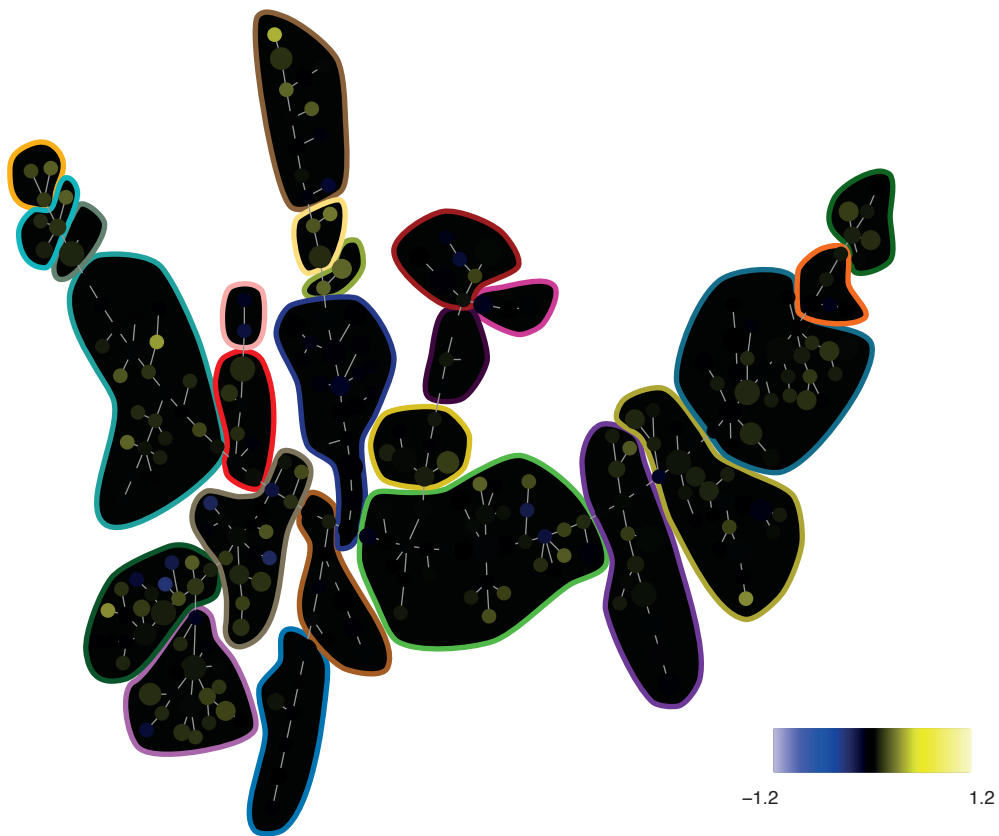


Figure S9A

174-pSrcFK — IL7 vs Ref Ratio

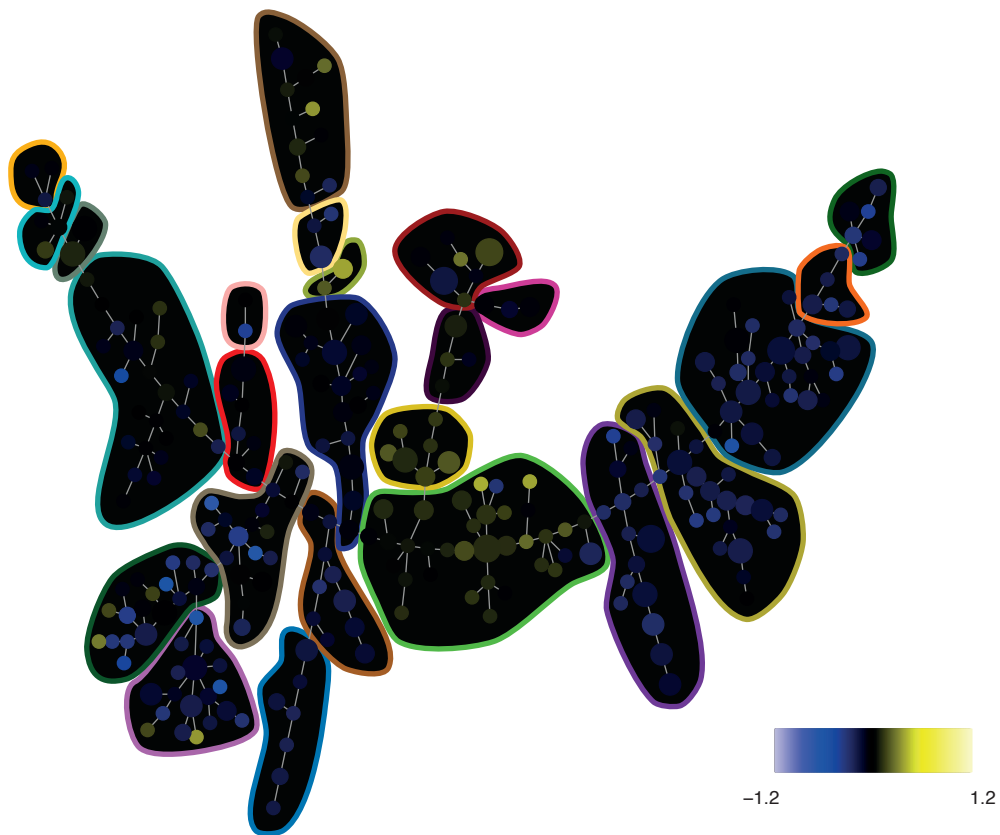


Figure S9A

174-pSrcFK ---- LPS vs Ref Ratio

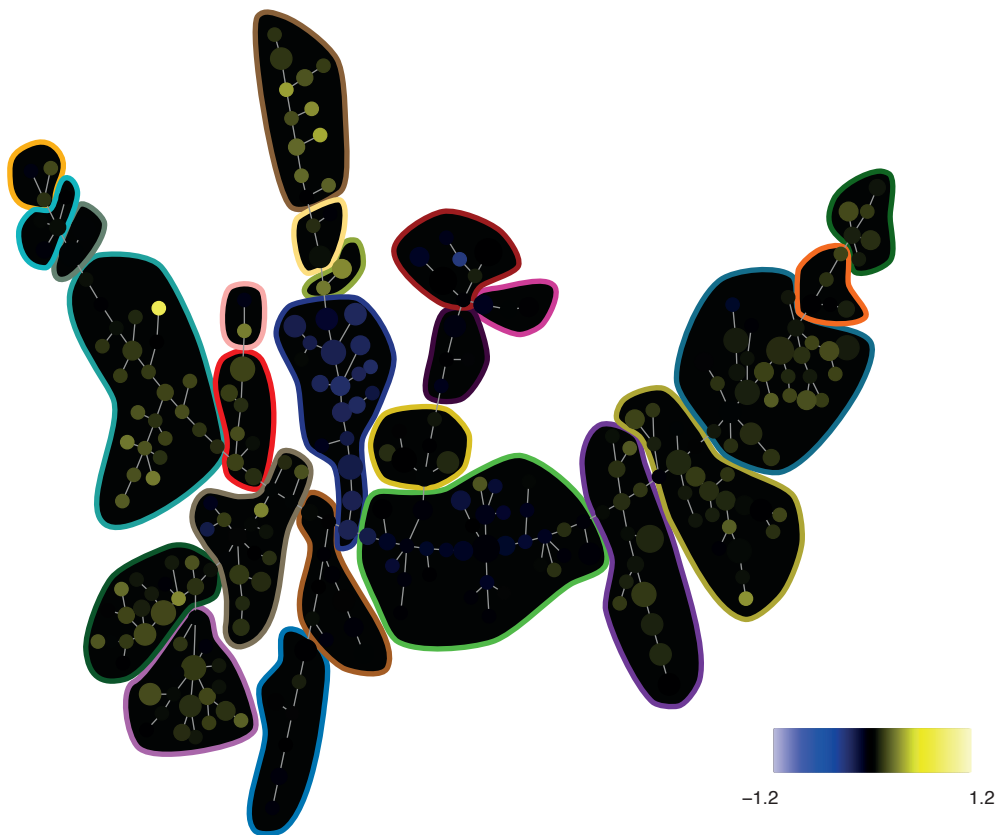


Figure S9A

174-pSrcFK ---- PMAiono vs Ref Ratio

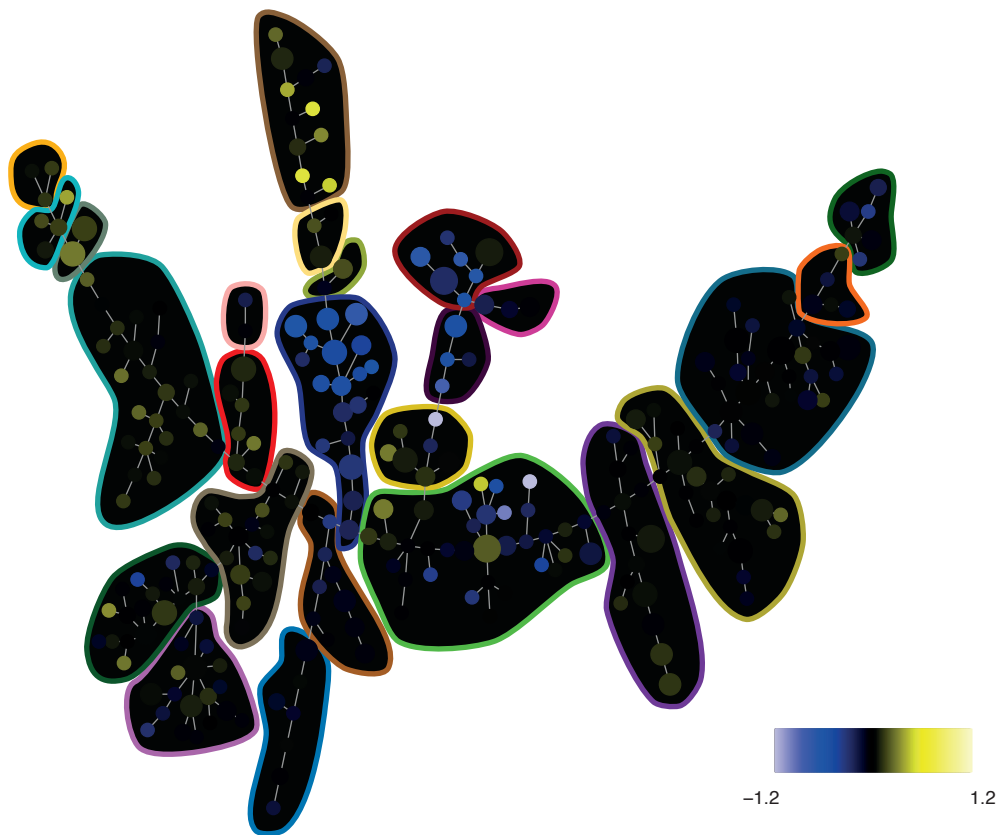


Figure S9A

174-pSrcFK ---- PVO4 vs Ref Ratio

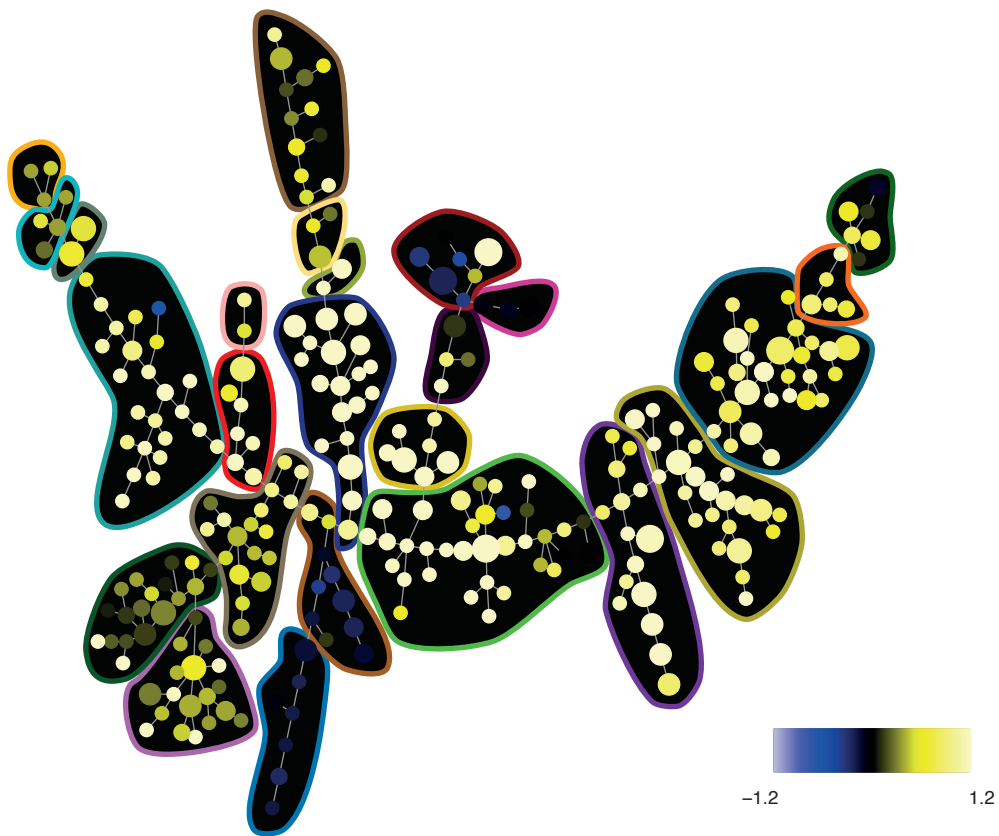


Figure S9A

174-pSrcFK ---- SCF vs Ref Ratio

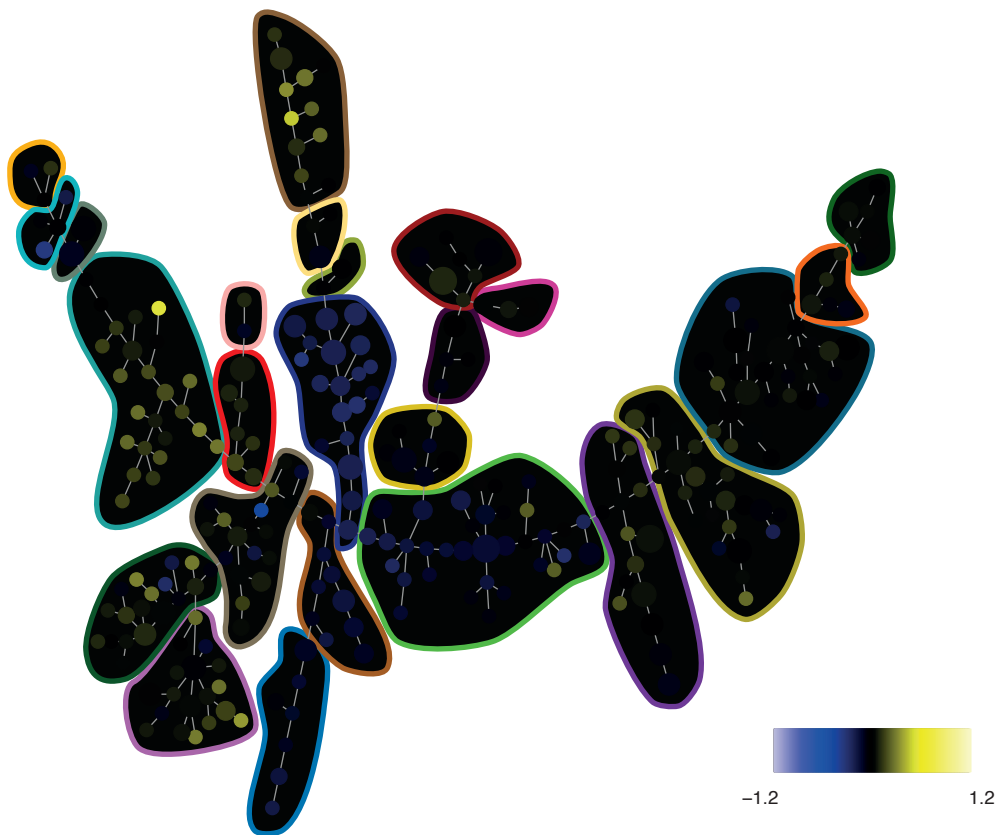


Figure S9A

174-pSrcFK --- TNFa vs Ref Ratio

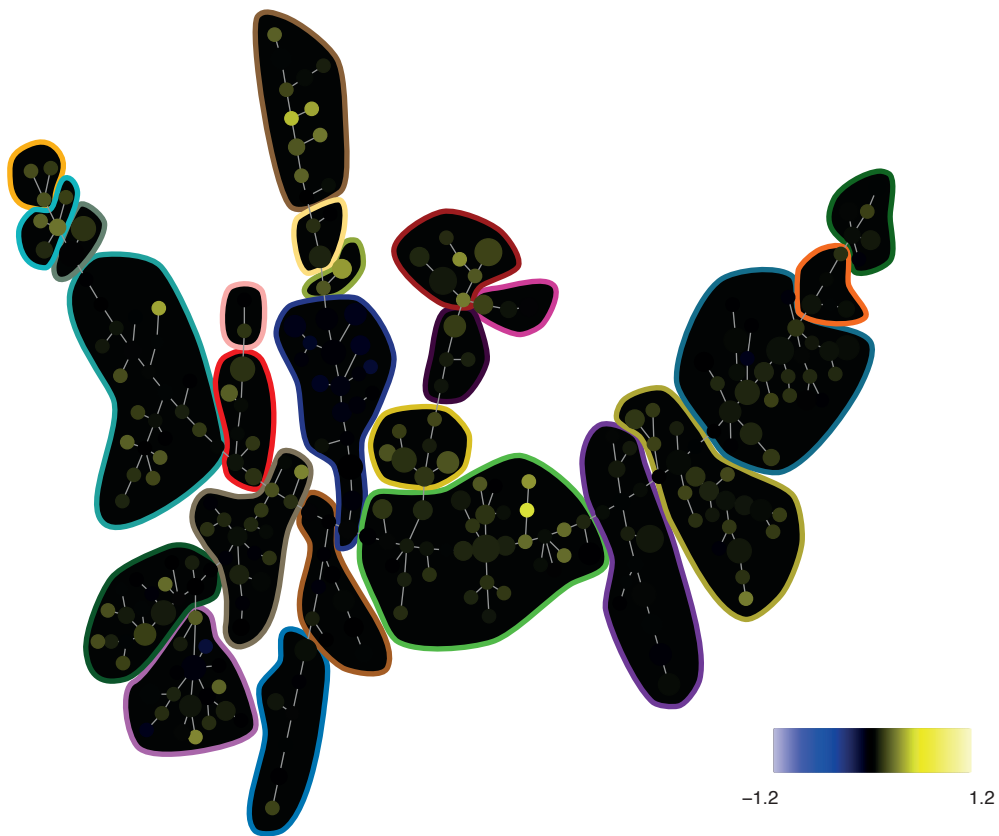


Figure S9A

174-pSrcFK ---- TPO vs Ref Ratio

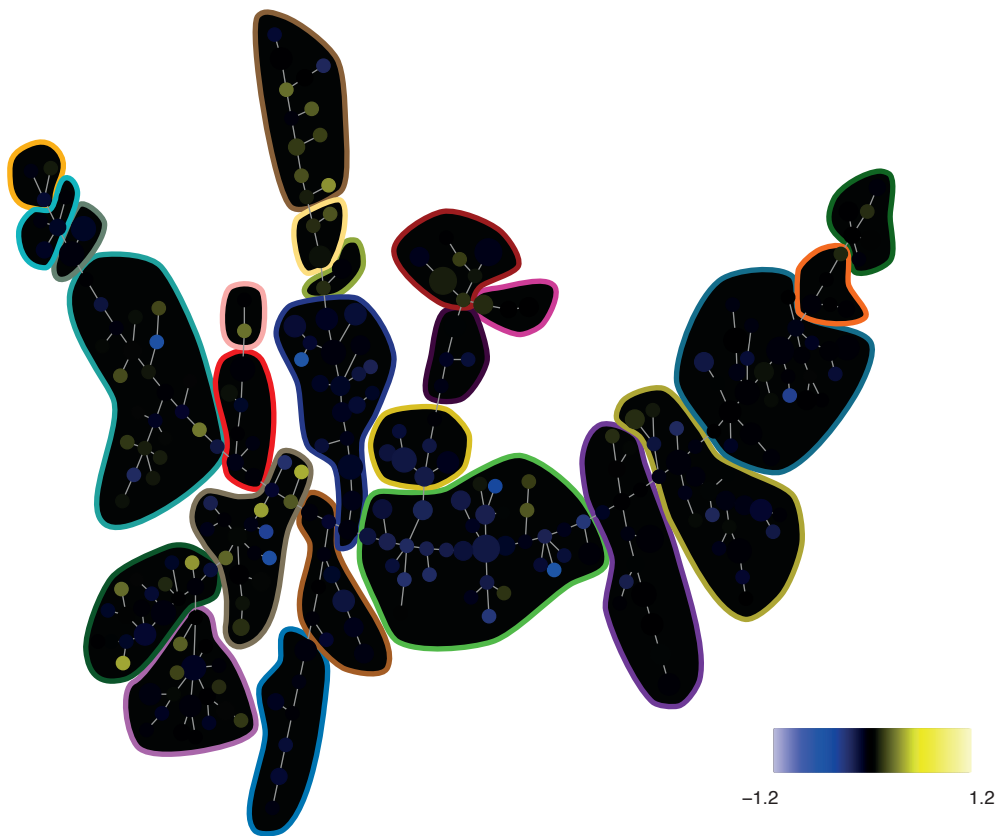


Figure S9A

175-pCrkL ---- BCR vs Ref Ratio

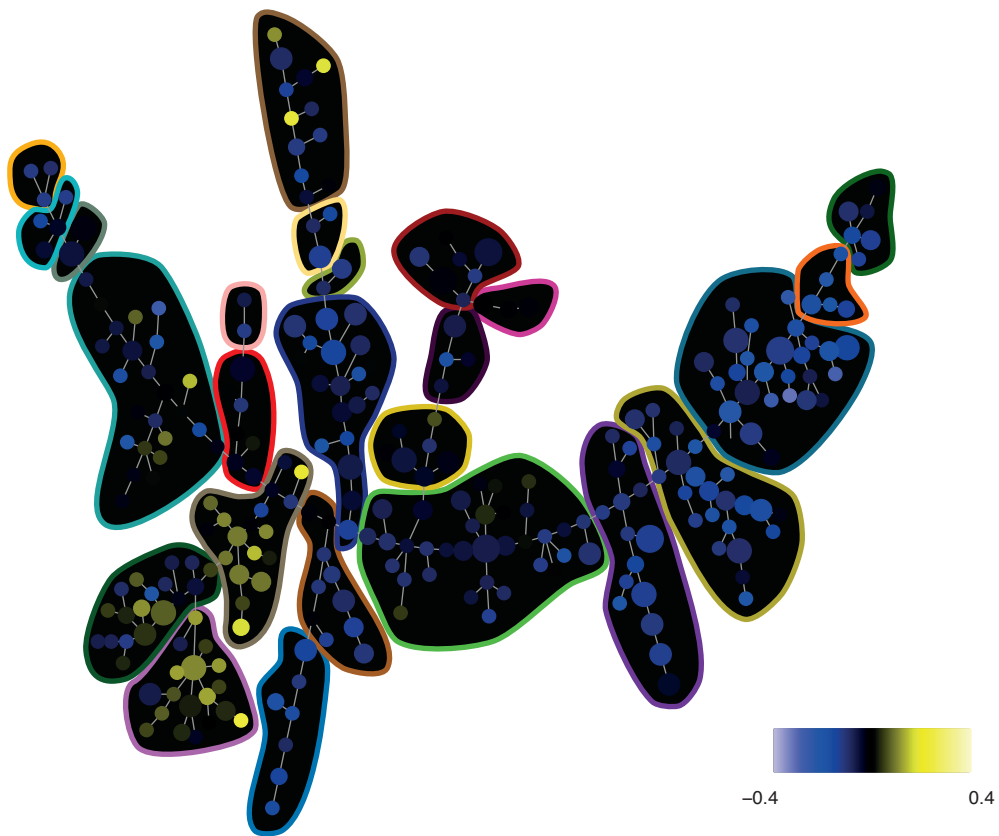


Figure S9A

175-pCrkL ---- DMSO vs Ref Ratio

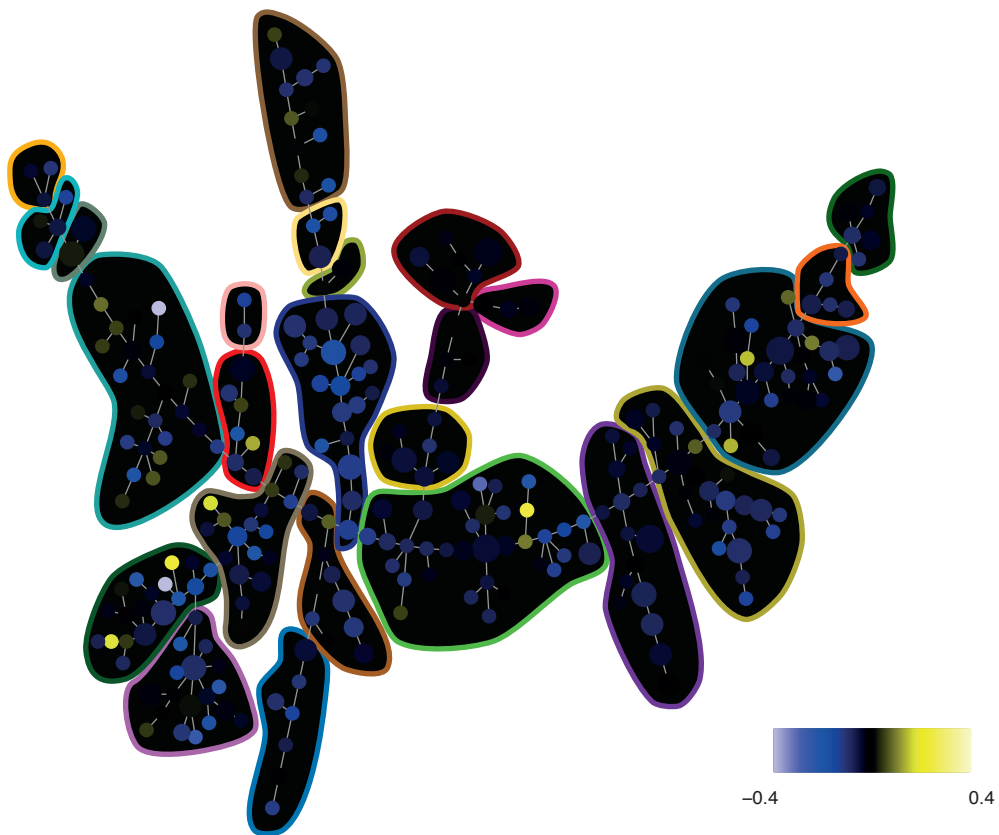


Figure S9A

175-pCrkL ---- Flt3L vs Ref Ratio

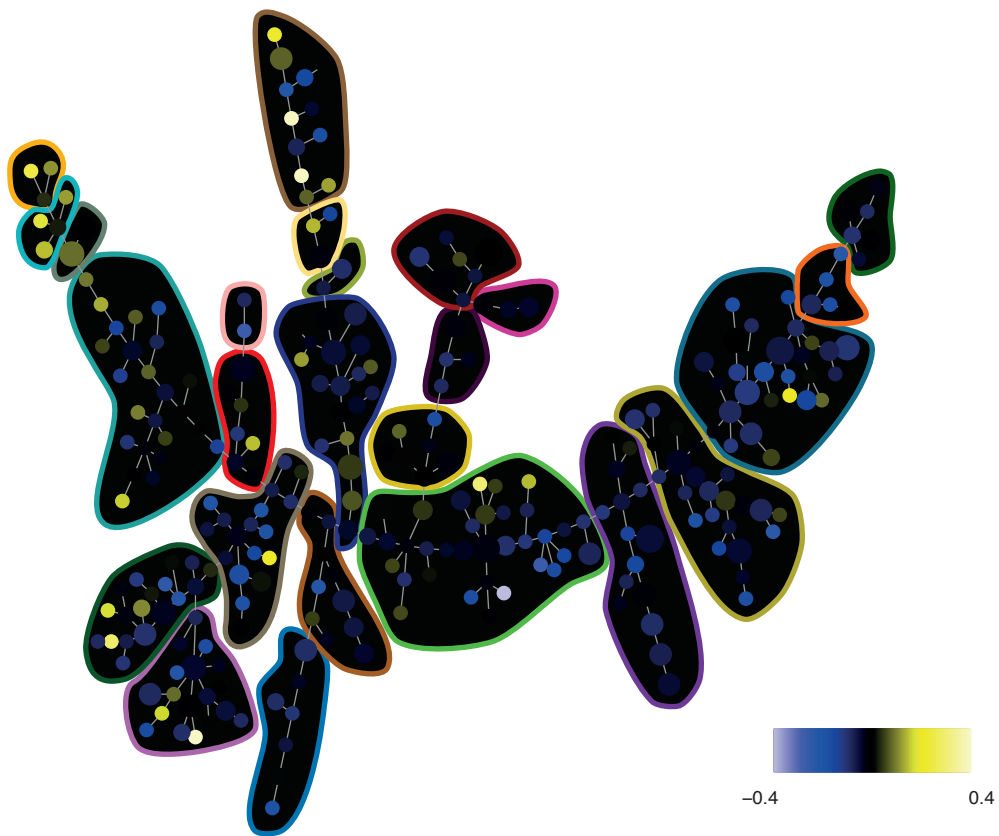


Figure S9A

175-pCrkL --- GCSF vs Ref Ratio

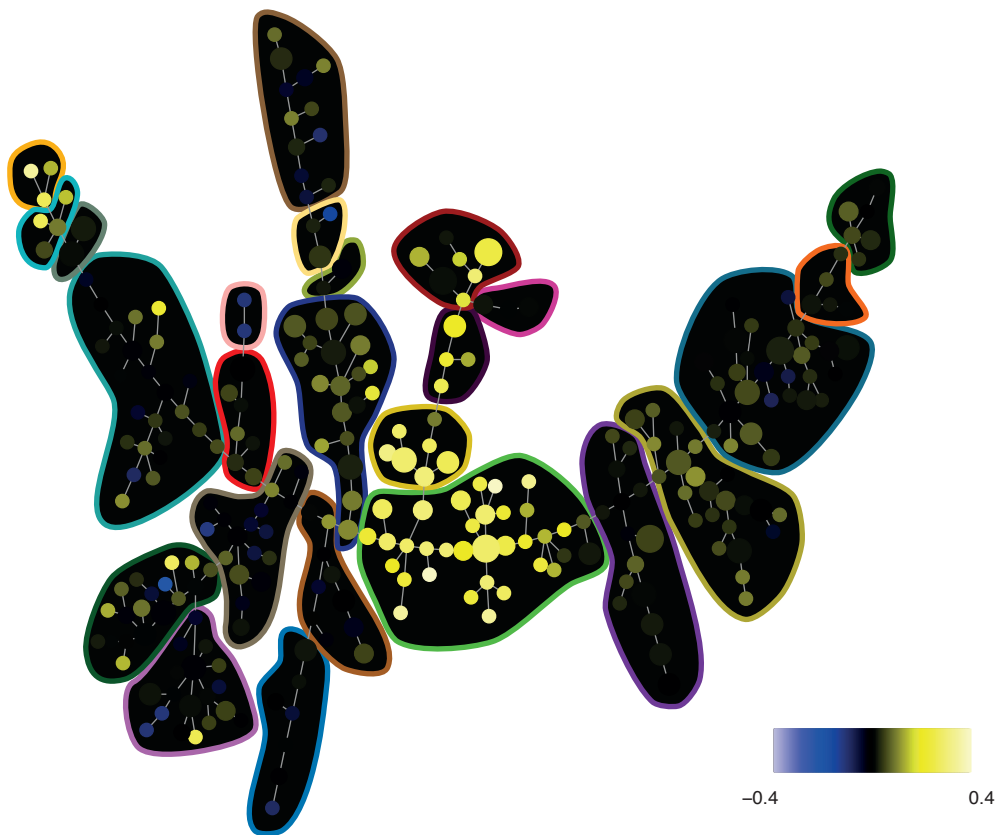


Figure S9A

175-pCrkL ---- GMCSF vs Ref Ratio

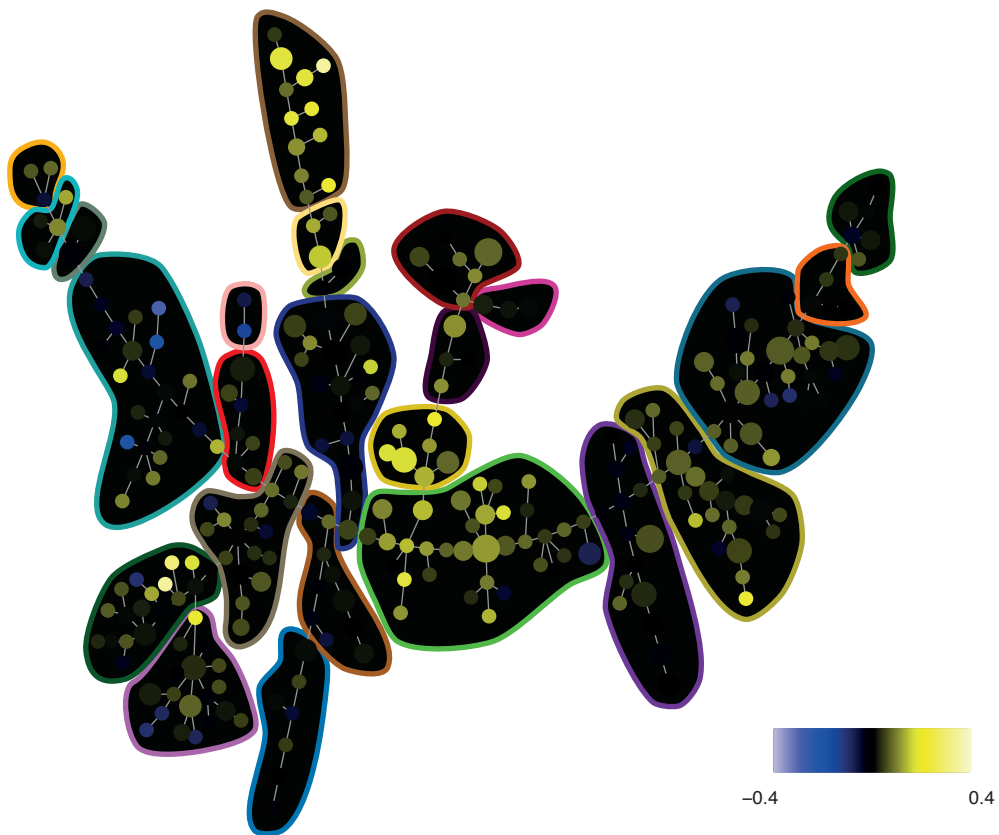


Figure S9A

175-pCrkL --- IFNad vs Ref Ratio

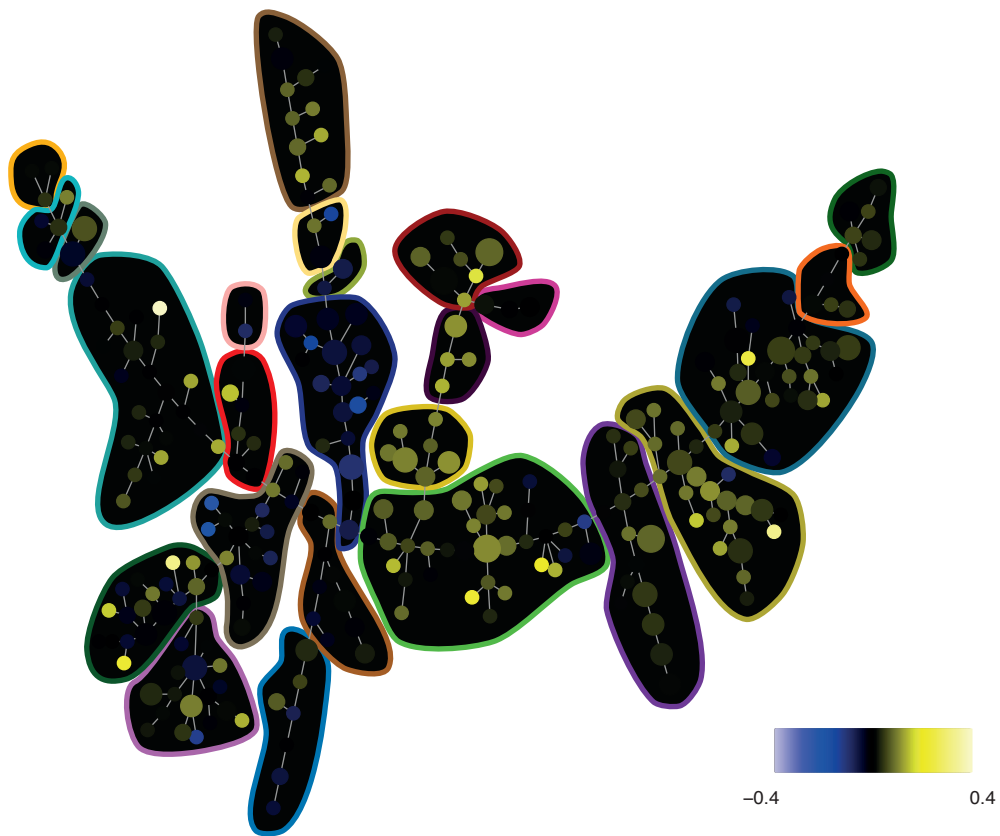


Figure S9A

175-pCrkL ---- IL3 vs Ref Ratio

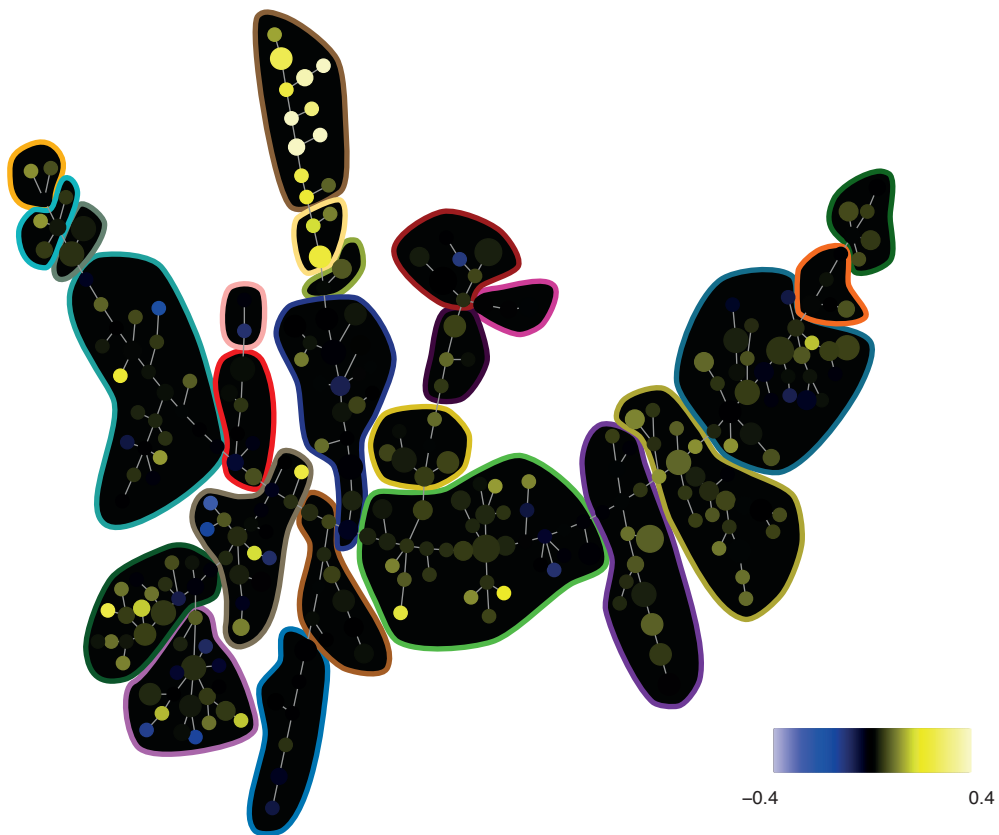


Figure S9A

175-pCrkL ---- IL7 vs Ref Ratio

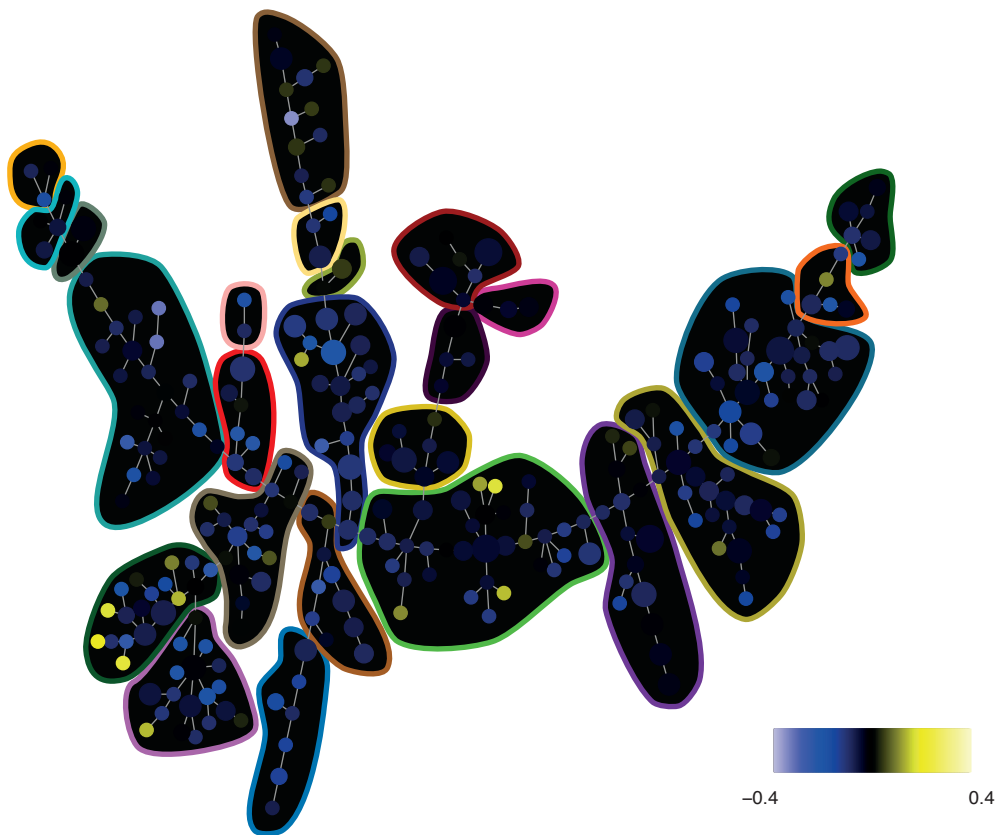


Figure S9A

175-pCrkL ---- LPS vs Ref Ratio

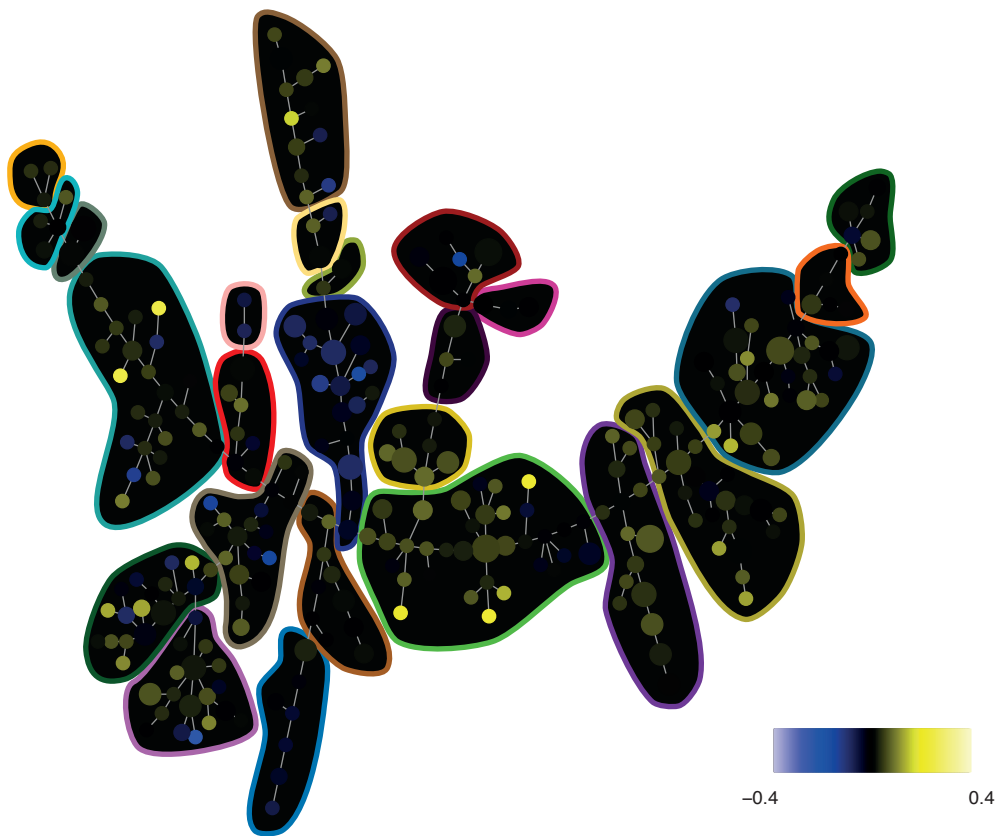


Figure S9A

175-pCrkL ---- PMAiono vs Ref Ratio

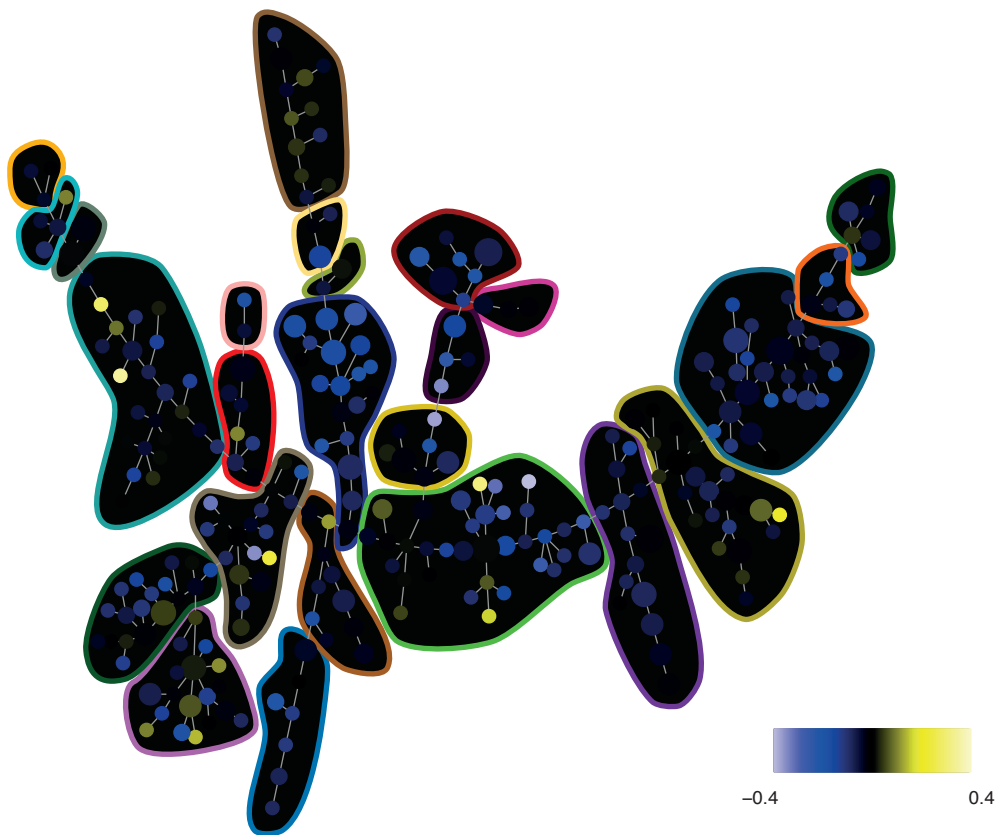


Figure S9A

175-pCrkL ---- PVO4 vs Ref Ratio

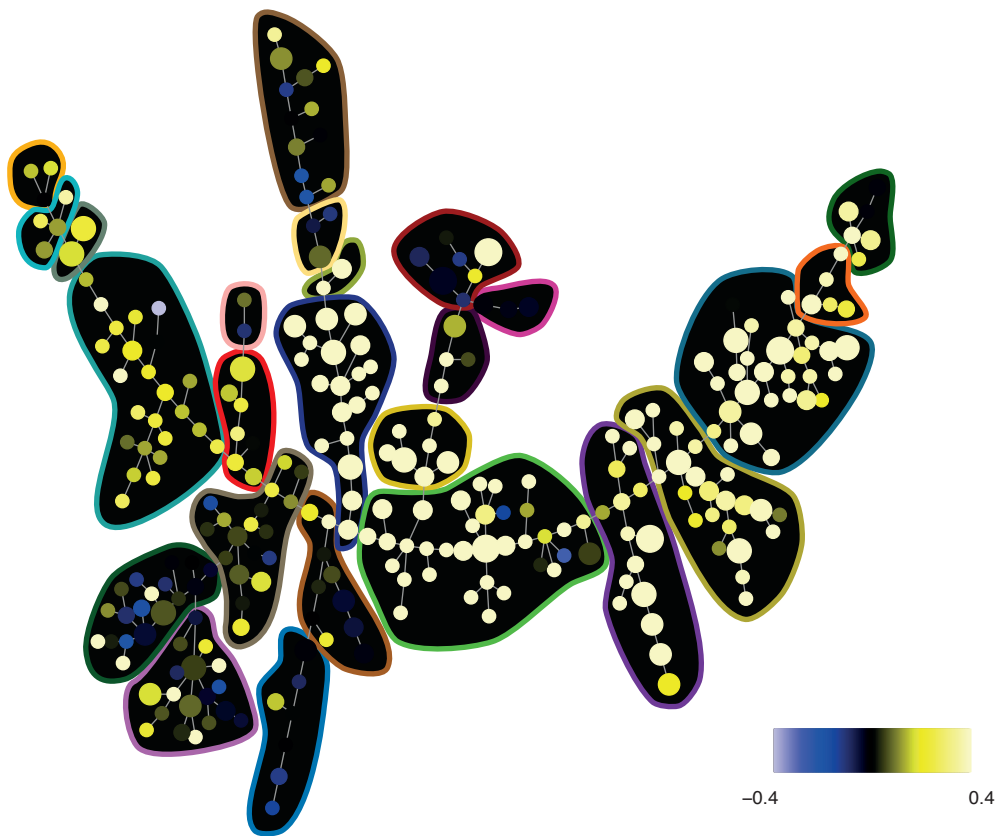


Figure S9A

175-pCrkL ---- SCF vs Ref Ratio

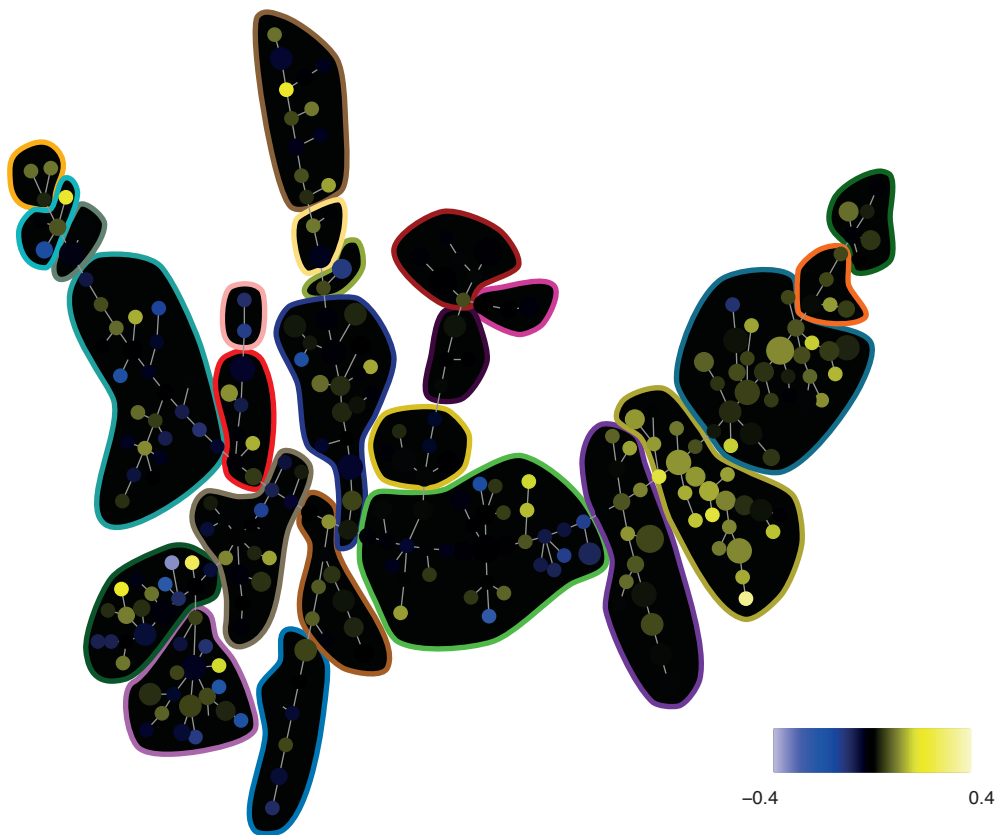


Figure S9A

175-pCrkL --- TNFa vs Ref Ratio

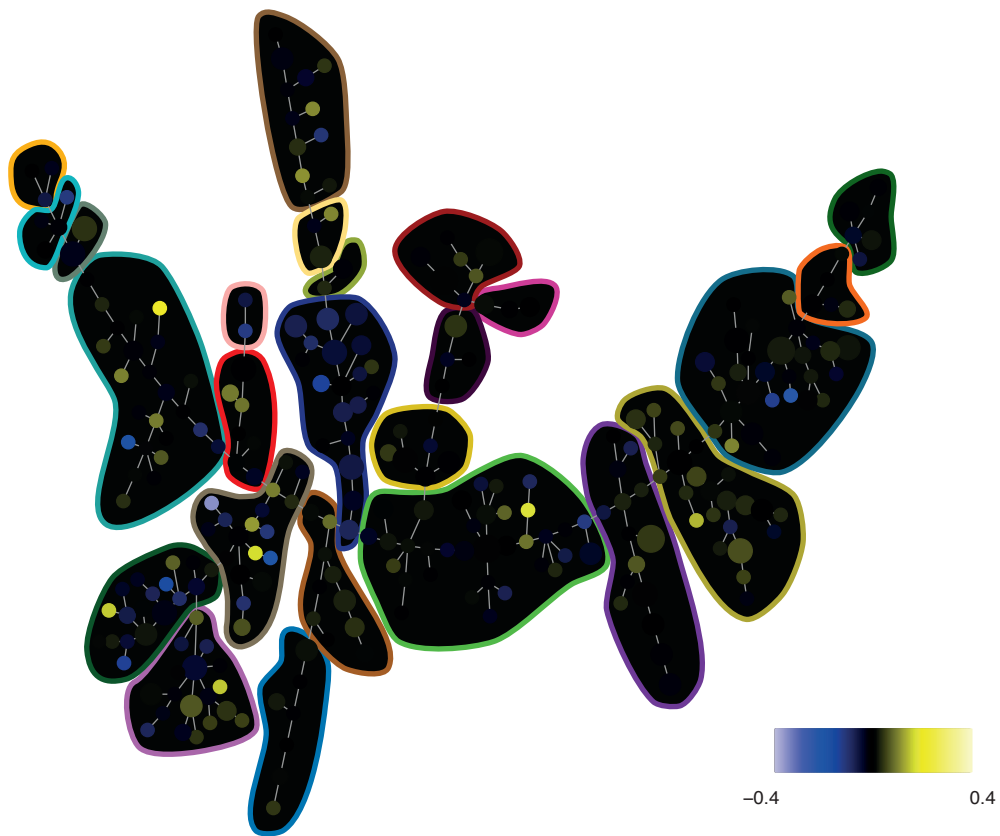


Figure S9A

175-pCrkL ---- TPO vs Ref Ratio

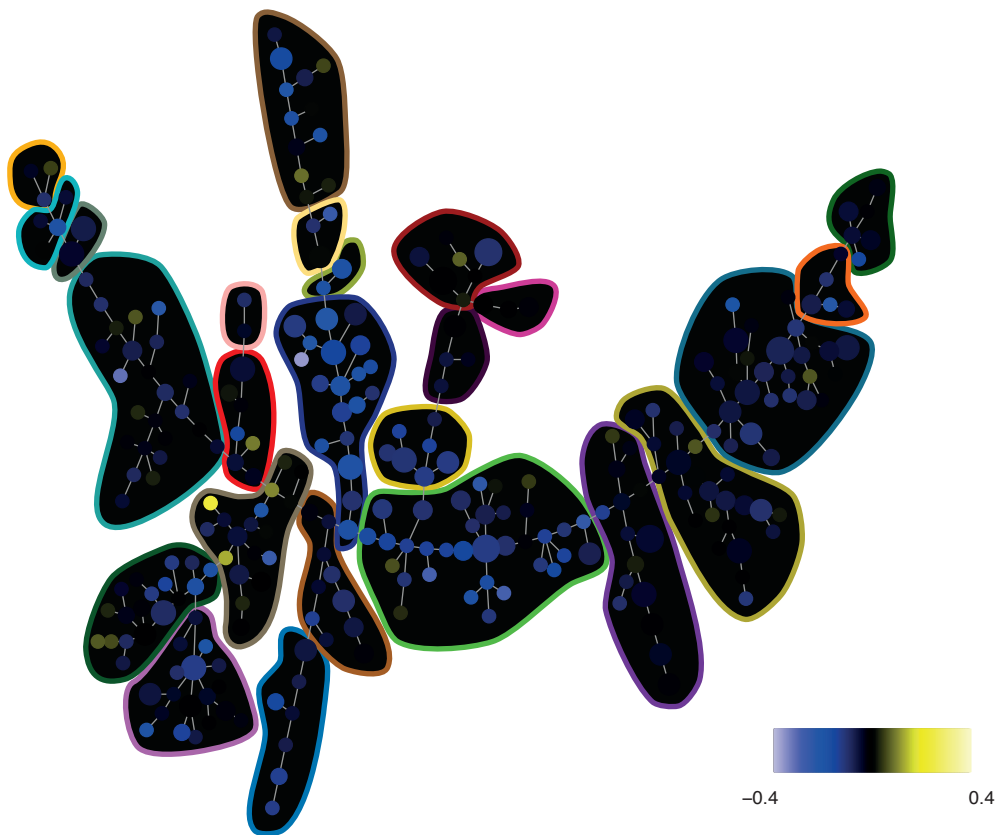


Figure S9A

176-pCREB --- BCR vs Ref Ratio



Figure S9A

176-pCREB --- DMSO vs Ref Ratio

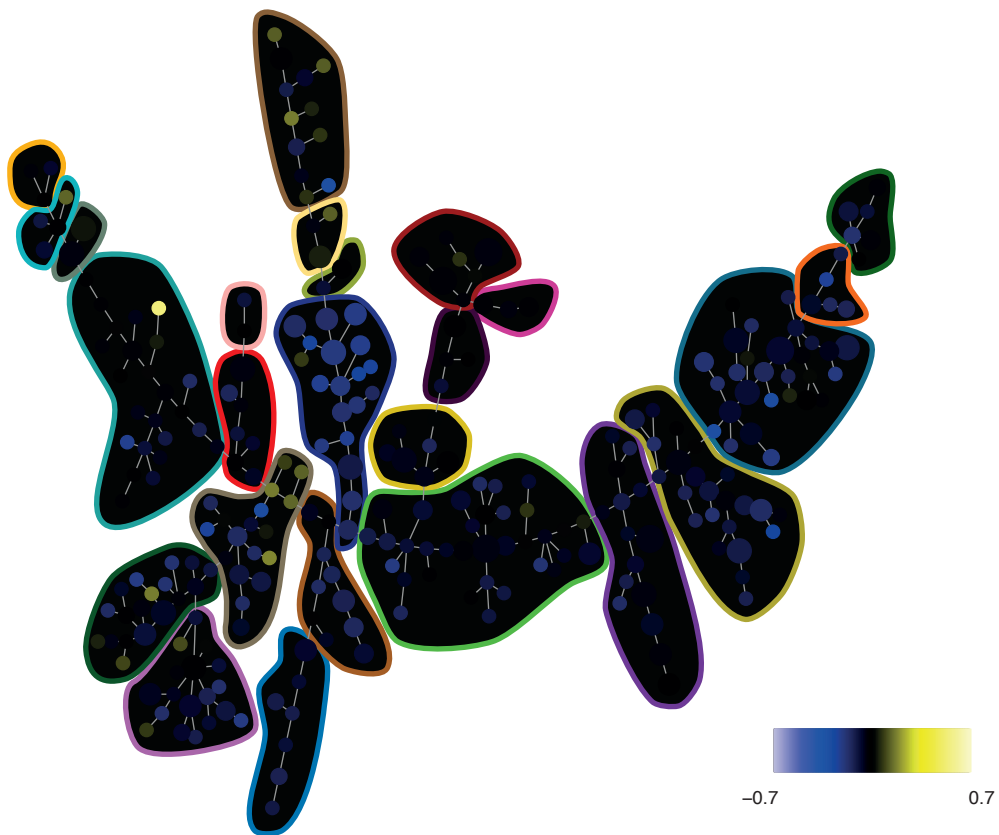


Figure S9A

176-pCREB --- Flt3L vs Ref Ratio

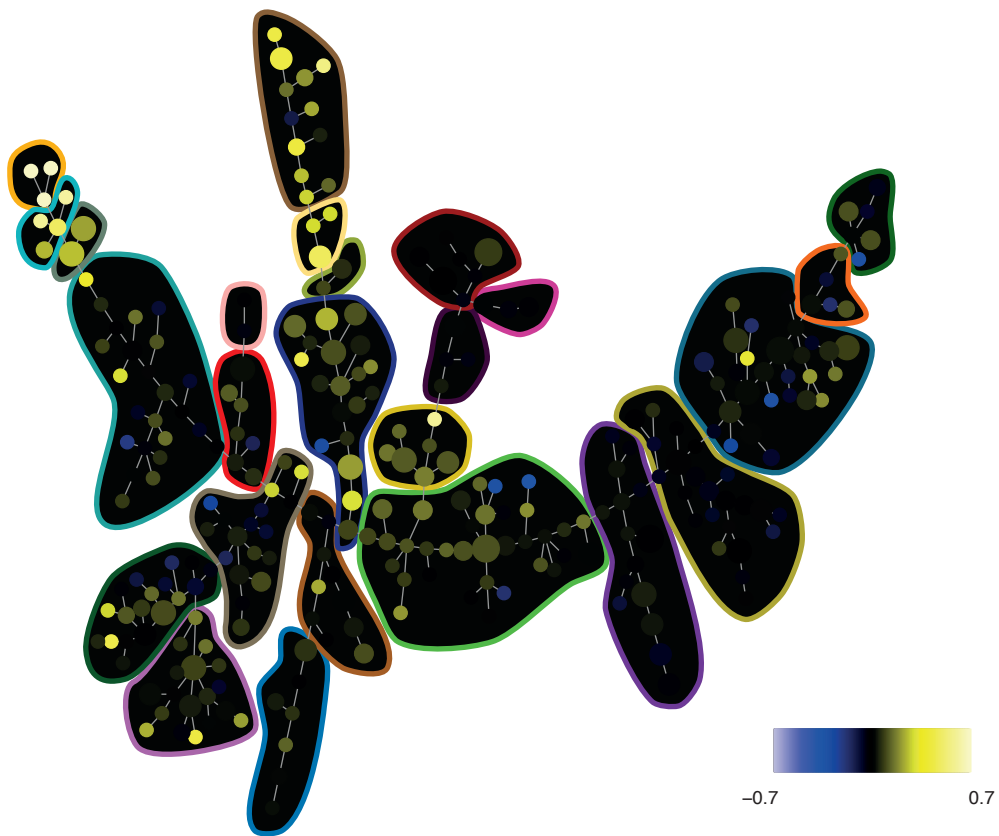


Figure S9A

176-pCREB ---- GCSF vs Ref Ratio

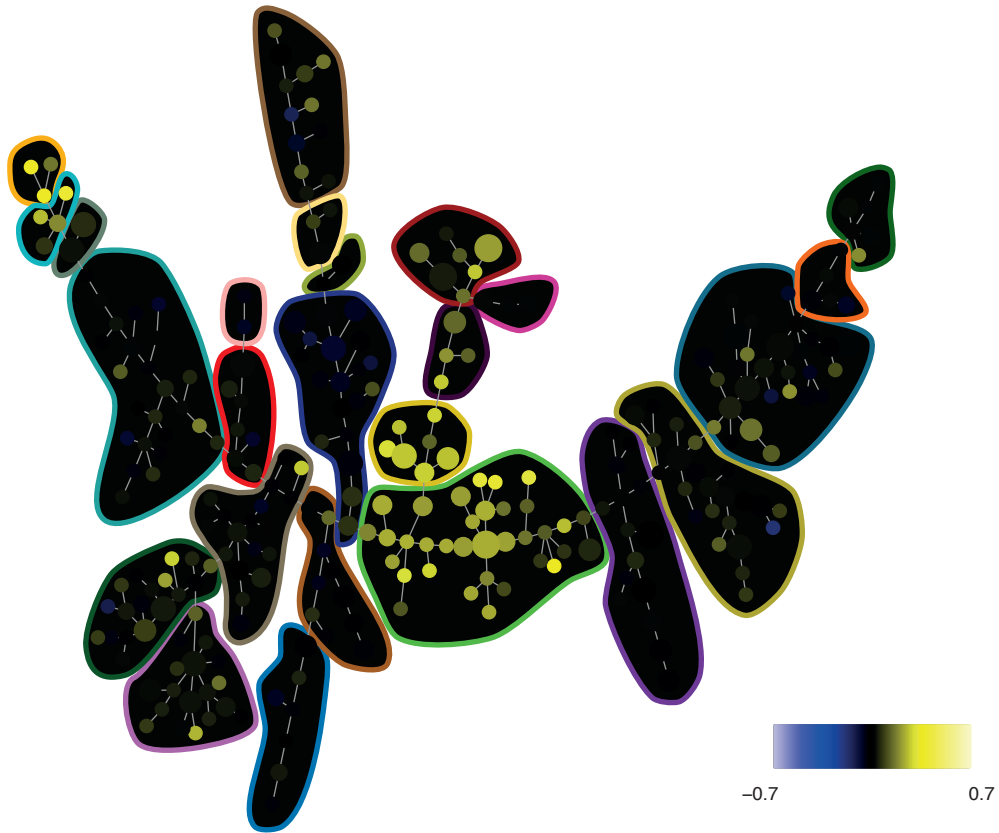


Figure S9A

176-pCREB ---- GMCSF vs Ref Ratio

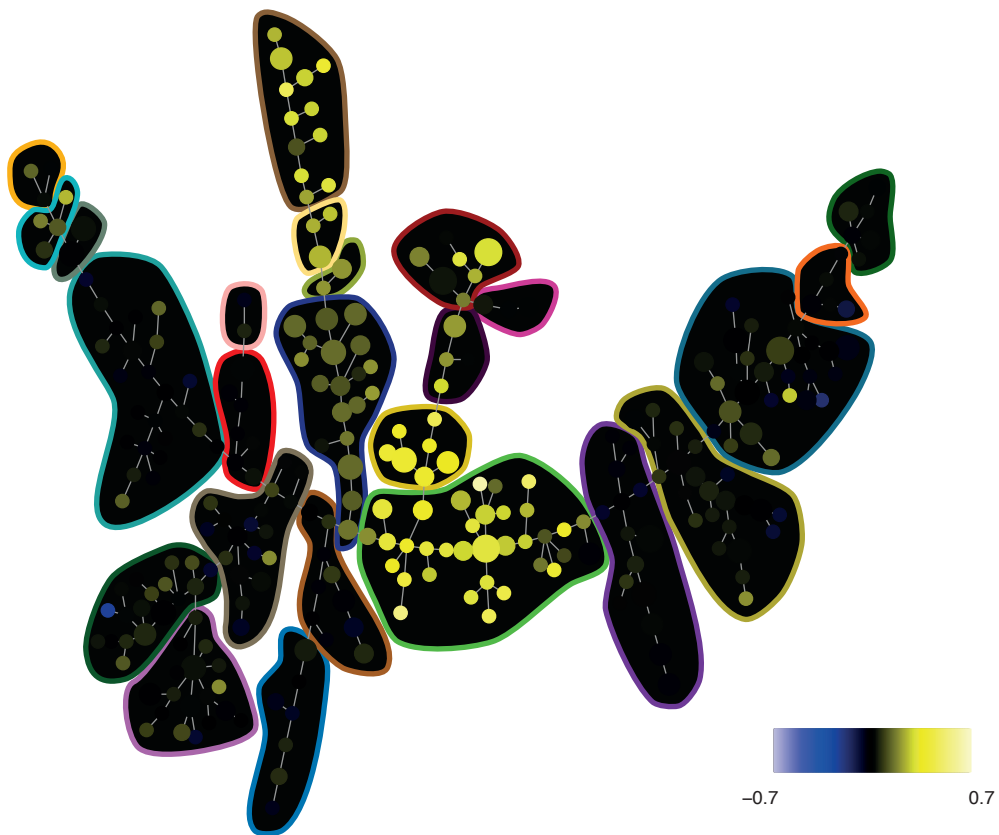


Figure S9A

176-pCREB ---- IFNad vs Ref Ratio

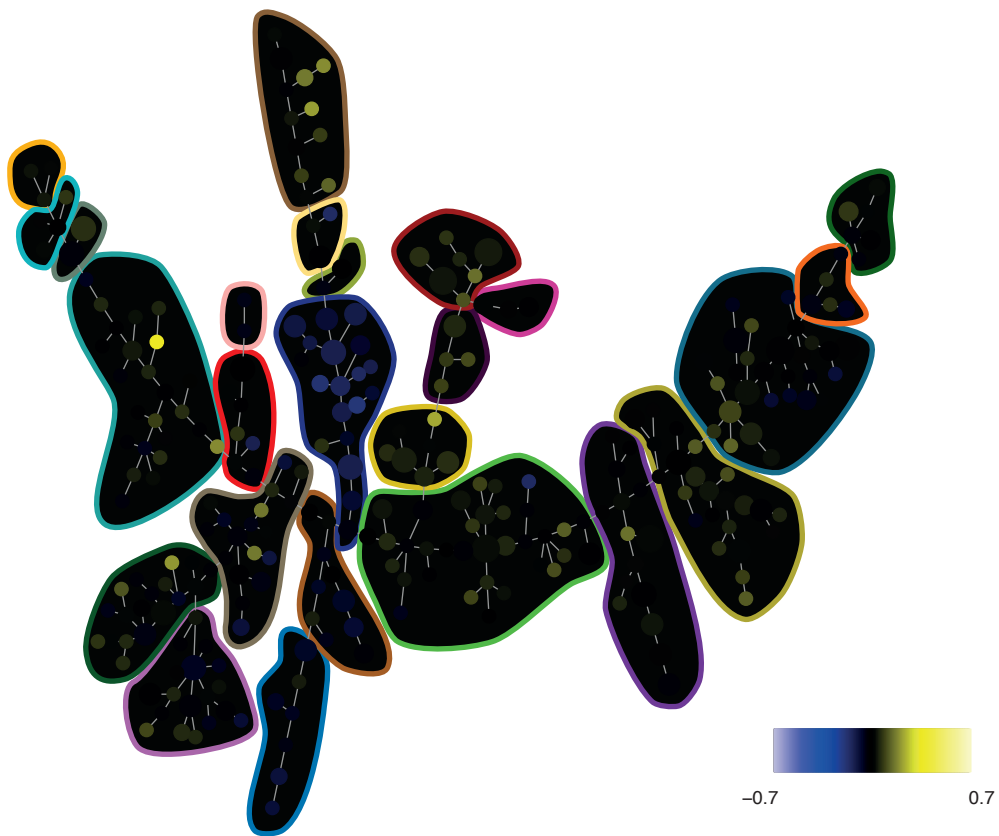


Figure S9A

176-pCREB — IL3 vs Ref Ratio

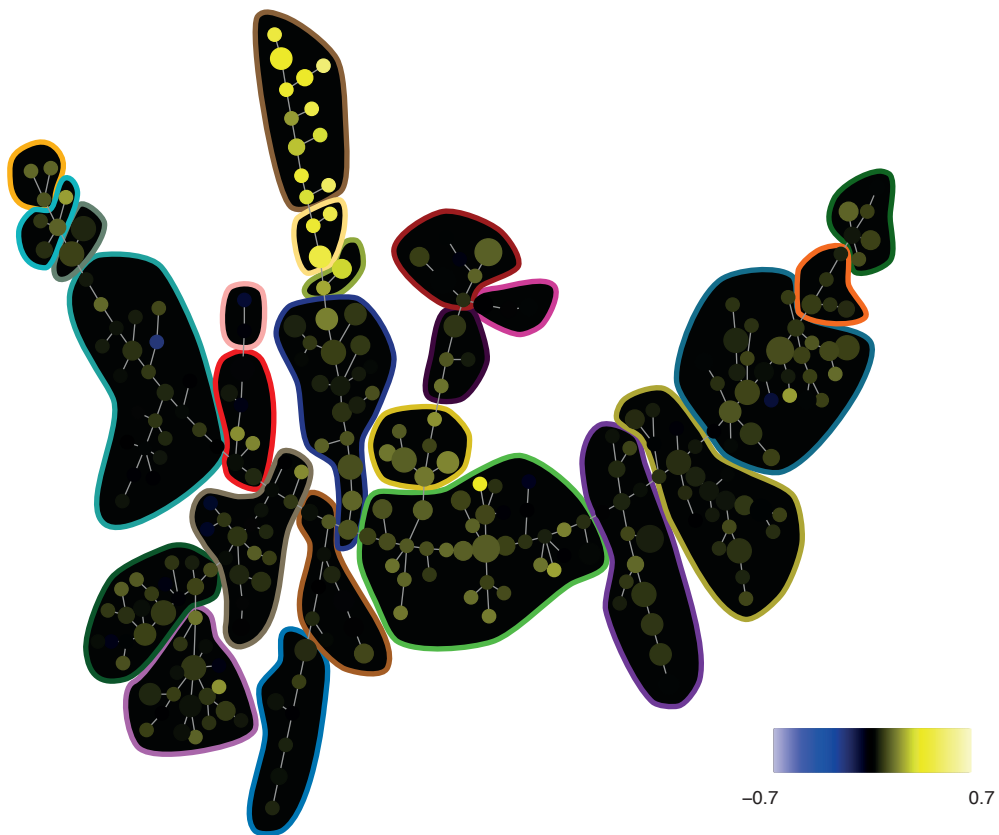


Figure S9A

176-pCREB — IL7 vs Ref Ratio

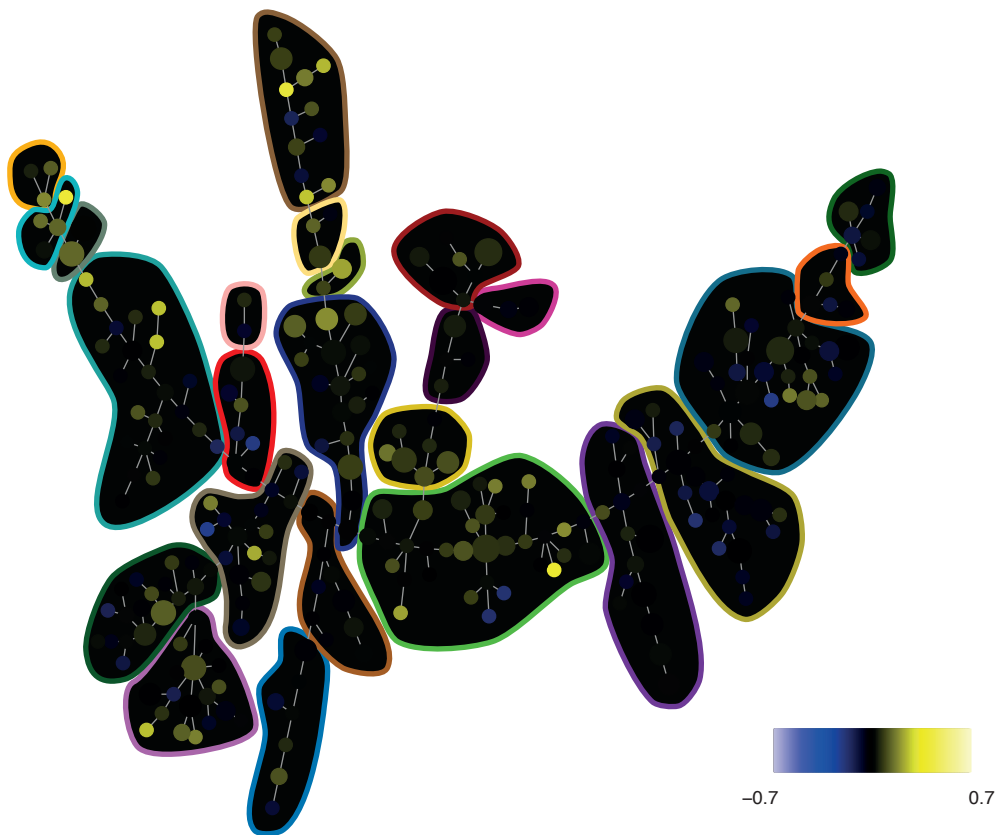


Figure S9A

176-pCREB ---- LPS vs Ref Ratio

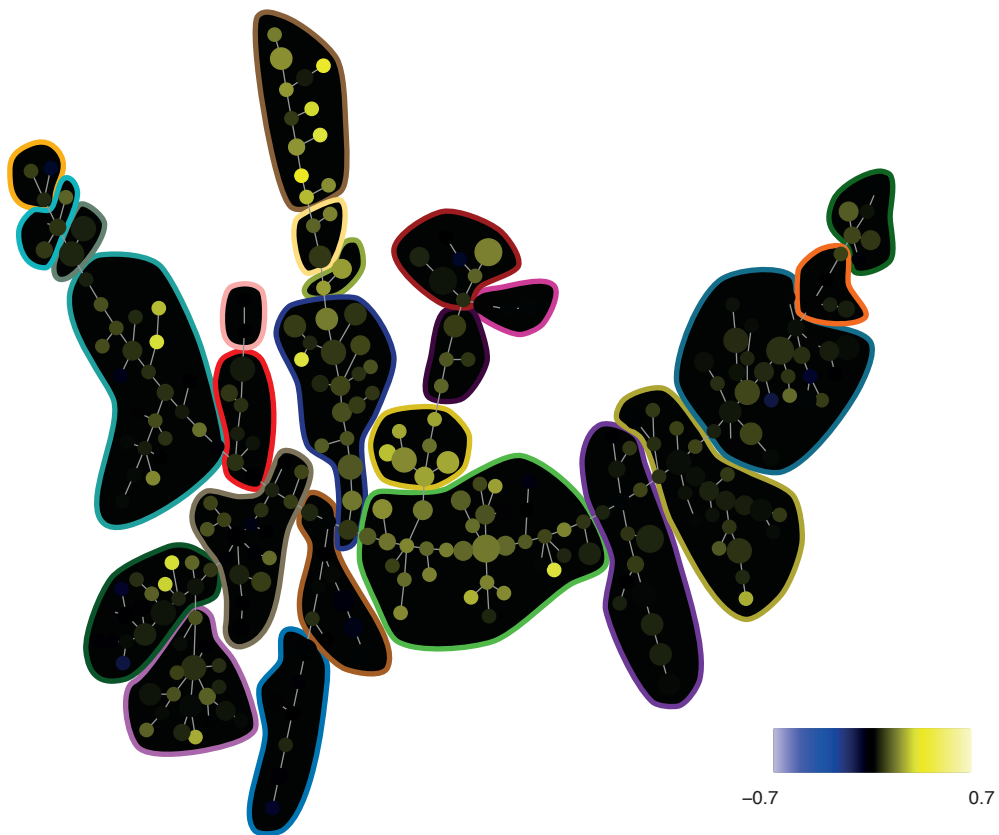


Figure S9A

176-pCREB ---- PMAiono vs Ref Ratio

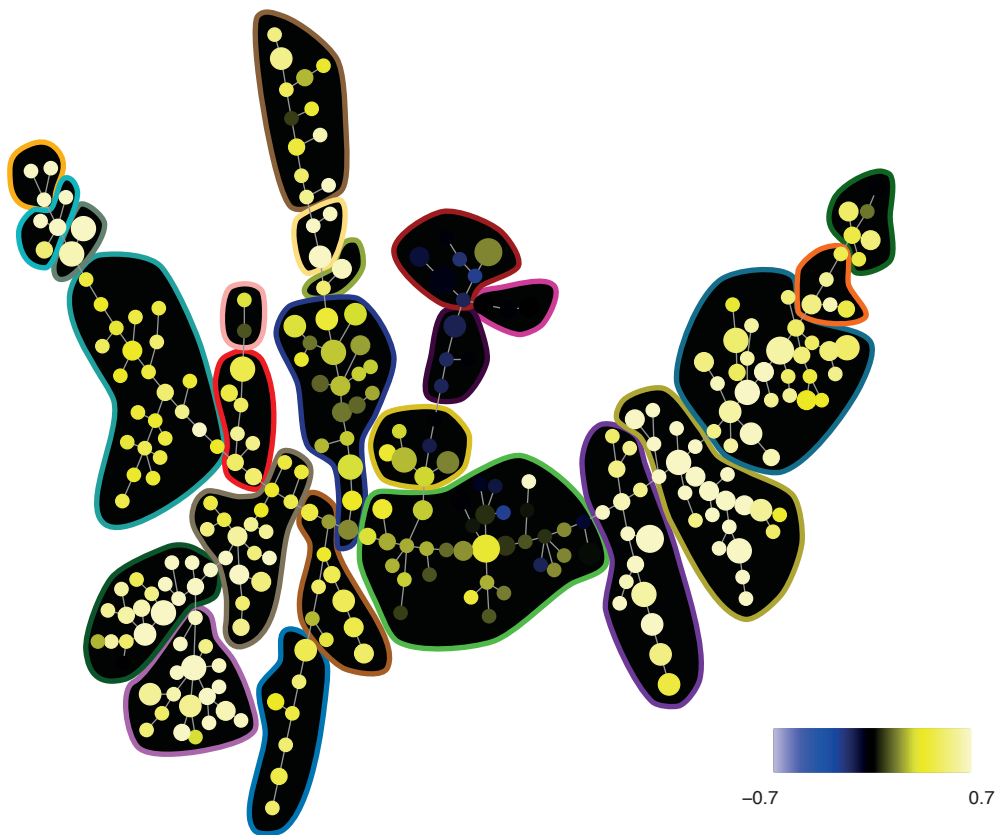


Figure S9A

176-pCREB ---- PVO4 vs Ref Ratio

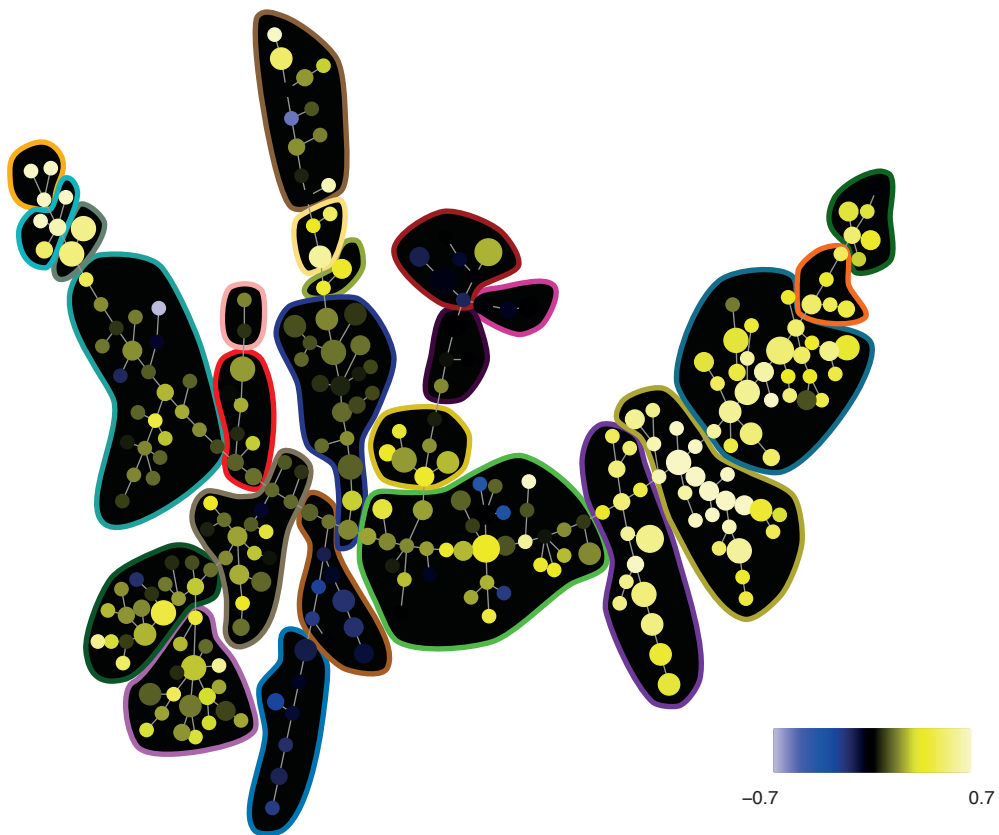


Figure S9A

176-pCREB ---- SCF vs Ref Ratio

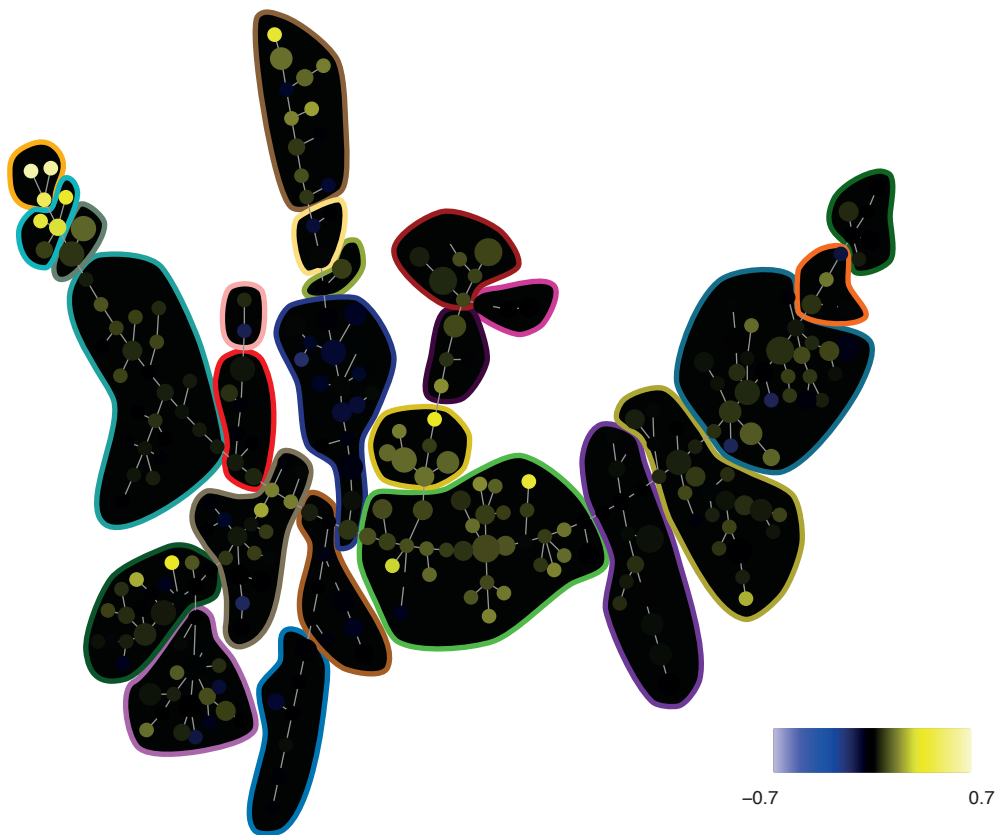


Figure S9A

176-pCREB ---- TNFa vs Ref Ratio

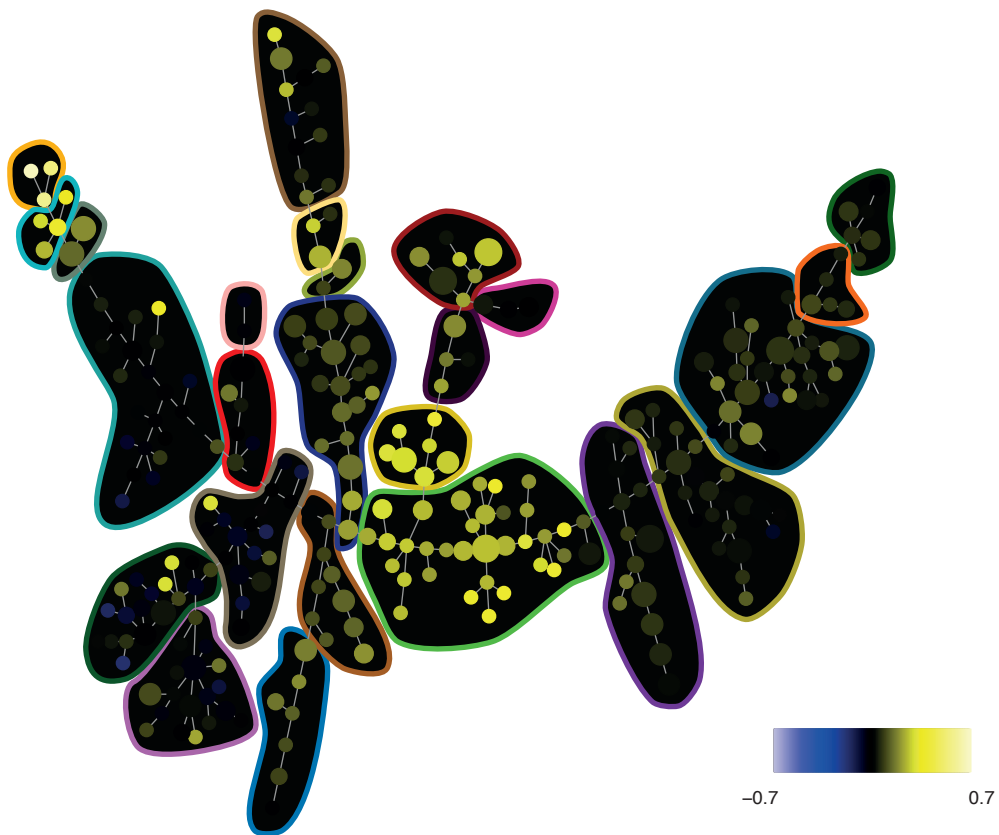


Figure S9A

176-pCREB --- TPO vs Ref Ratio

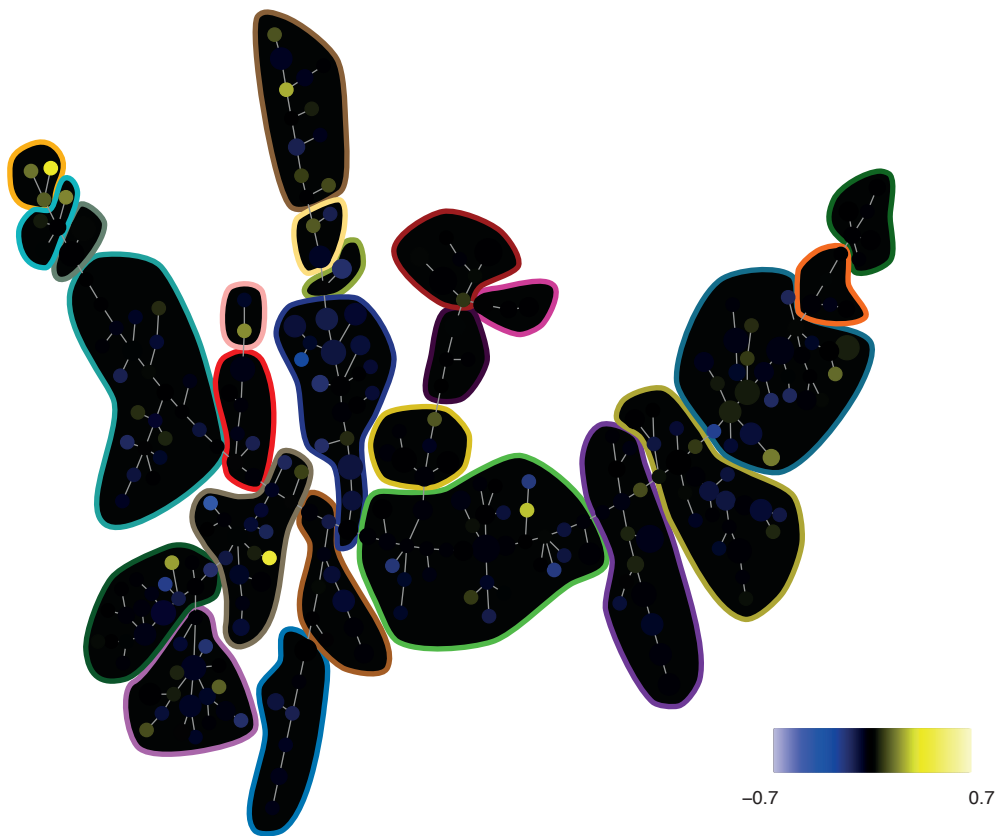


Figure S9B

141-pPLCgamma2 ——— Dasatinib+BCR vs Ref Ratio

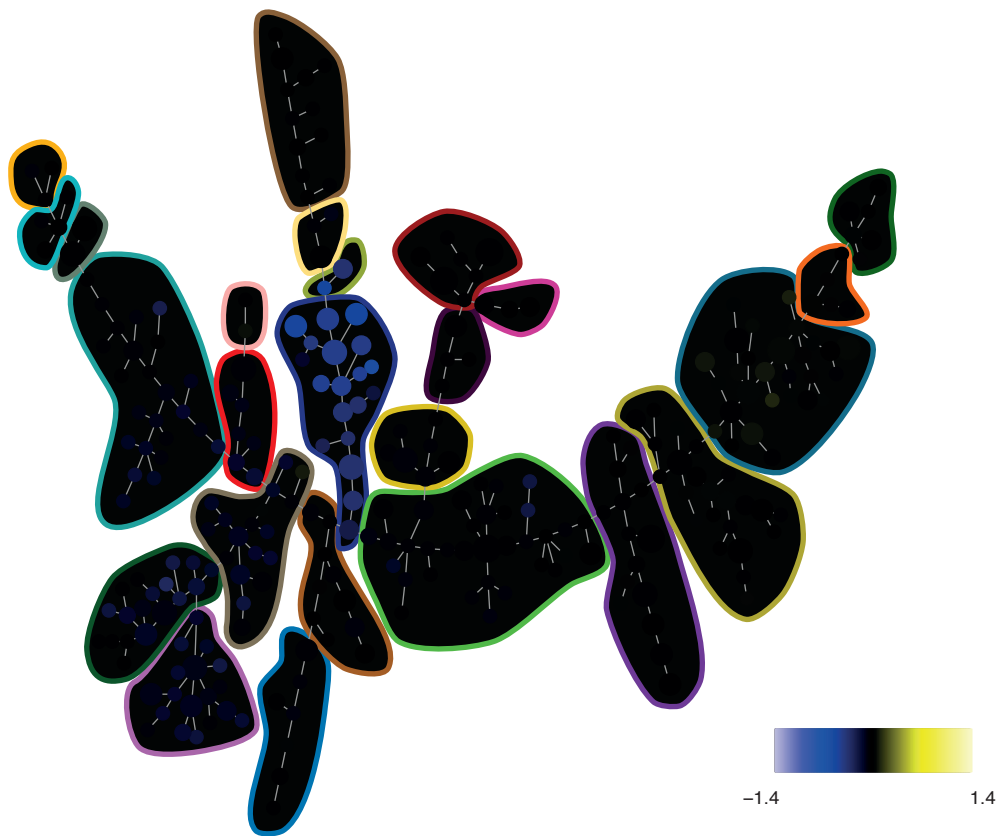


Figure S9B

141-pPLCgamma2 ---- Dasatinib+Flt3L vs Ref Ratio

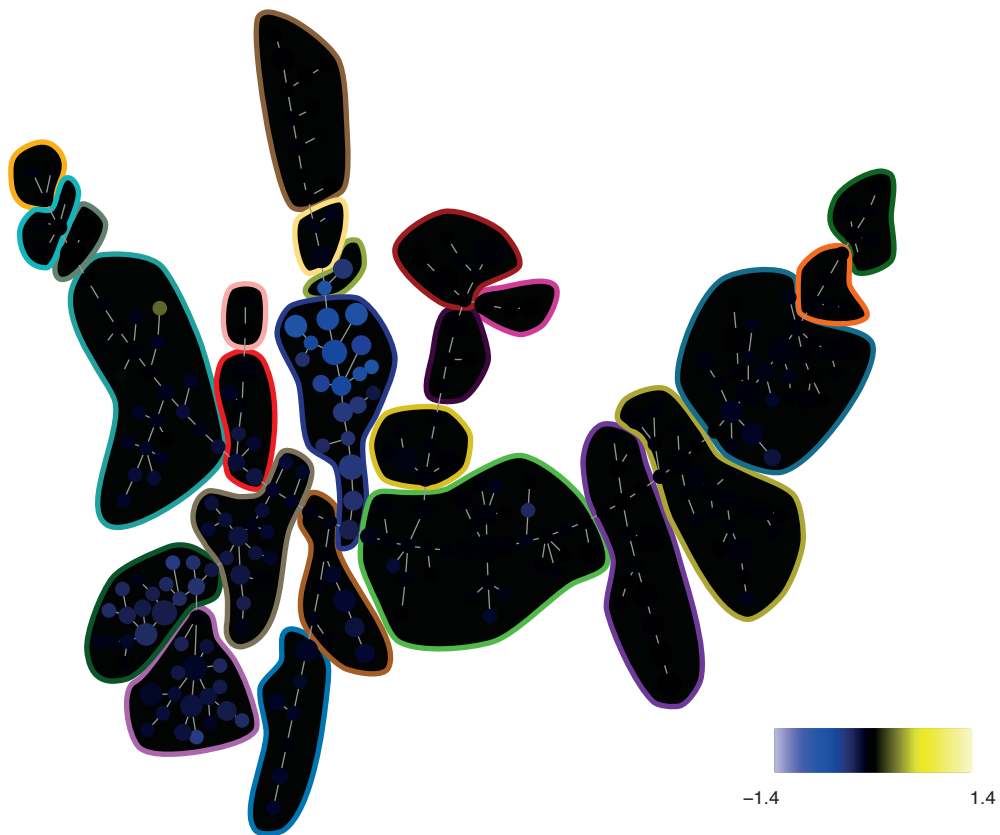


Figure S9B

141-pPLCgamma2 ---- Dasatinib+IL7 vs Ref Ratio

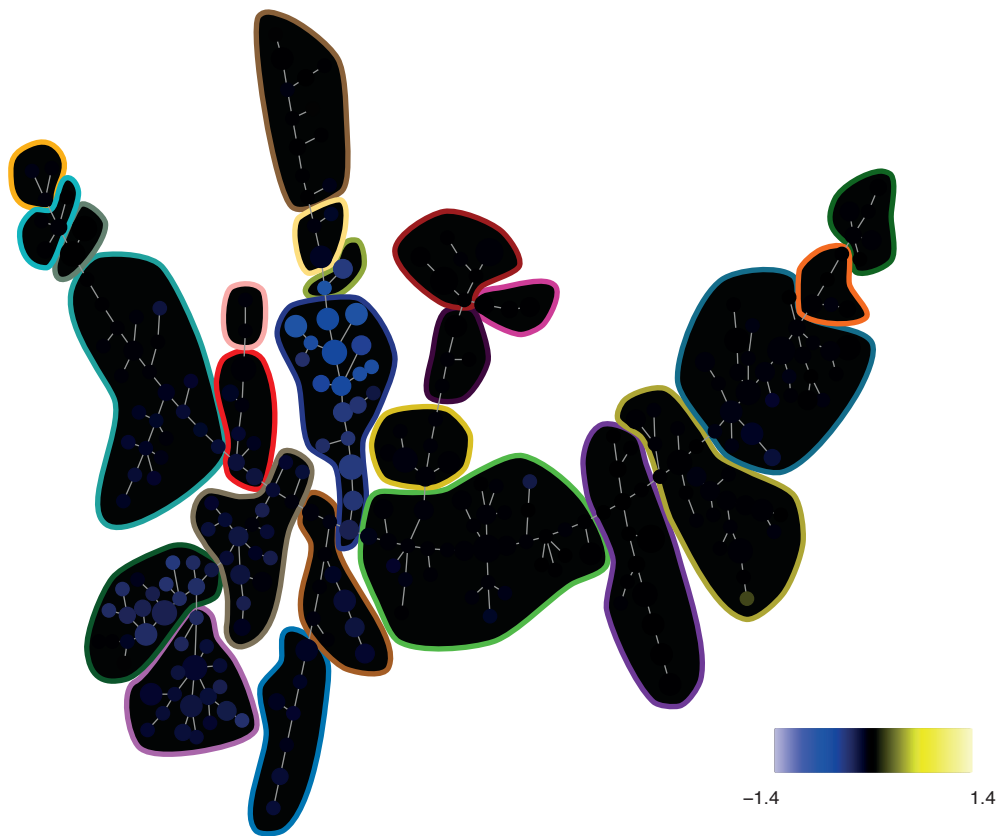


Figure S9B

141-pPLCgamma2 --- Dasatinib+PMAiono vs Ref Ratio

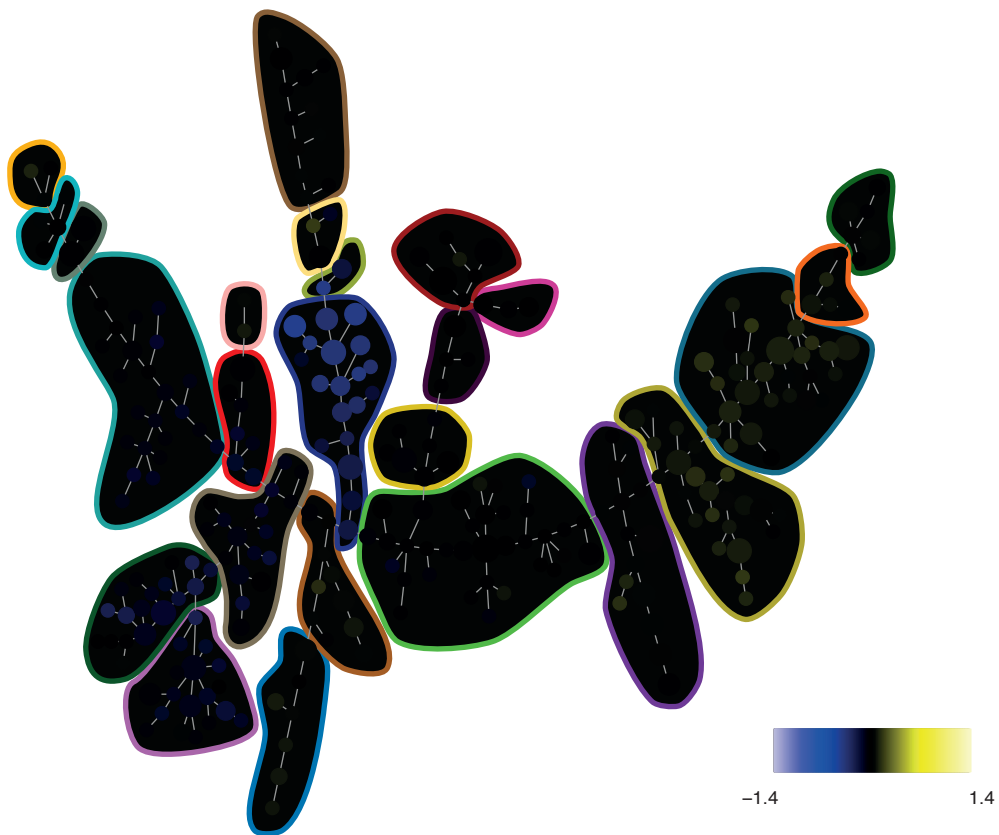


Figure S9B

141-pPLCgamma2 ---- Dasatinib+PVO4 vs Ref Ratio

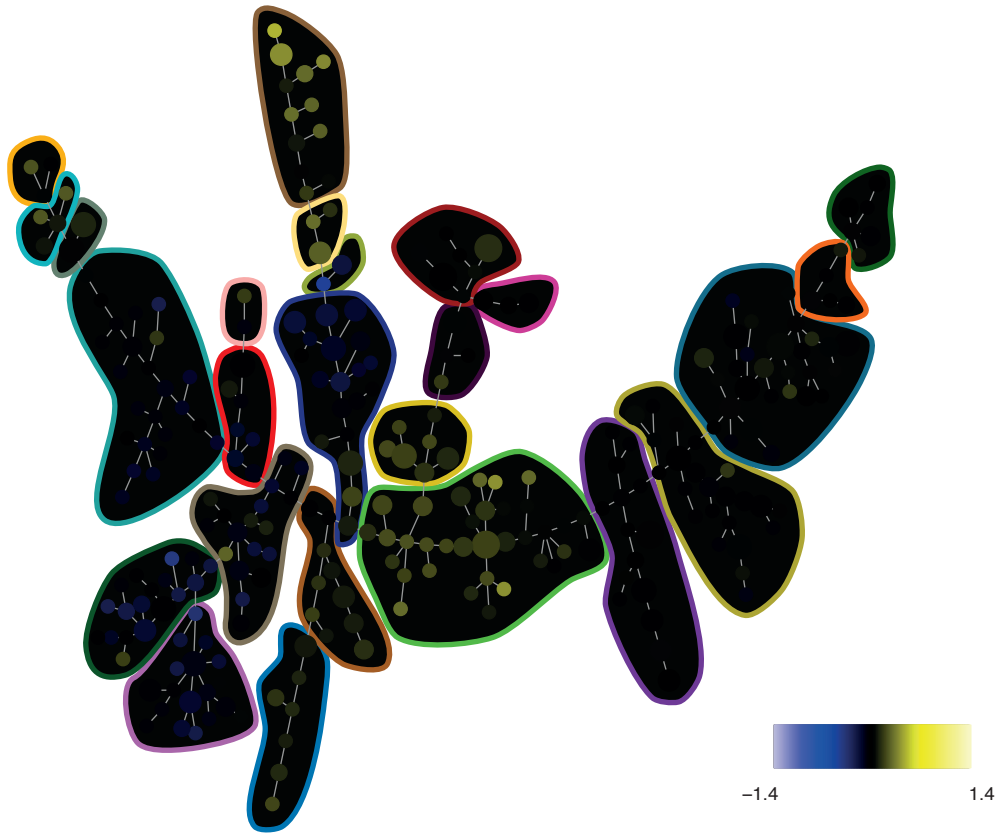


Figure S9B

141-pPLCgamma2 ---- Dasatinib+Unstim vs Ref Ratio

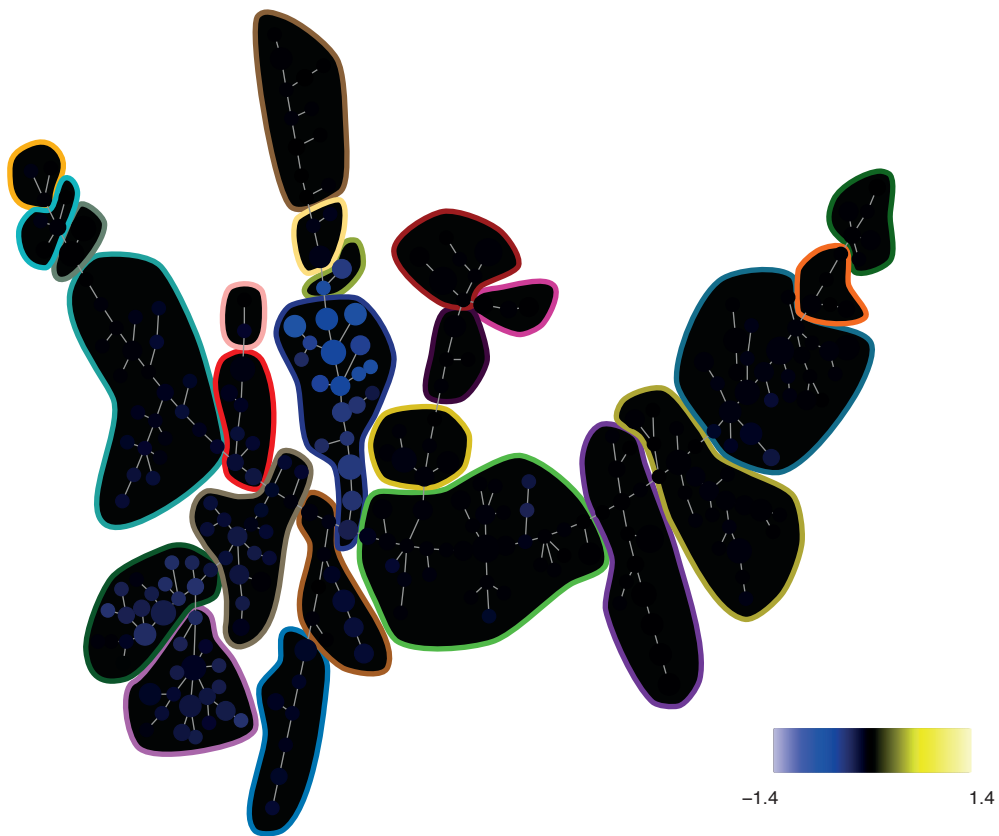


Figure S9B

150-pSTAT5 ---- Dasatinib+BCR vs Ref Ratio

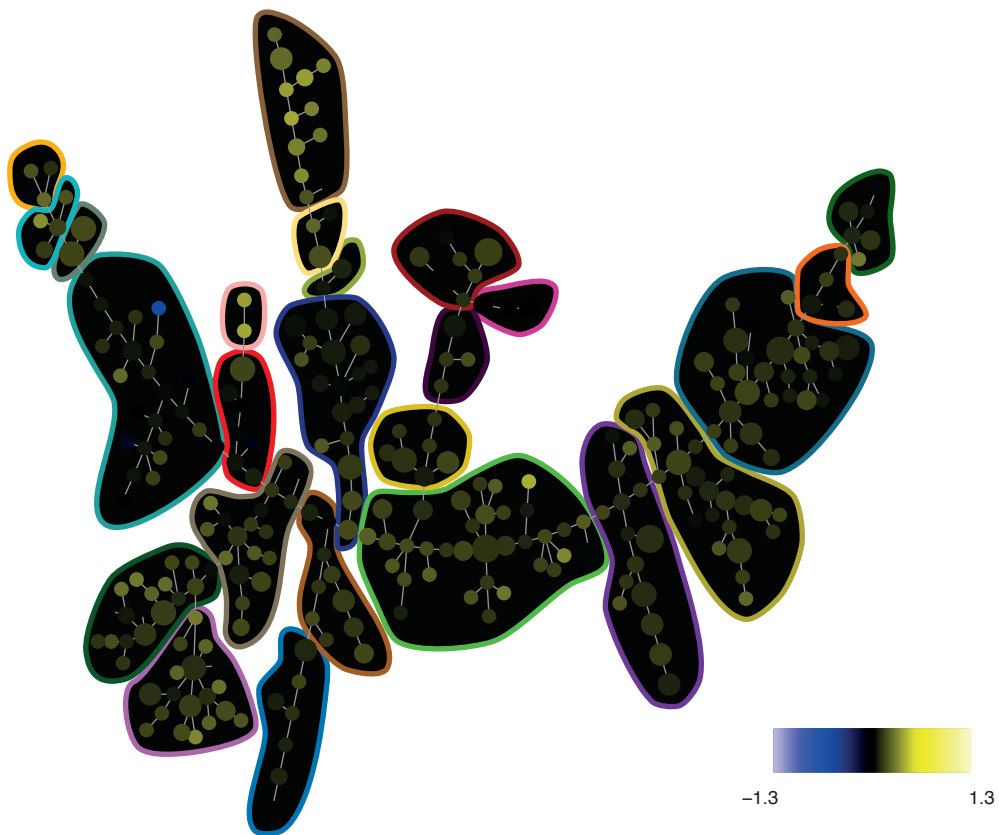


Figure S9B

150-pSTAT5 ---- Dasatinib+Flt3L vs Ref Ratio

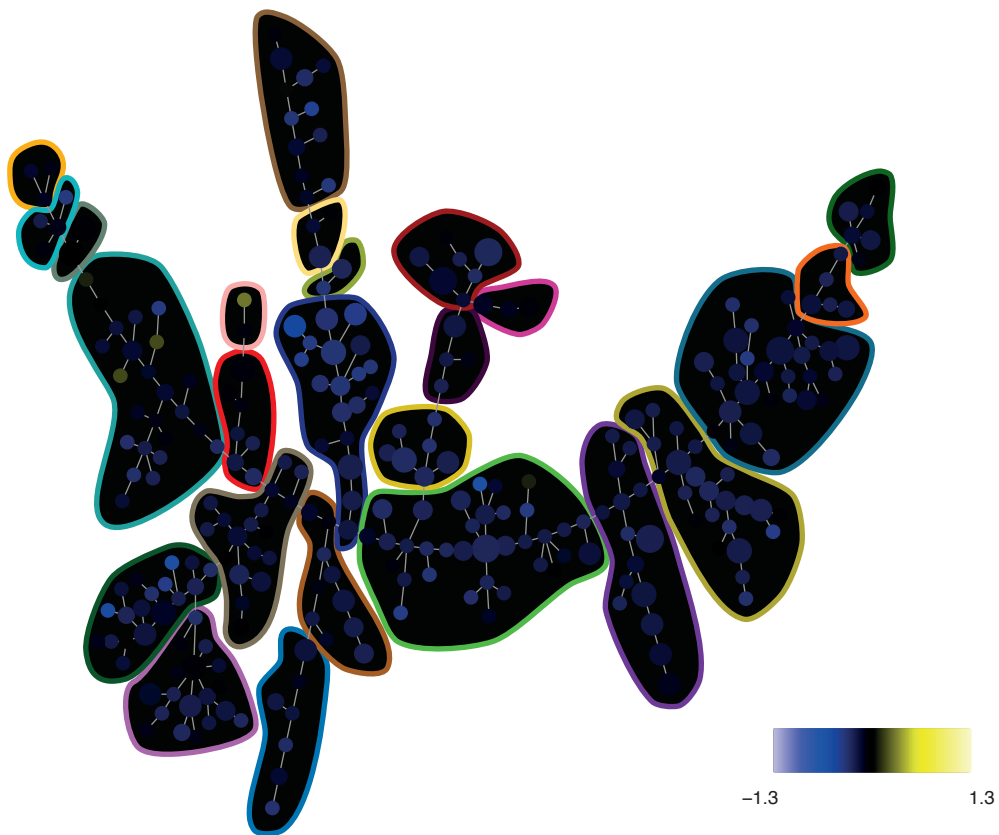


Figure S9B

150-pSTAT5 ---- Dasatinib+IL7 vs Ref Ratio

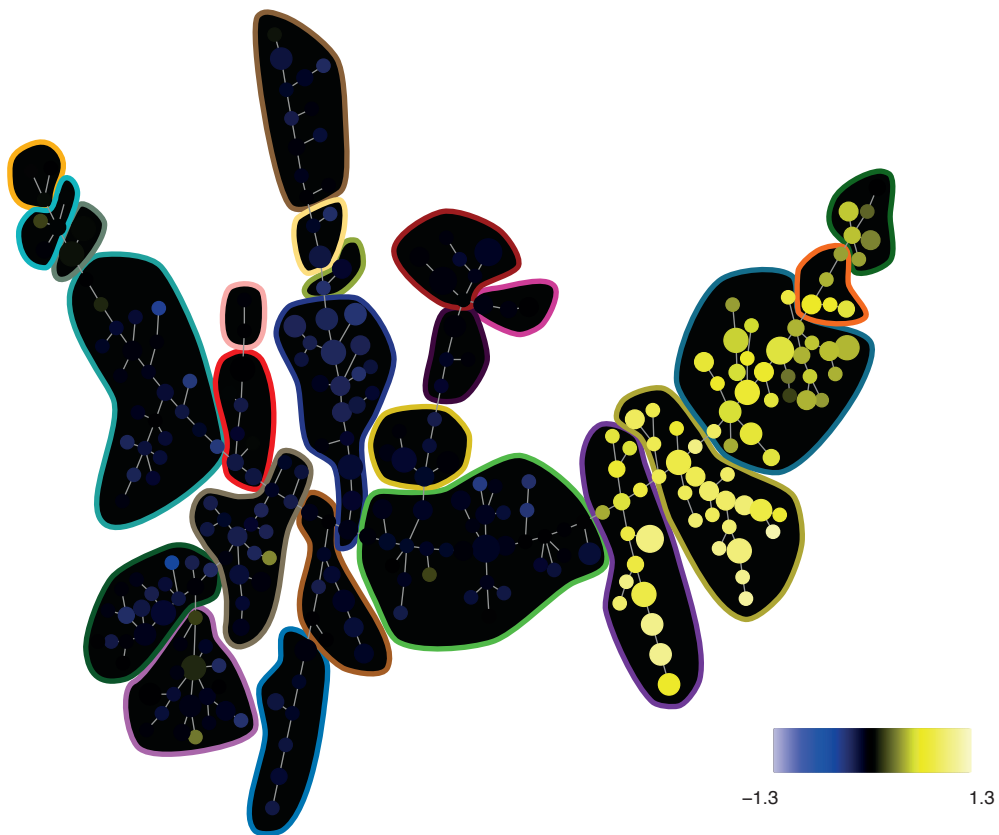


Figure S9B

150-pSTAT5 --- Dasatinib+PMAiono vs Ref Ratio

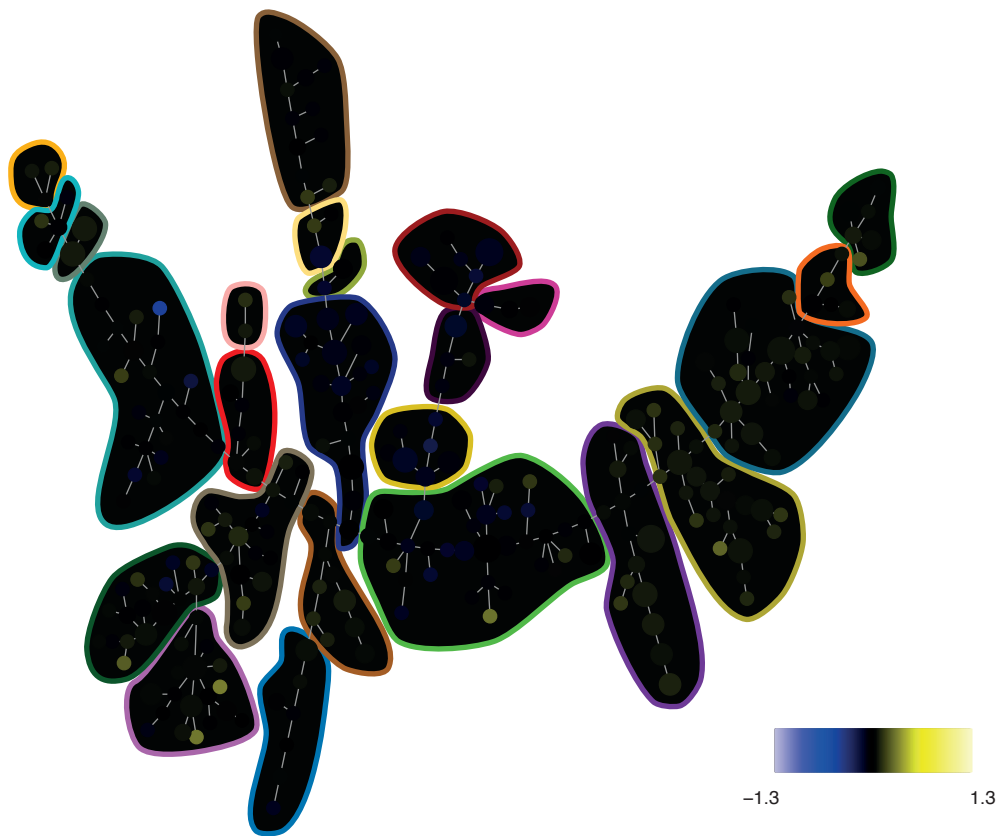


Figure S9B

150-pSTAT5 ---- Dasatinib+PVO4 vs Ref Ratio



Figure S9B

150-pSTAT5 ---- Dasatinib+Unstim vs Ref Ratio

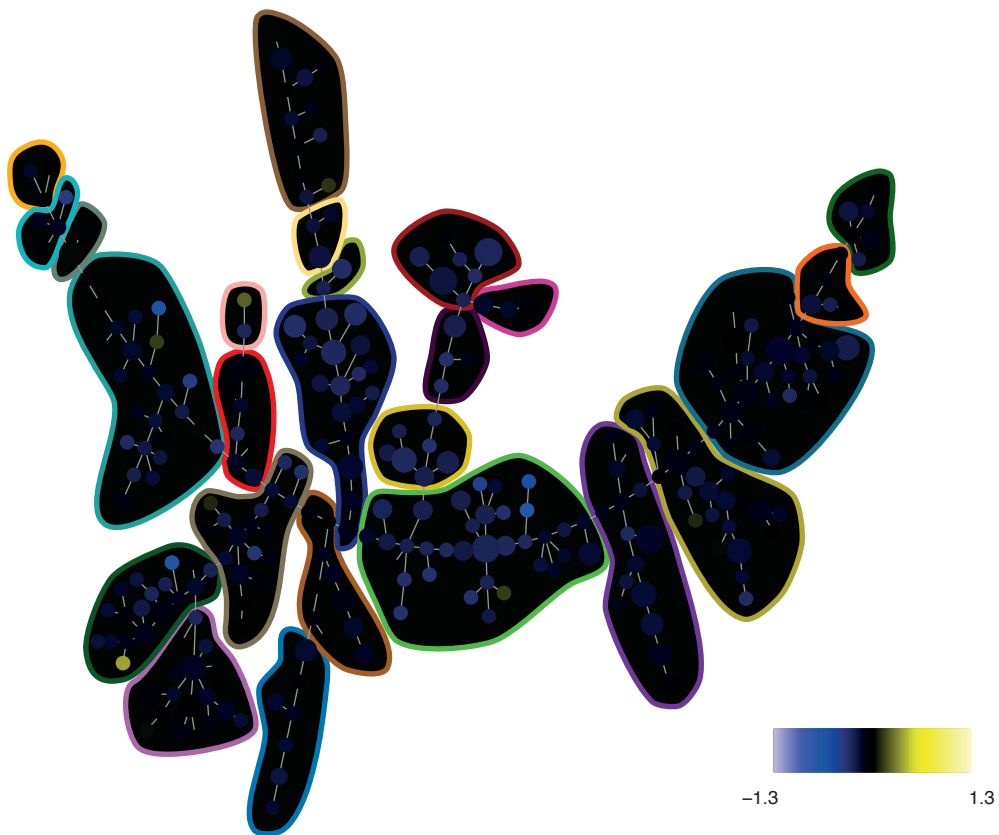


Figure S9B

151-pERK1/2 ---- Dasatinib+BCR vs Ref Ratio

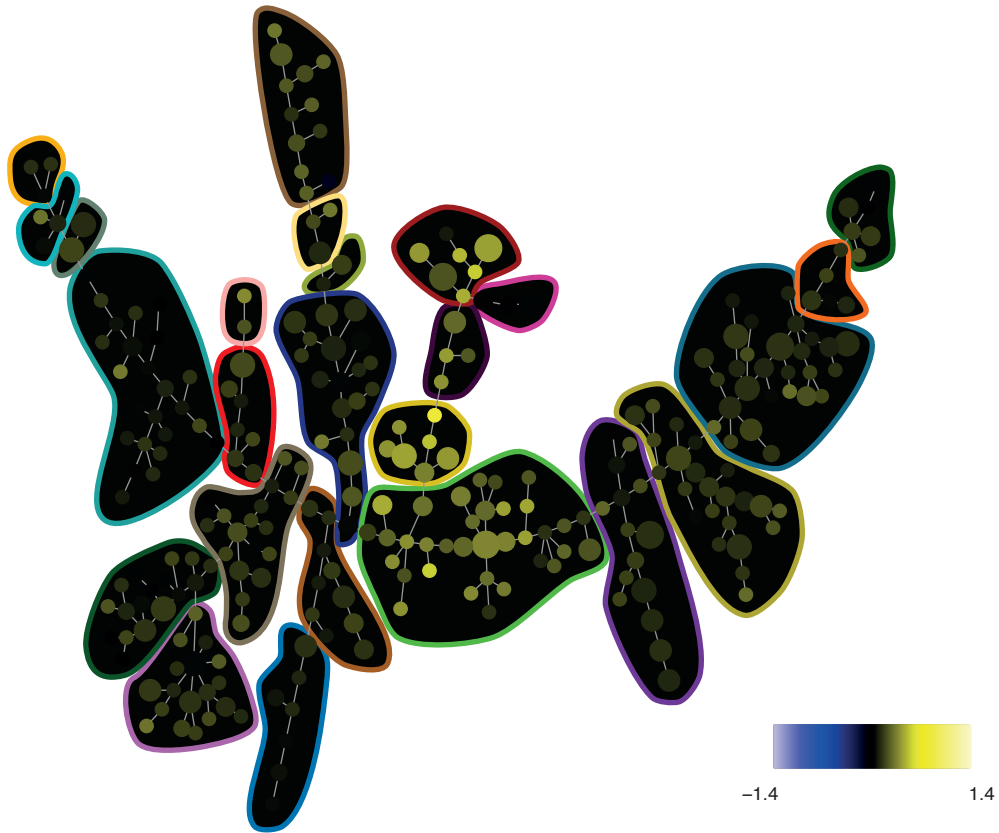


Figure S9B

151-pERK1/2 ---- Dasatinib+Flt3L vs Ref Ratio

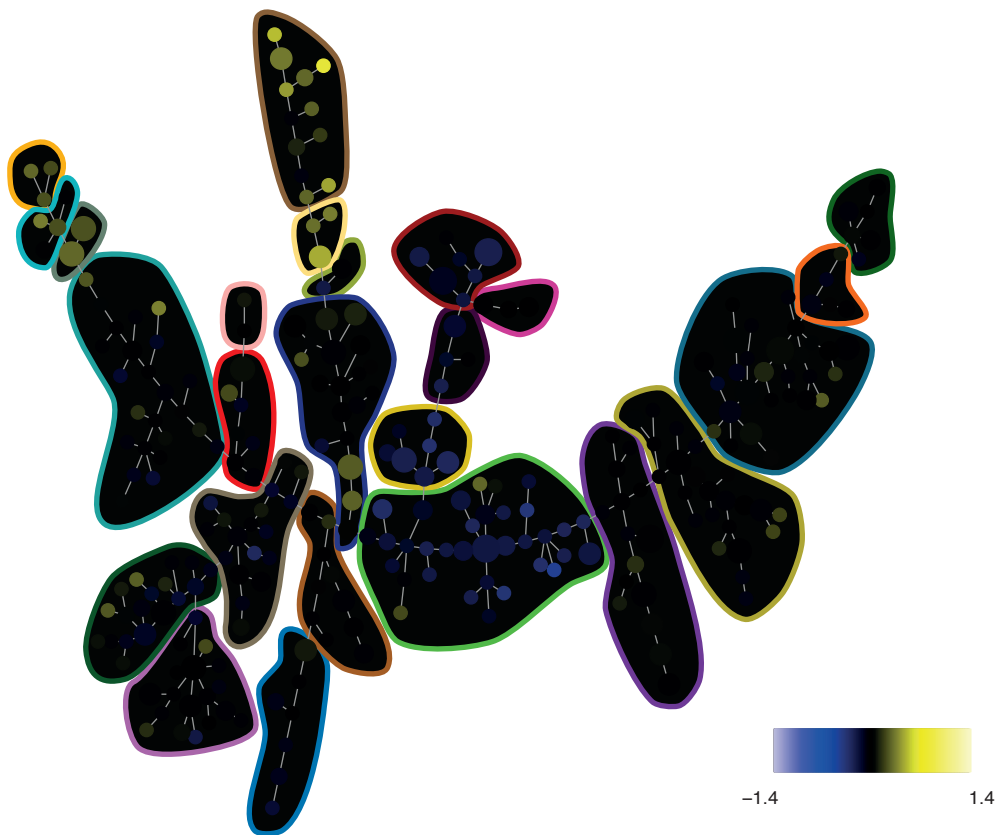


Figure S9B

151-pERK1/2 ---- Dasatinib+IL7 vs Ref Ratio

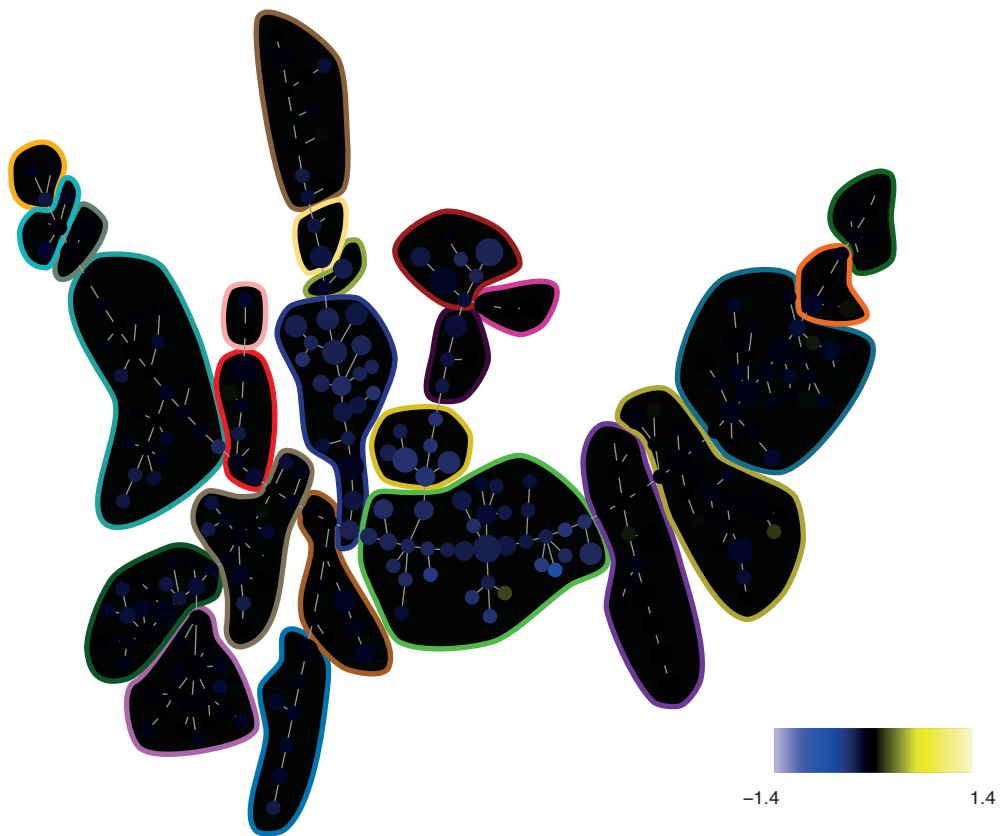


Figure S9B

151-pERK1/2 --- Dasatinib+PMAiono vs Ref Ratio

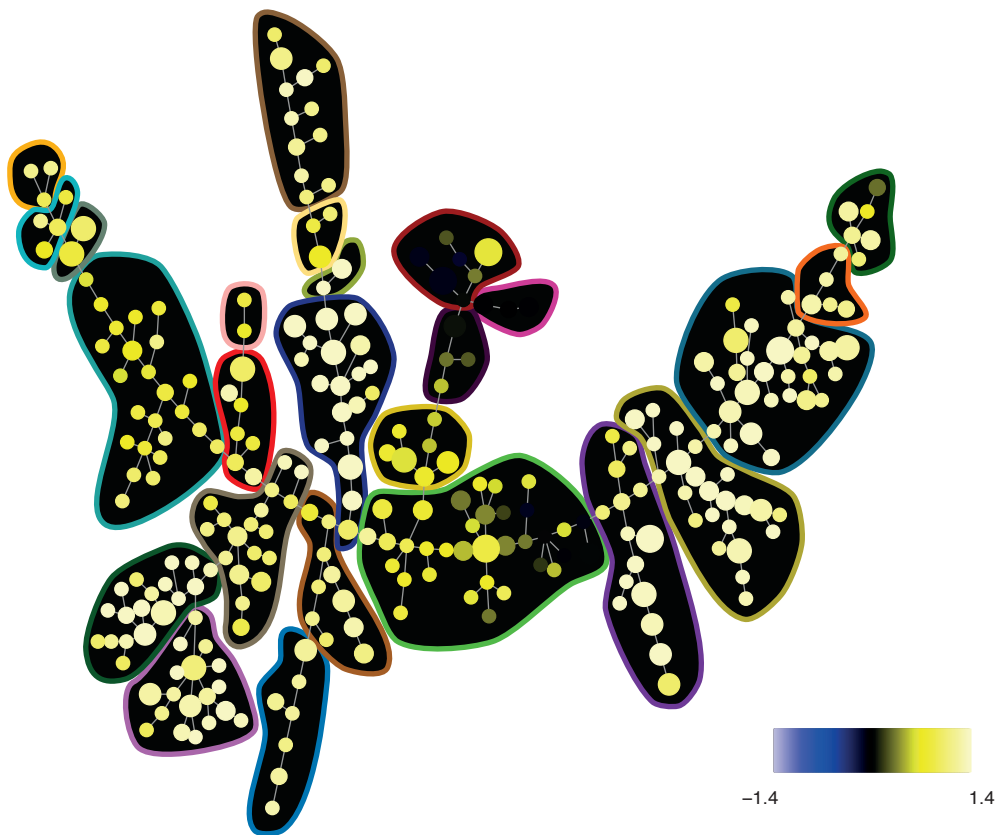


Figure S9B

151-pERK1/2 ---- Dasatinib+PVO4 vs Ref Ratio

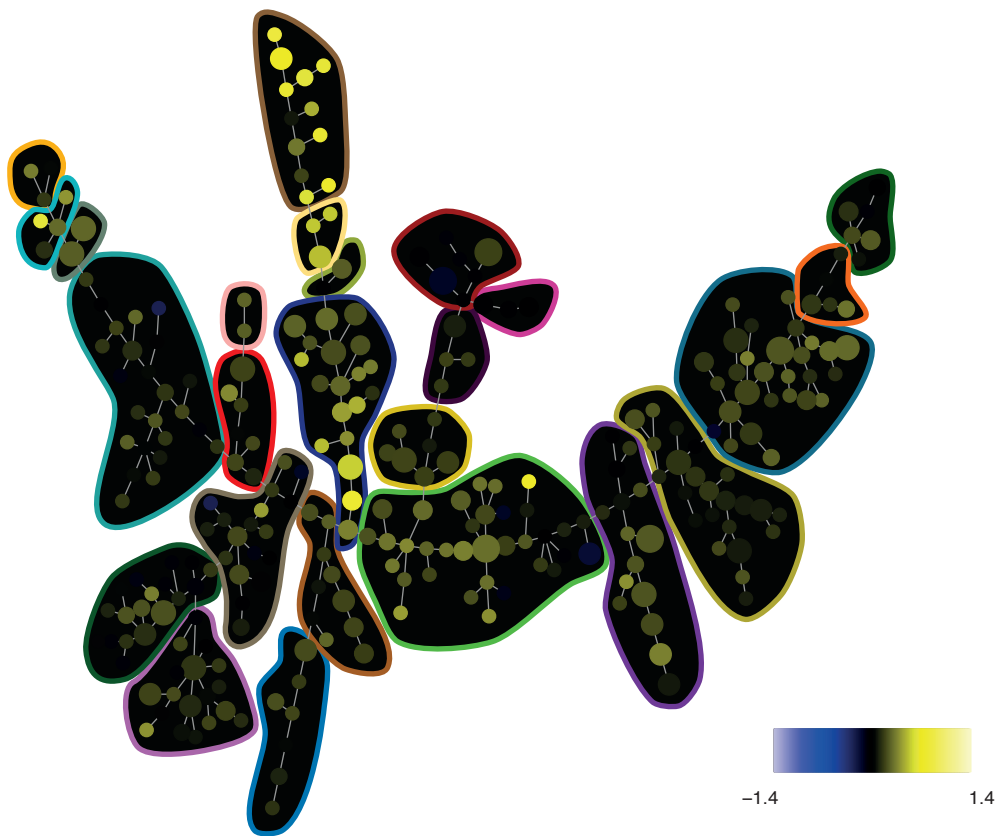


Figure S9B

151-pERK1/2 ---- Dasatinib+Unstim vs Ref Ratio

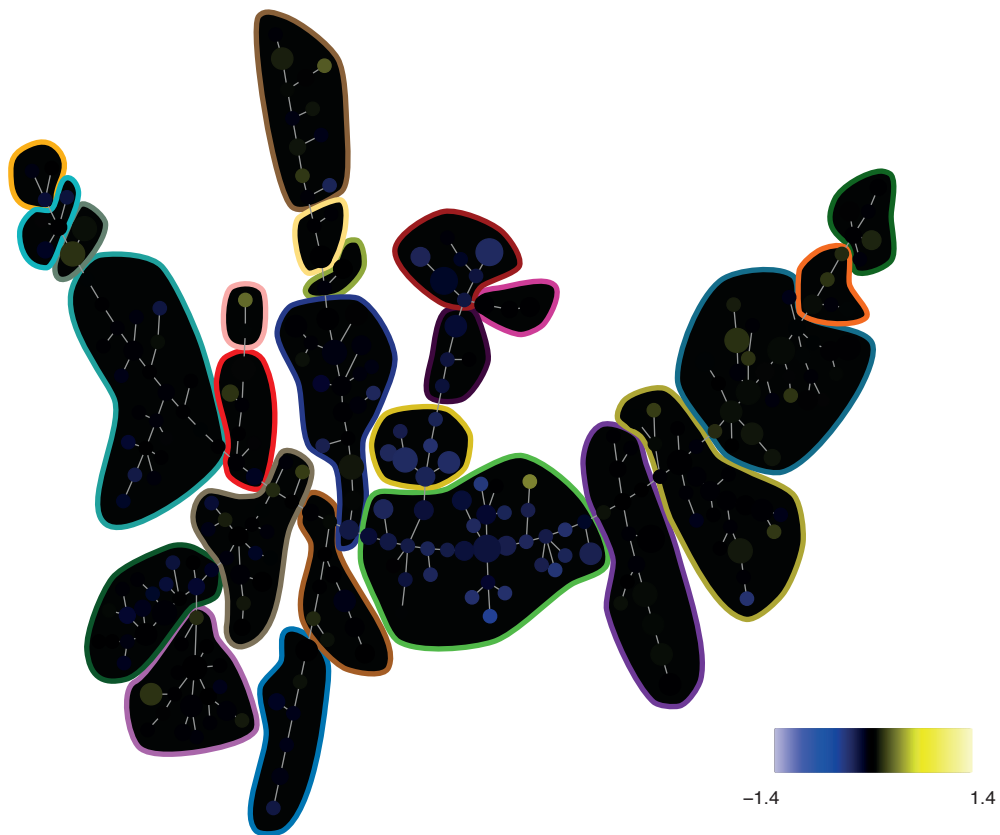


Figure S9B

152-Ki67 --- Dasatinib+BCR vs Ref Ratio

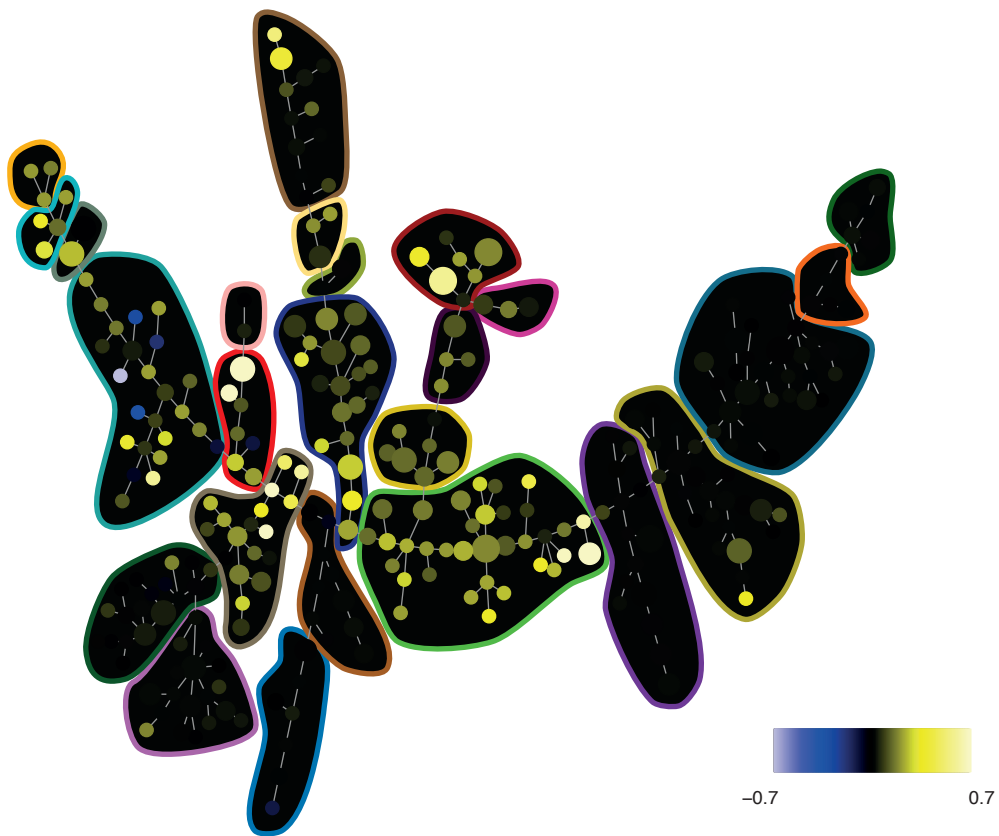


Figure S9B

152-Ki67 --- Dasatinib+Flt3L vs Ref Ratio

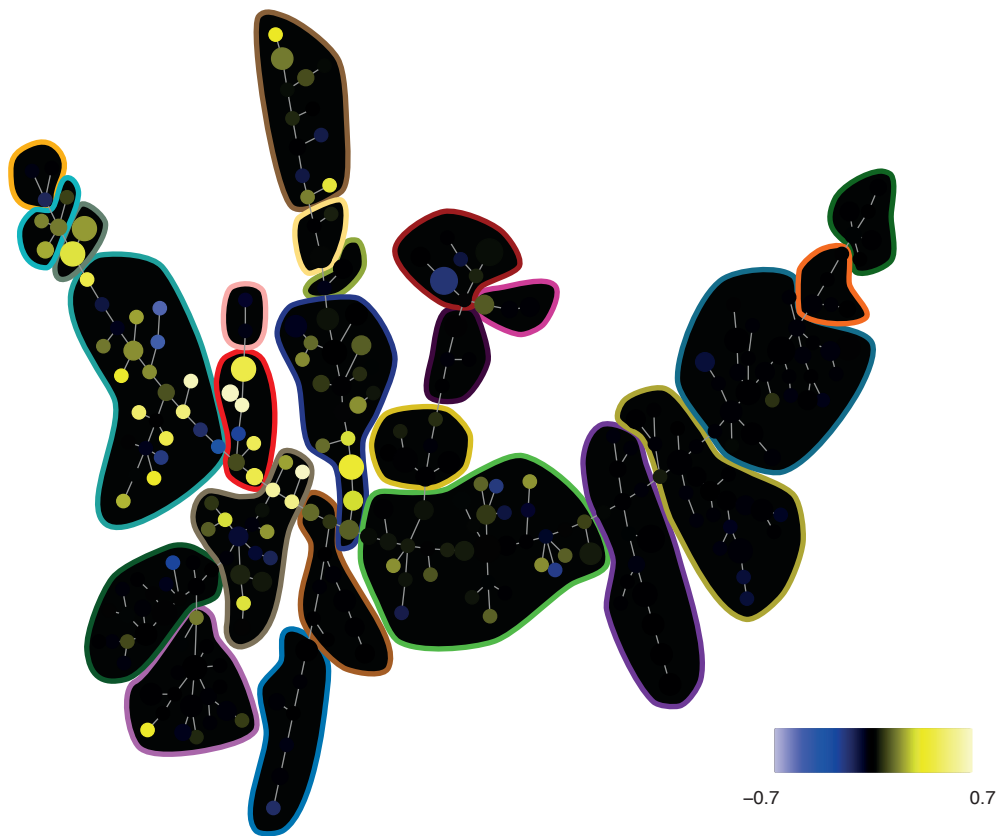


Figure S9B

152-Ki67 ---- Dasatinib+IL7 vs Ref Ratio

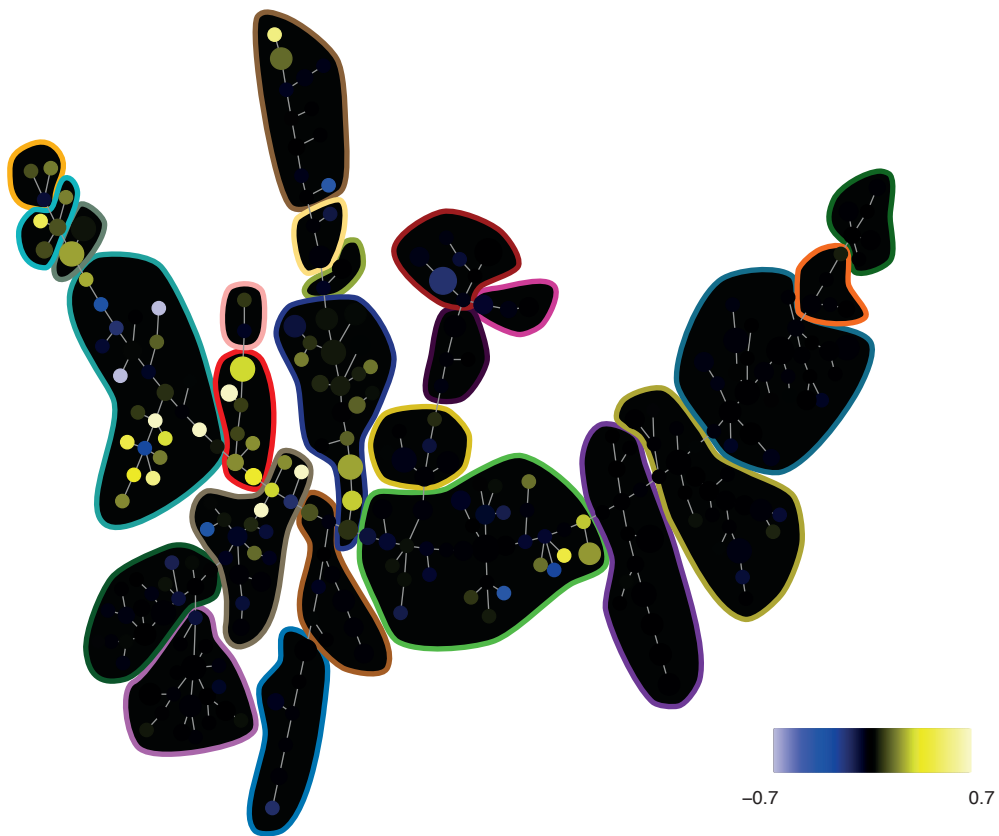


Figure S9B

152-Ki67 ---- Dasatinib+PMAiono vs Ref Ratio

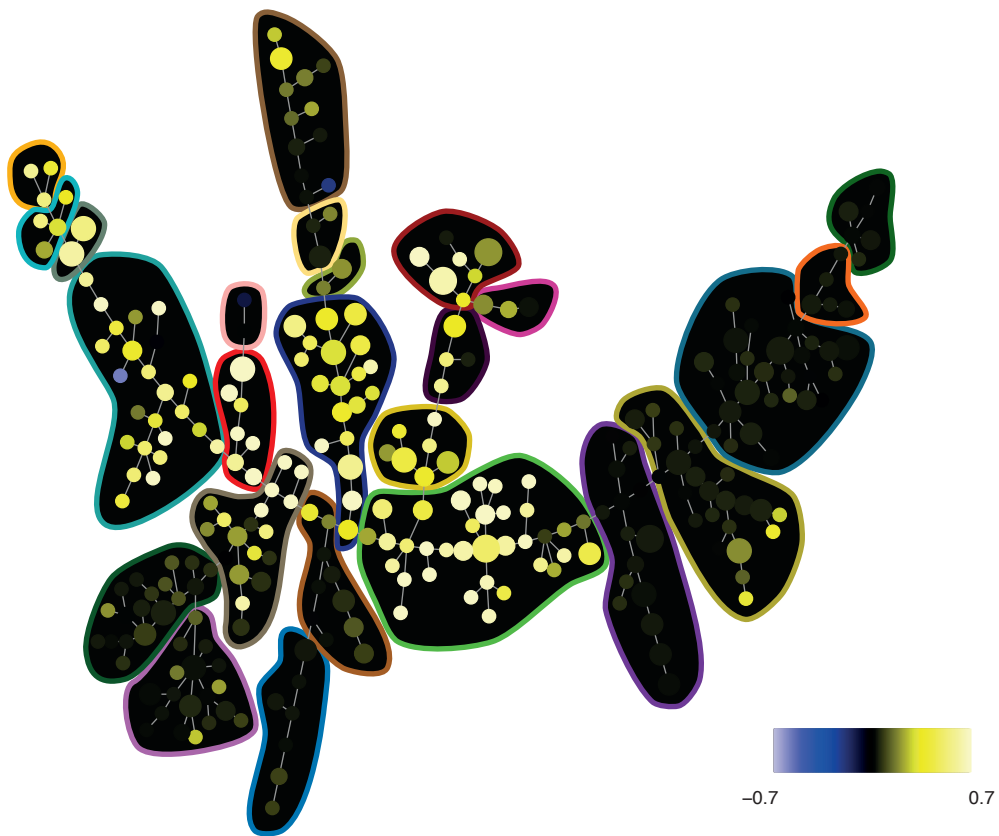


Figure S9B

152-Ki67 ---- Dasatinib+PVO4 vs Ref Ratio

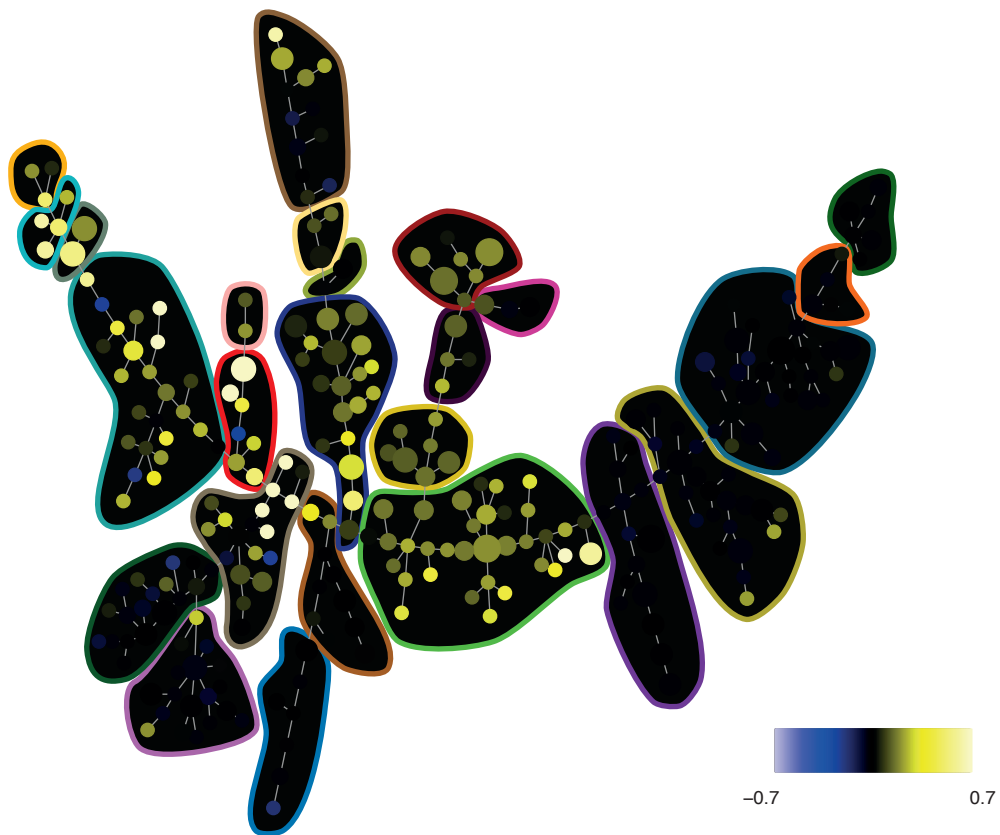


Figure S9B

152-Ki67 ---- Dasatinib+Unstim vs Ref Ratio

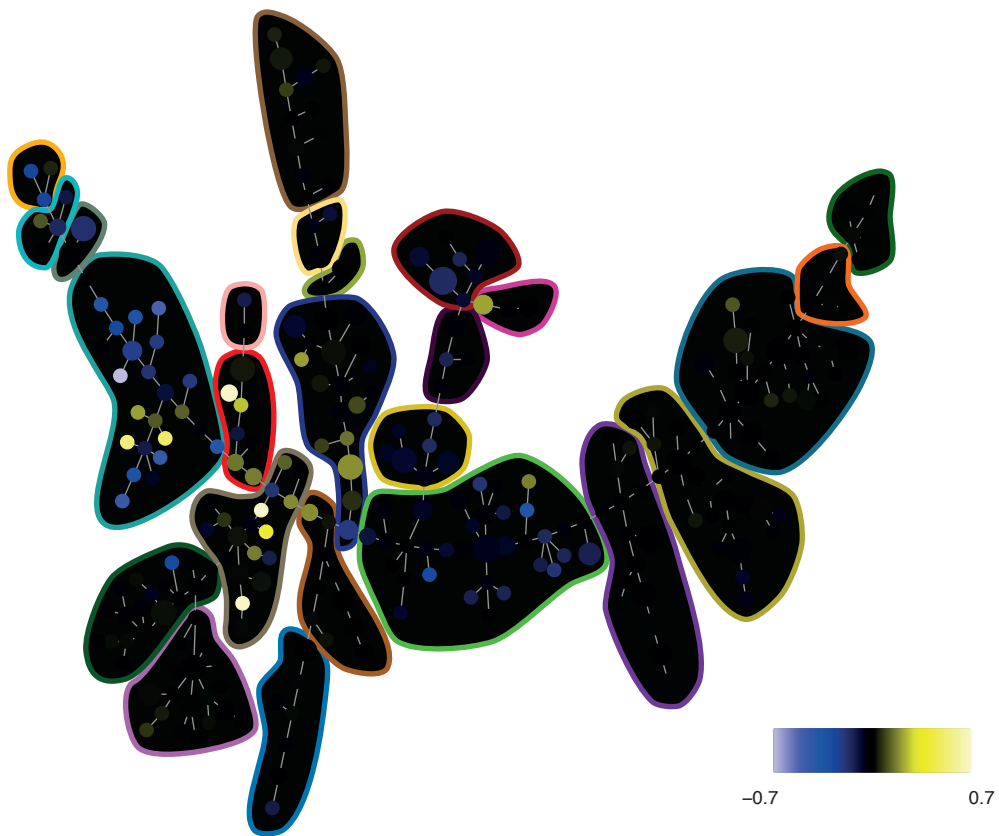


Figure S9B

153-pMAPKAPK2 ---- Dasatinib+BCR vs Ref Ratio

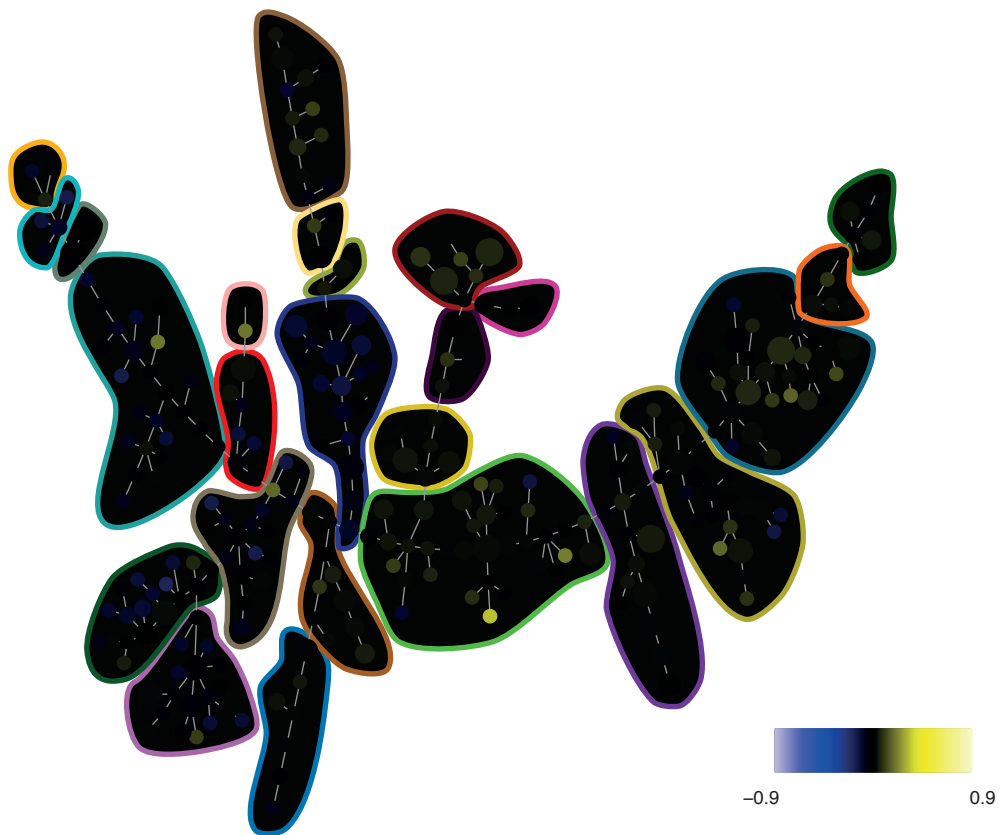


Figure S9B

153-pMAPKAPK2 ---- Dasatinib+Fit3L vs Ref Ratio

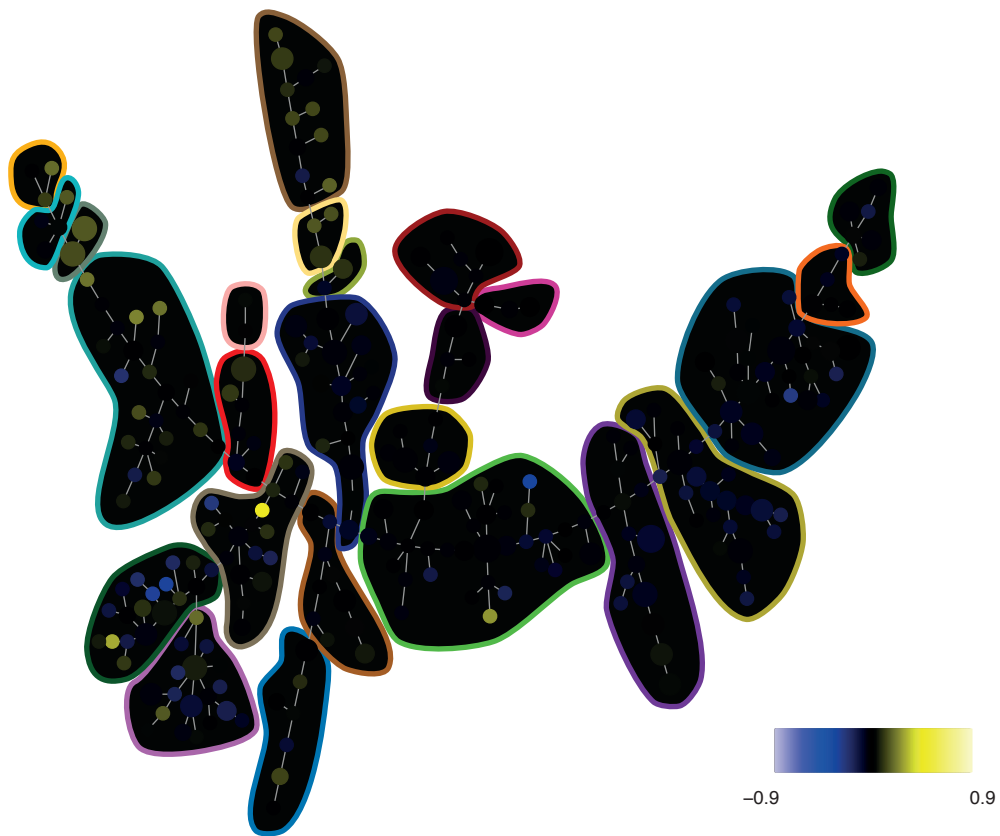


Figure S9B

153-pMAPKAPK2 ---- Dasatinib+IL7 vs Ref Ratio

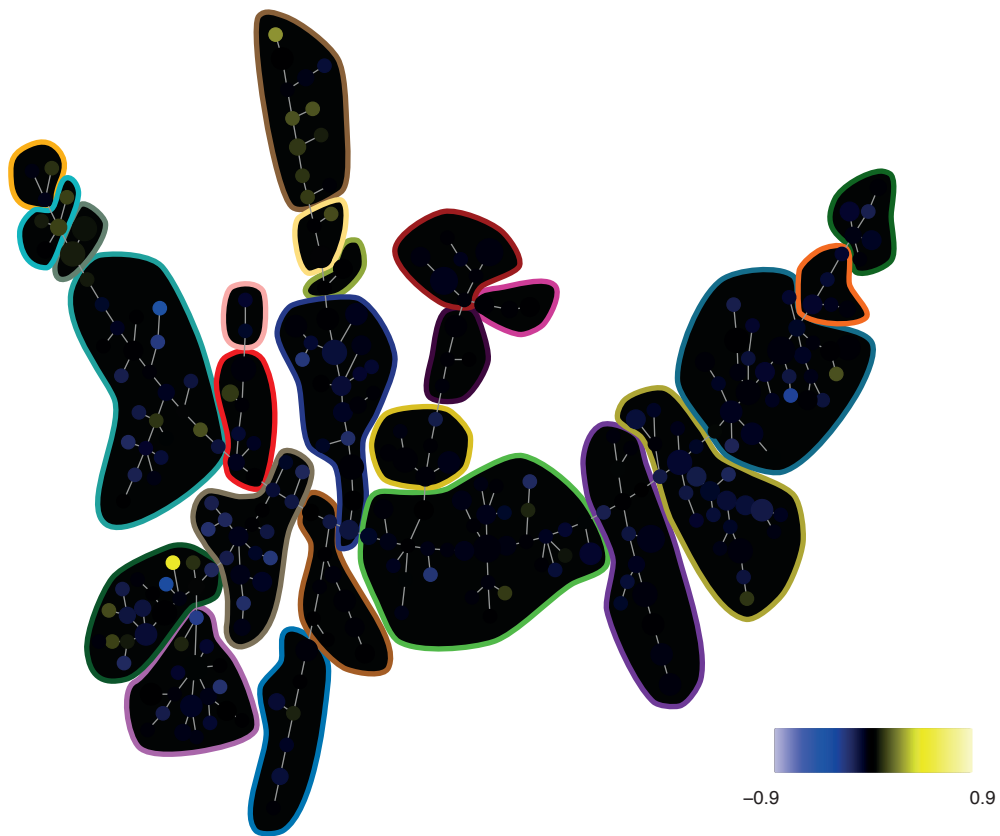


Figure S9B

153-pMAPKAPK2 ---- Dasatinib+PMAiono vs Ref Ratio



Figure S9B

153-pMAPKAPK2 ---- Dasatinib+PVO4 vs Ref Ratio

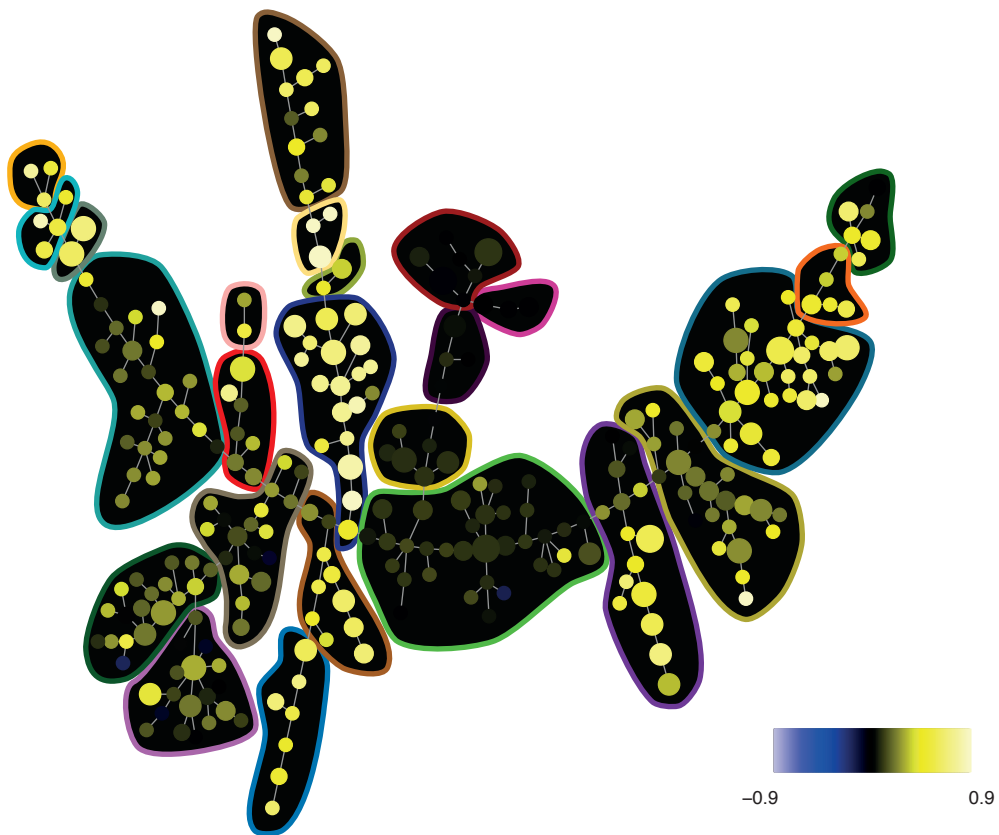


Figure S9B

153-pMAPKAPK2 ---- Dasatinib+Unstim vs Ref Ratio

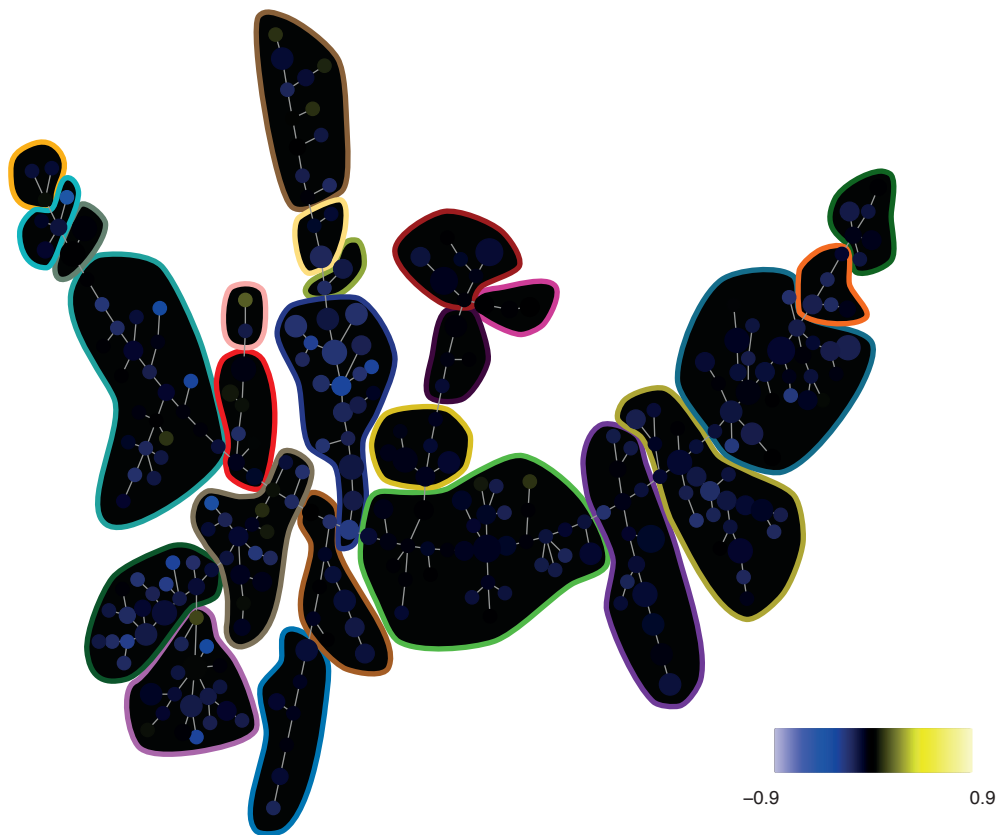


Figure S9B

154-pSHP2 --- Dasatinib+BCR vs Ref Ratio

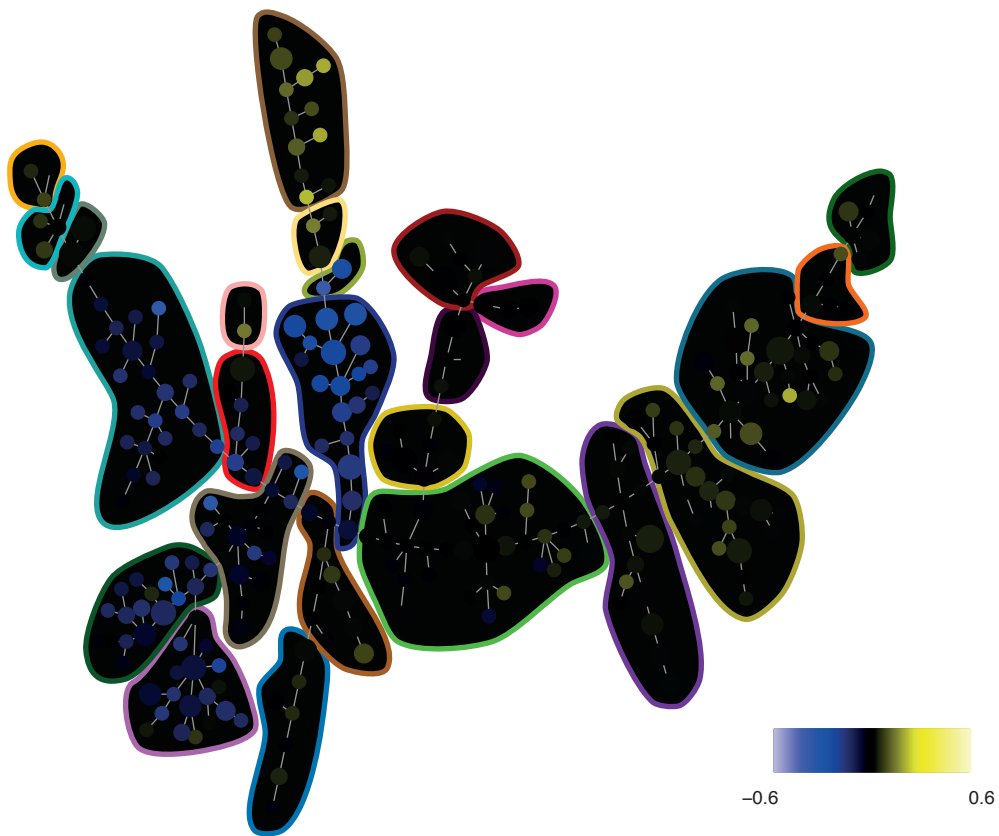


Figure S9B

154-pSHP2 --- Dasatinib+Flt3L vs Ref Ratio

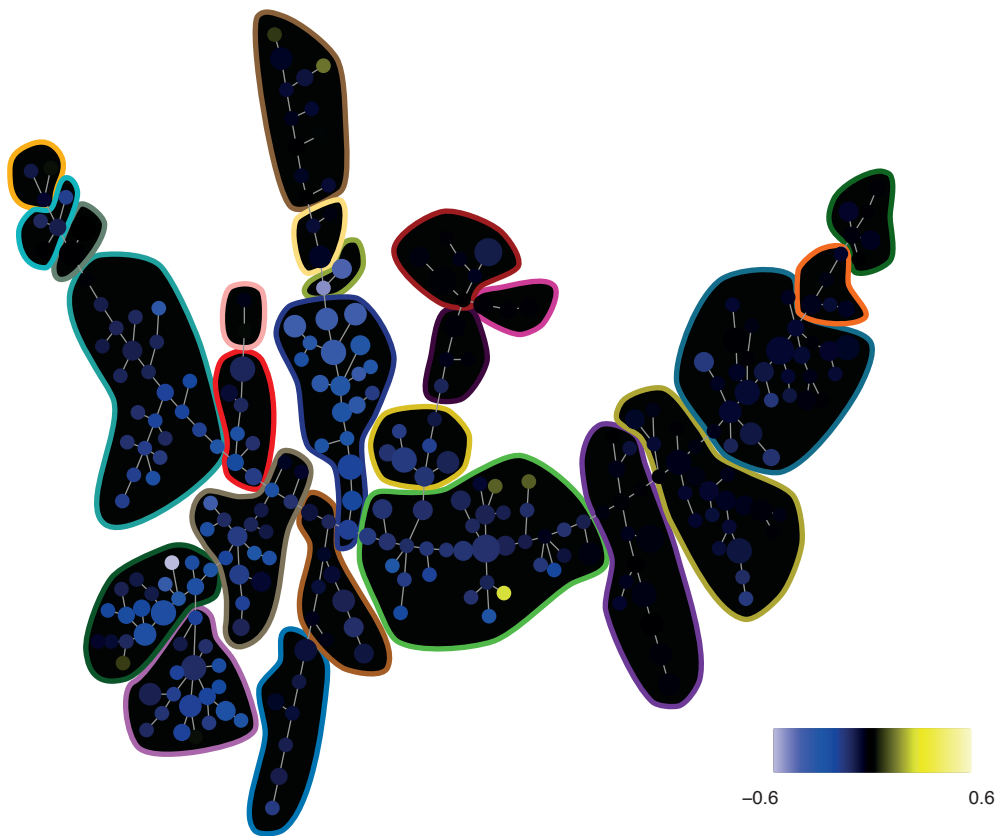


Figure S9B

154-pSHP2 ---- Dasatinib+IL7 vs Ref Ratio

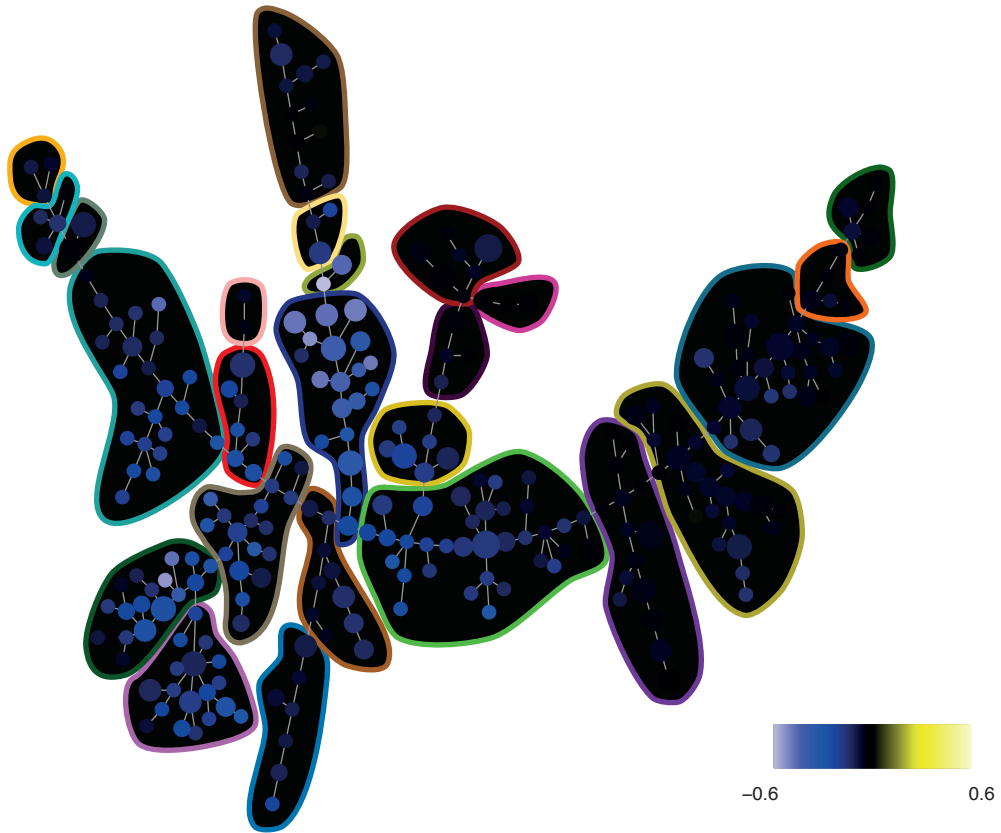


Figure S9B

154-pSHP2 ---- Dasatinib+PMAiono vs Ref Ratio

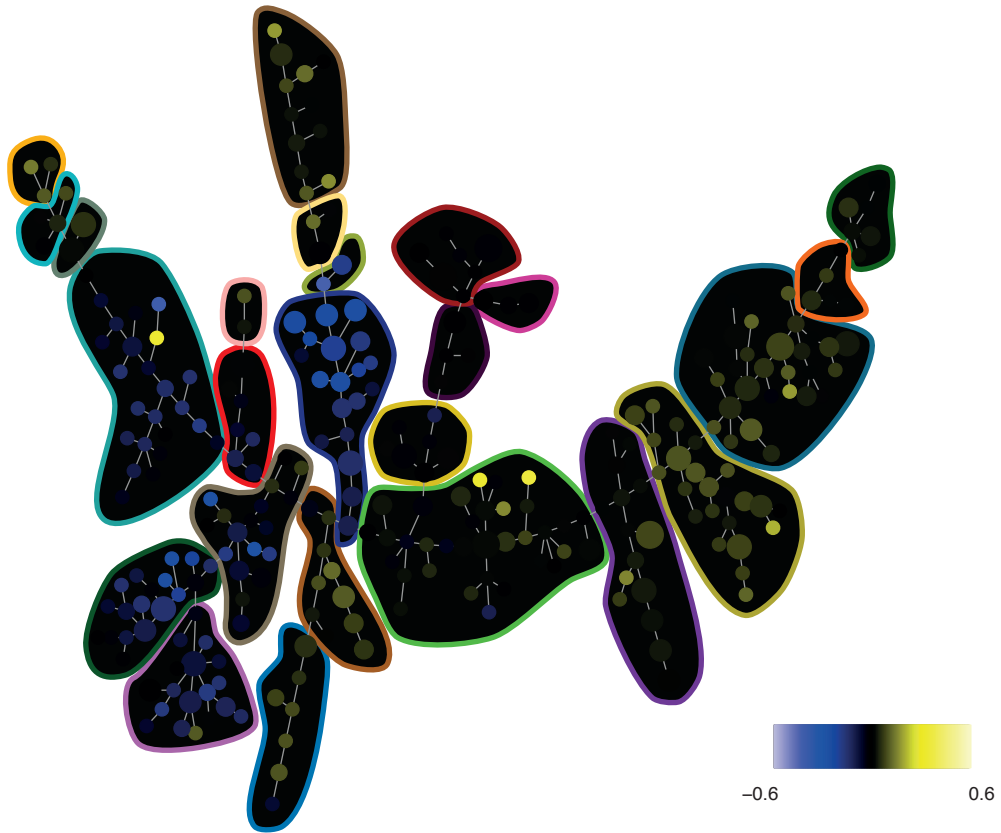


Figure S9B

154-pSHP2 ---- Dasatinib+PVO4 vs Ref Ratio

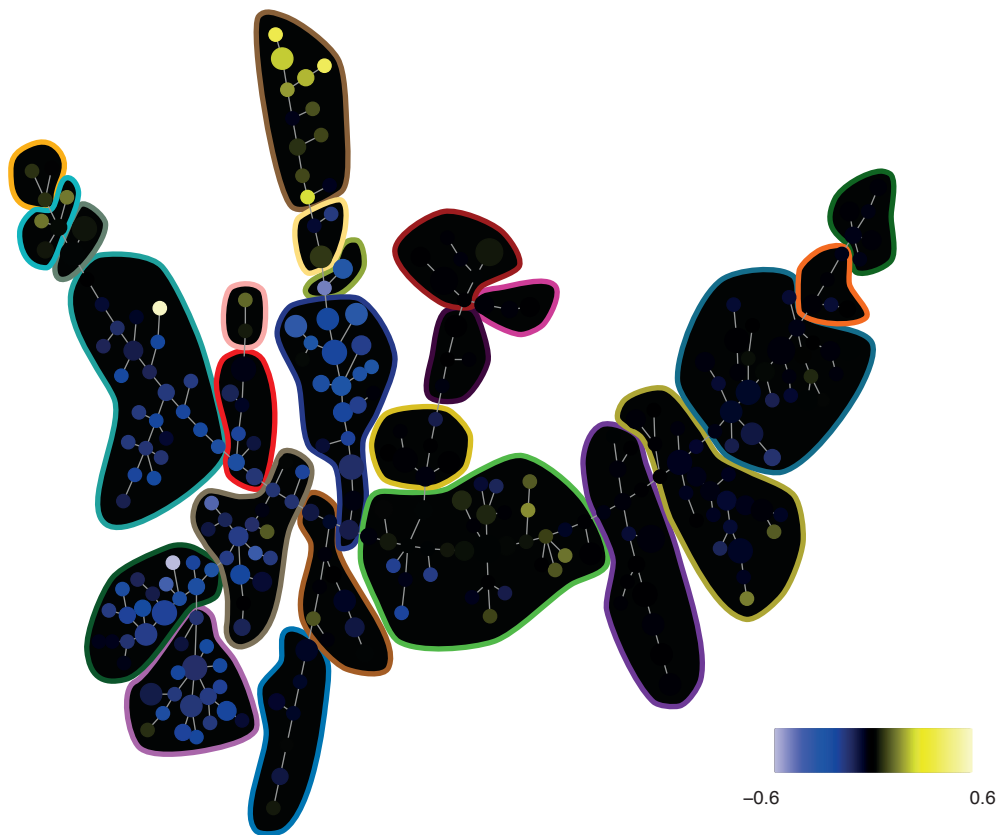


Figure S9B

154-pSHP2 --- Dasatinib+Unstim vs Ref Ratio

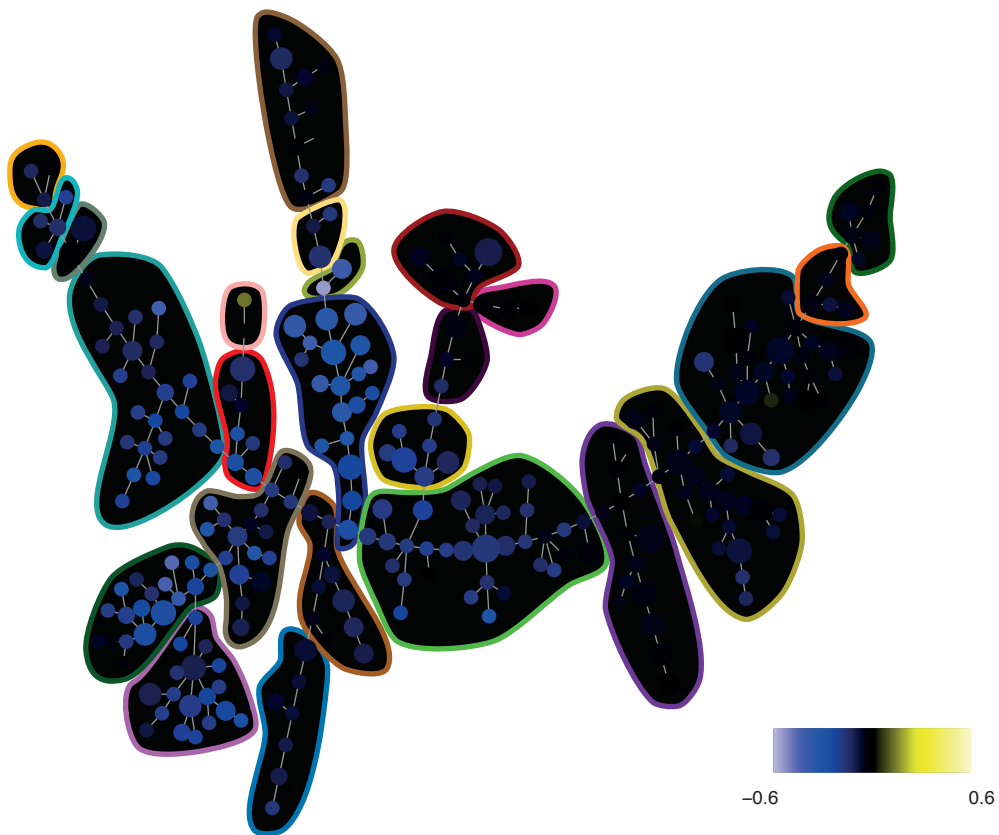


Figure S9B

156-pZAP70/Syk --- Dasatinib+BCR vs Ref Ratio

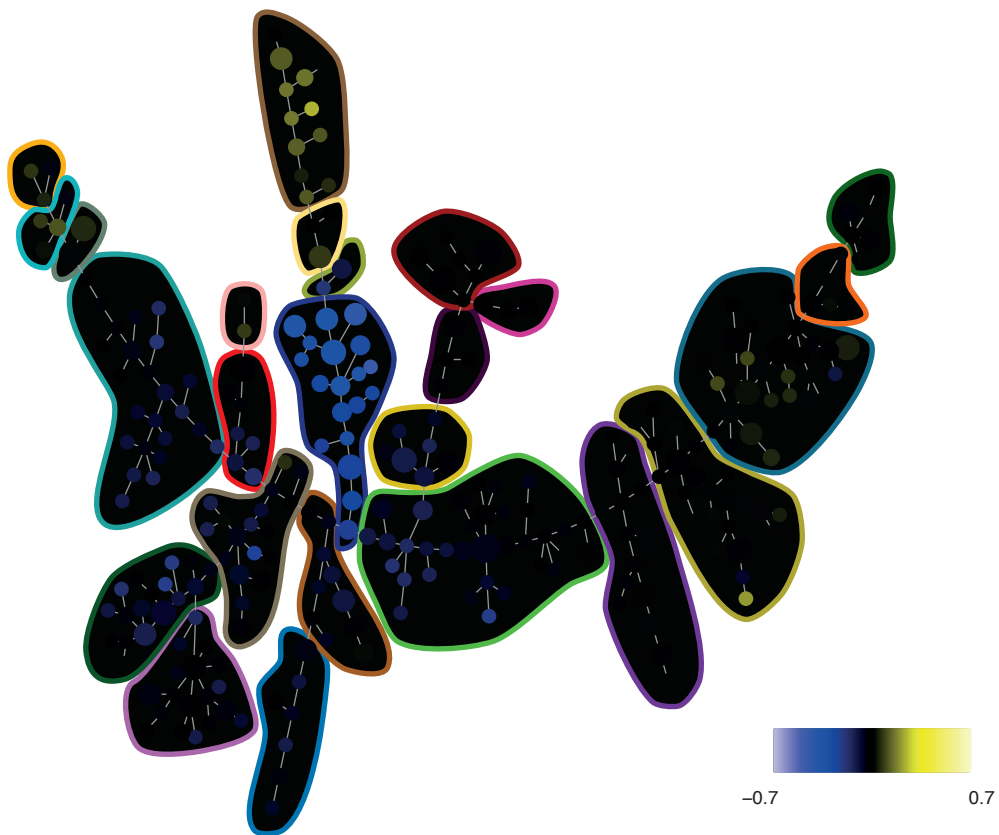


Figure S9B

156-pZAP70/Syk --- Dasatinib+Flt3L vs Ref Ratio

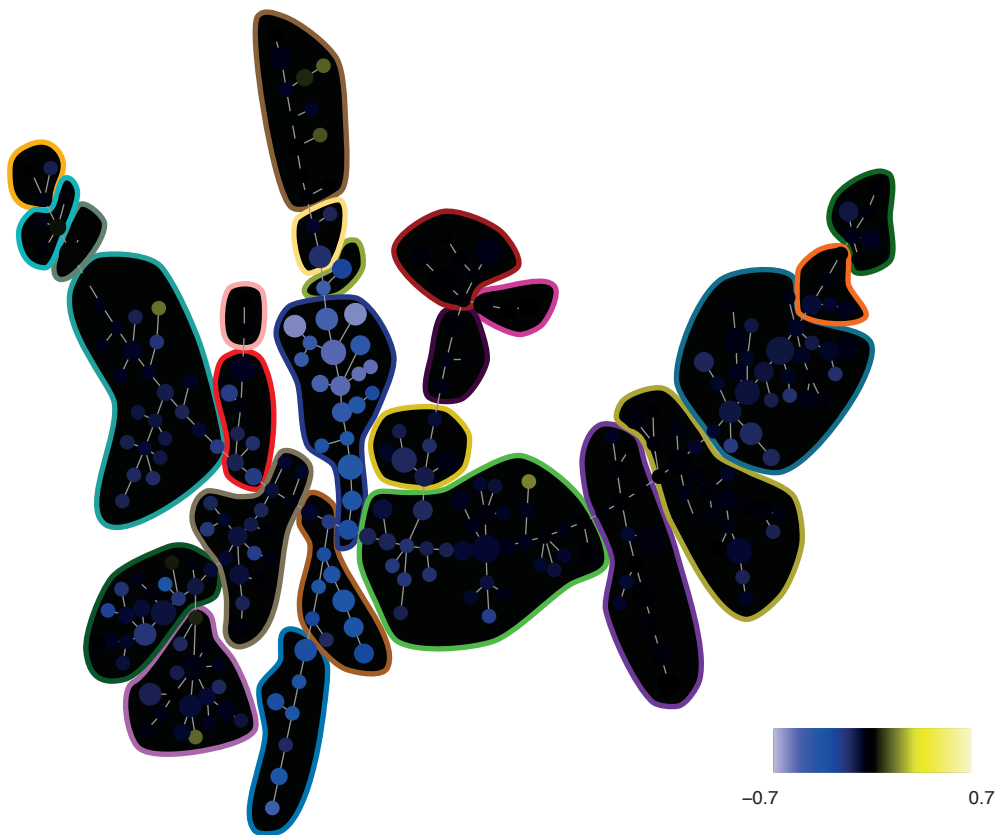


Figure S9B

156-pZAP70/Syk ---- Dasatinib+IL7 vs Ref Ratio

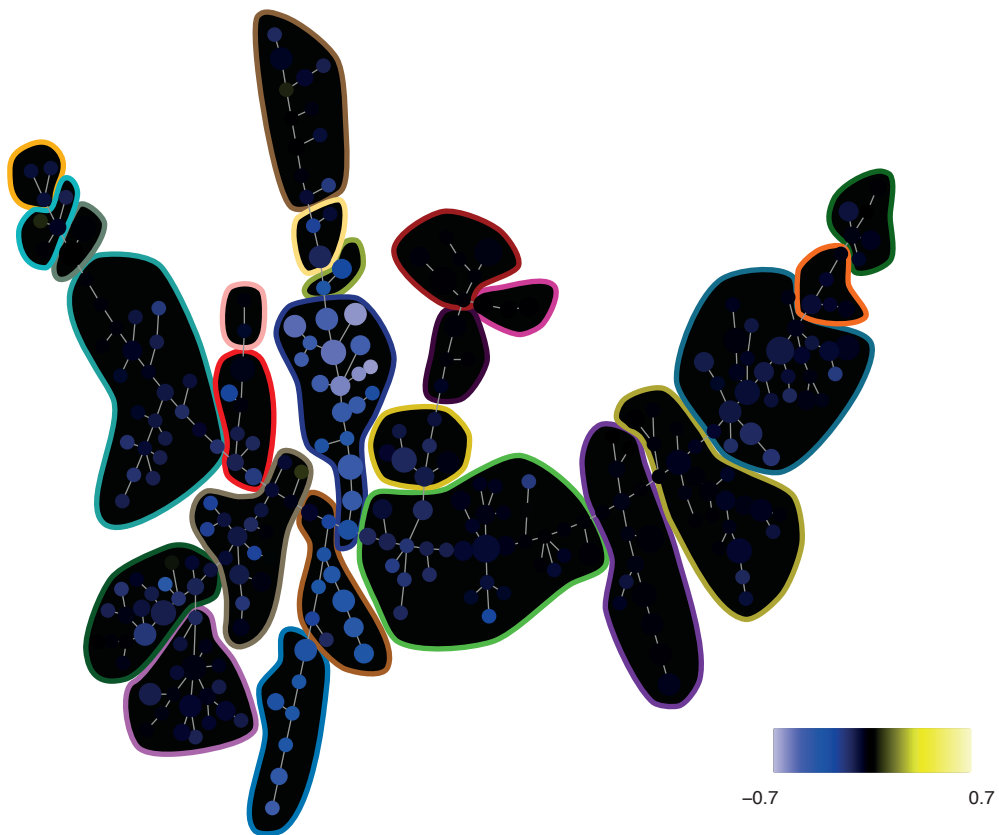


Figure S9B

156-pZAP70/Syk --- Dasatinib+PMAiono vs Ref Ratio

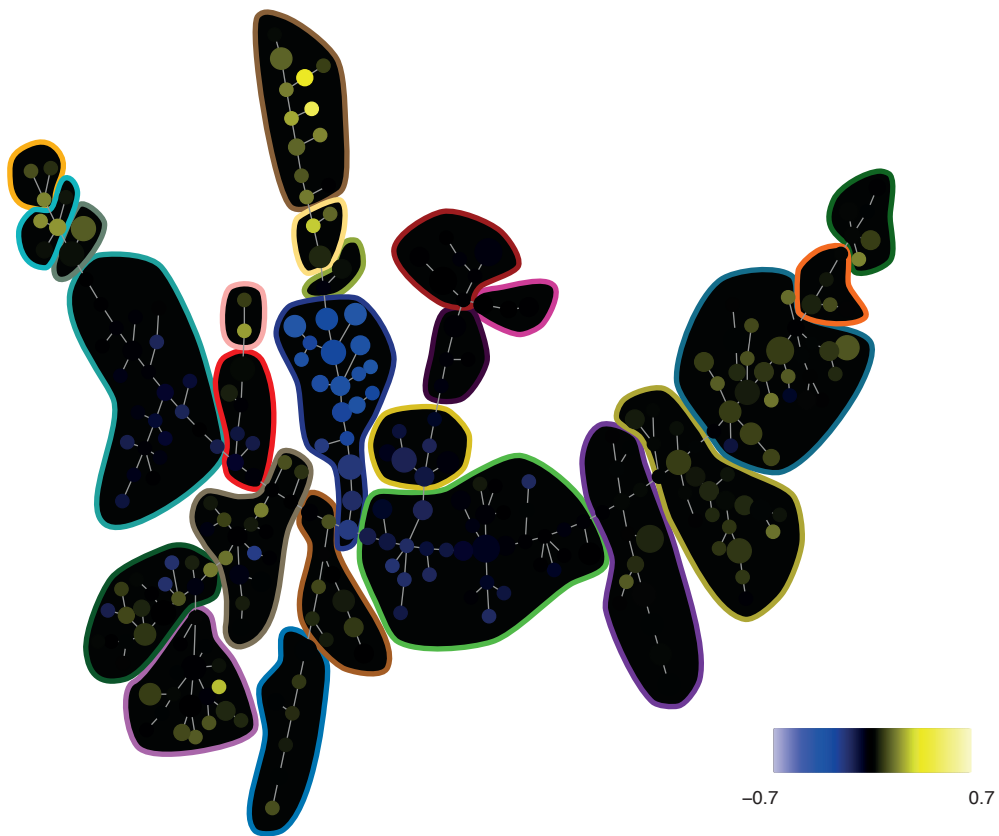


Figure S9B

156-pZAP70/Syk ---- Dasatinib+PVO4 vs Ref Ratio

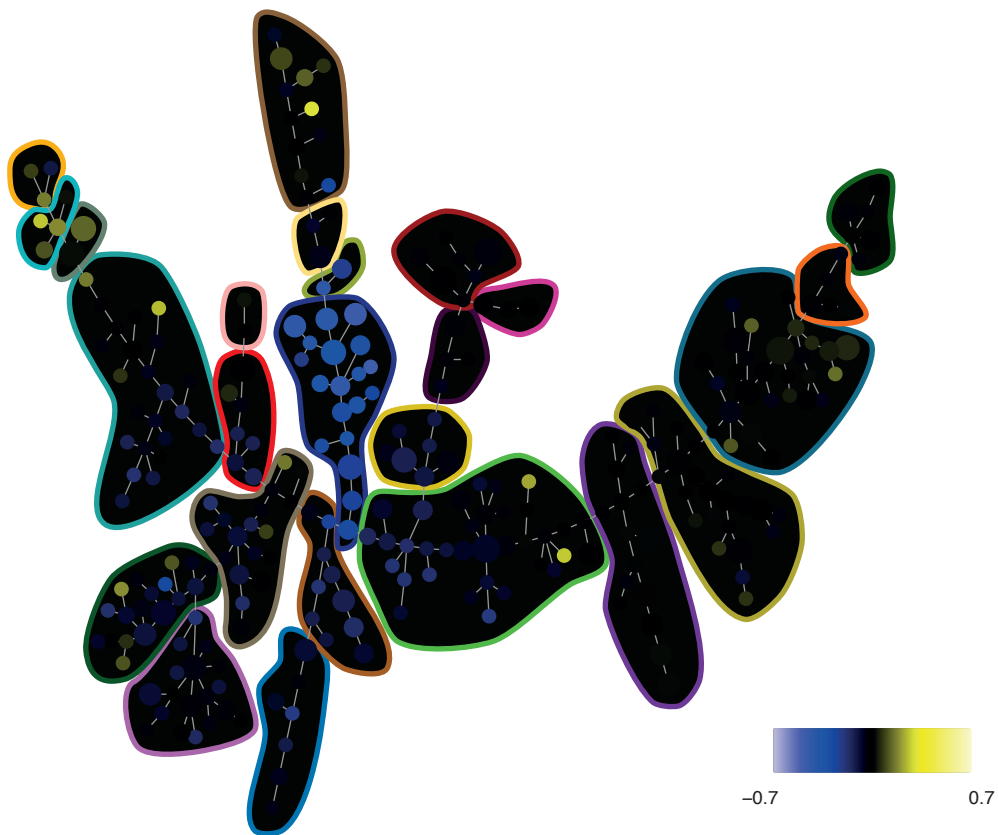


Figure S9B

156-pZAP70/Syk --- Dasatinib+Unstim vs Ref Ratio

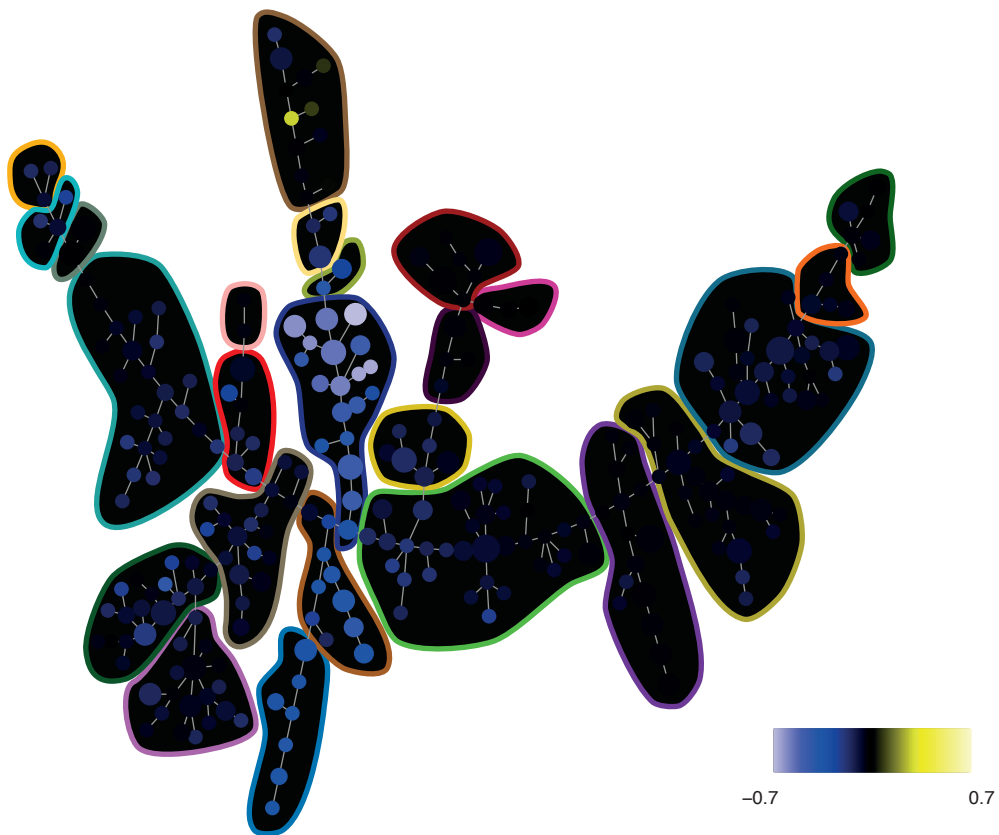


Figure S9B

159-pSTAT3 ---- Dasatinib+BCR vs Ref Ratio

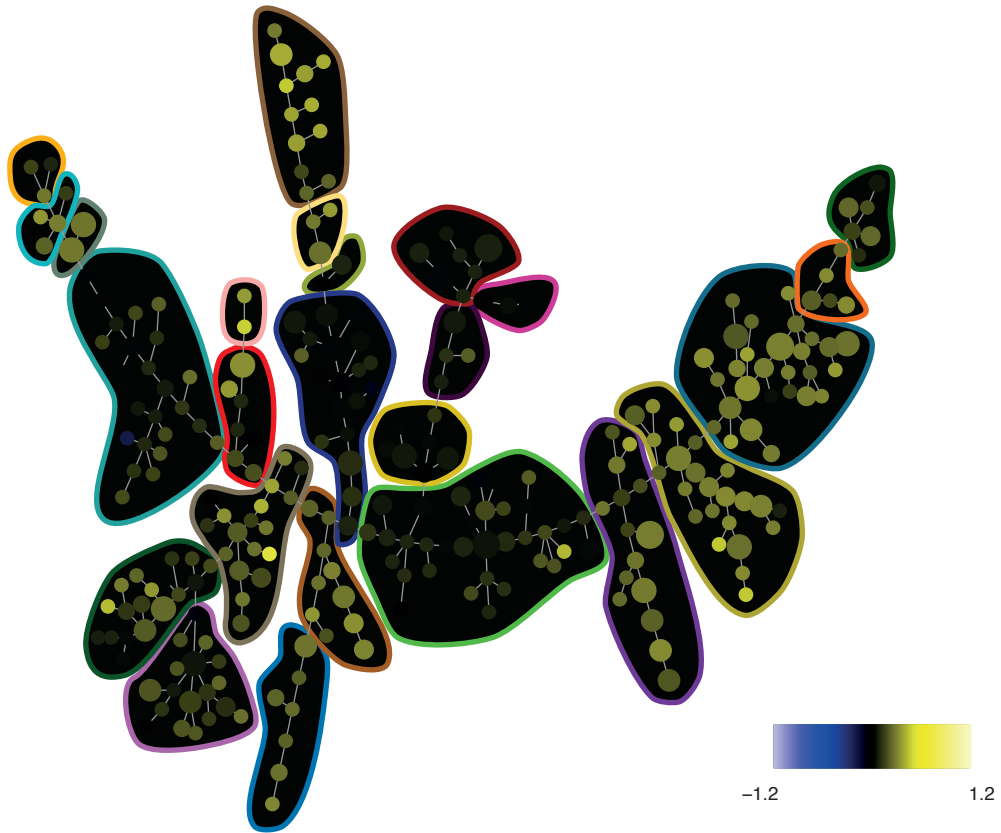


Figure S9B

159-pSTAT3 ---- Dasatinib+Flt3L vs Ref Ratio

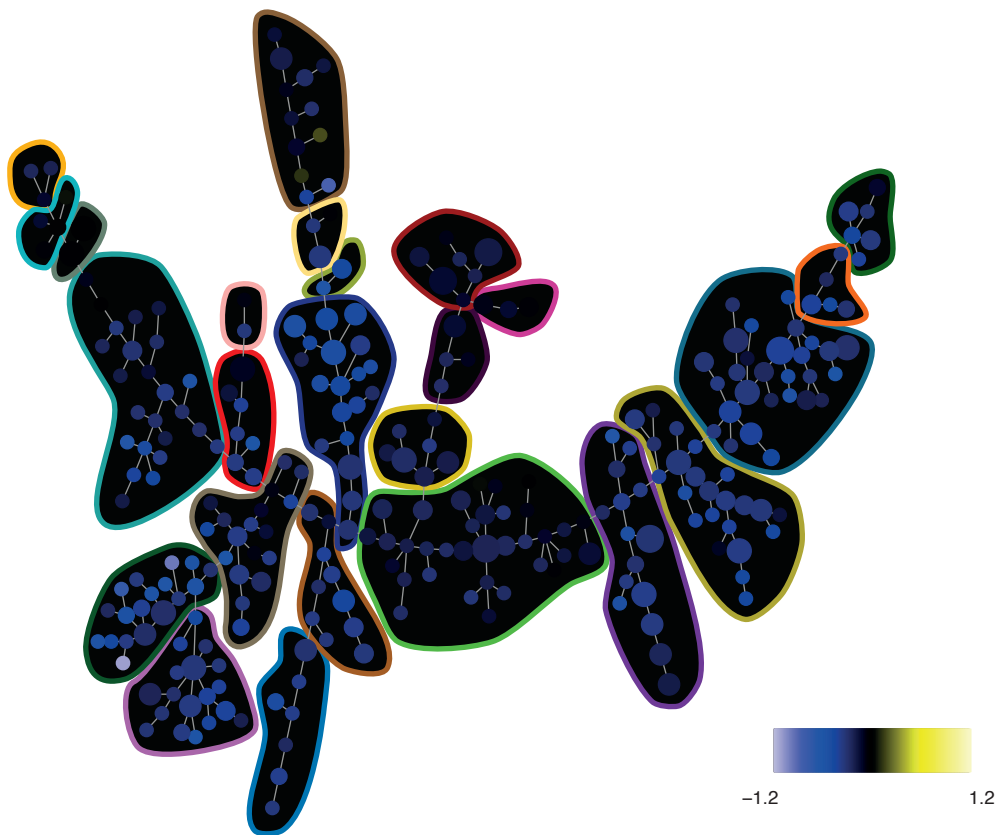


Figure S9B

159-pSTAT3 ---- Dasatinib+IL7 vs Ref Ratio

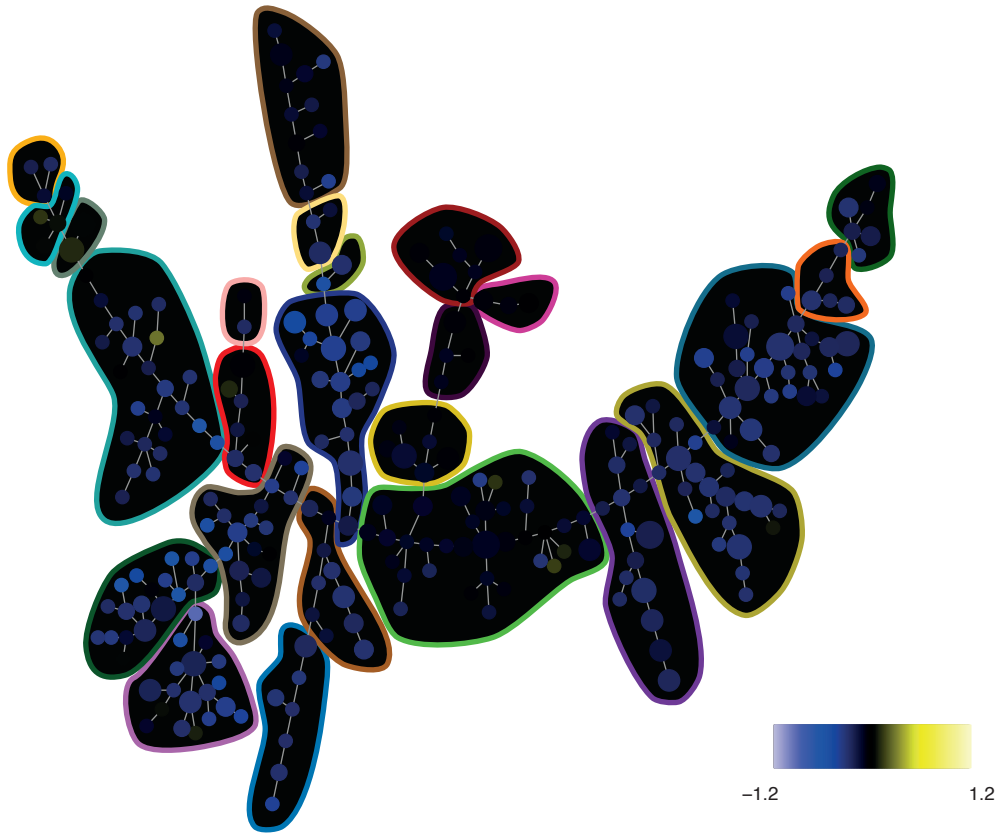


Figure S9B

159-pSTAT3 --- Dasatinib+PMAiono vs Ref Ratio

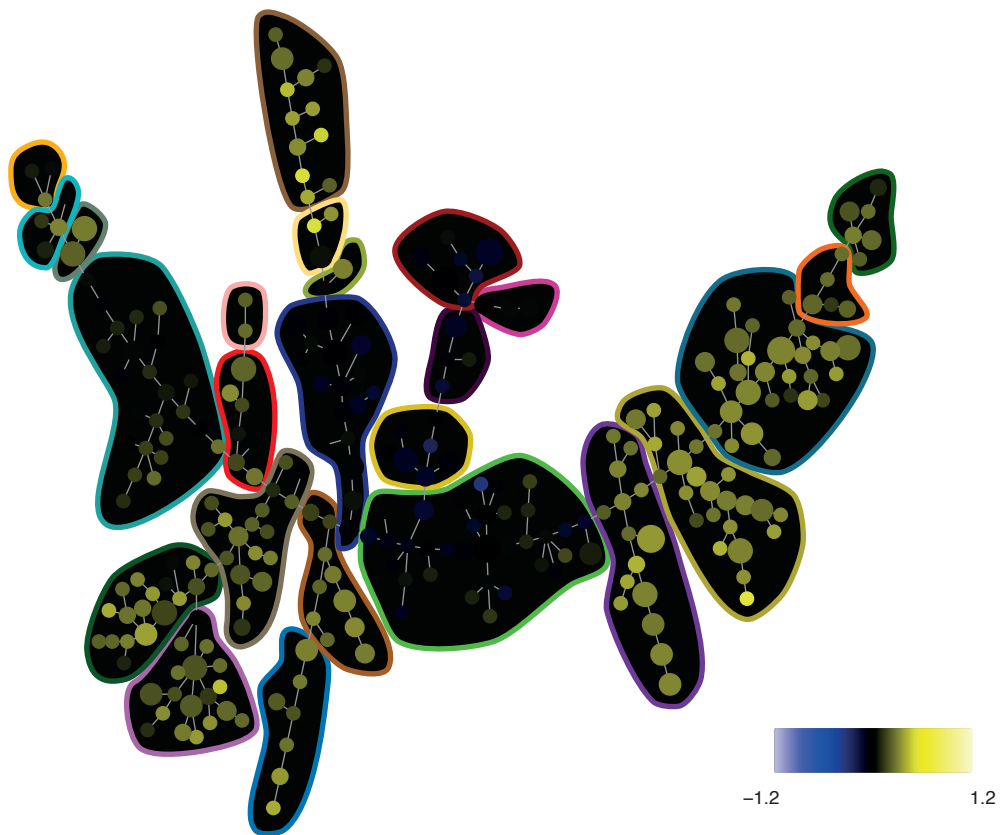


Figure S9B

159-pSTAT3 ---- Dasatinib+PVO4 vs Ref Ratio

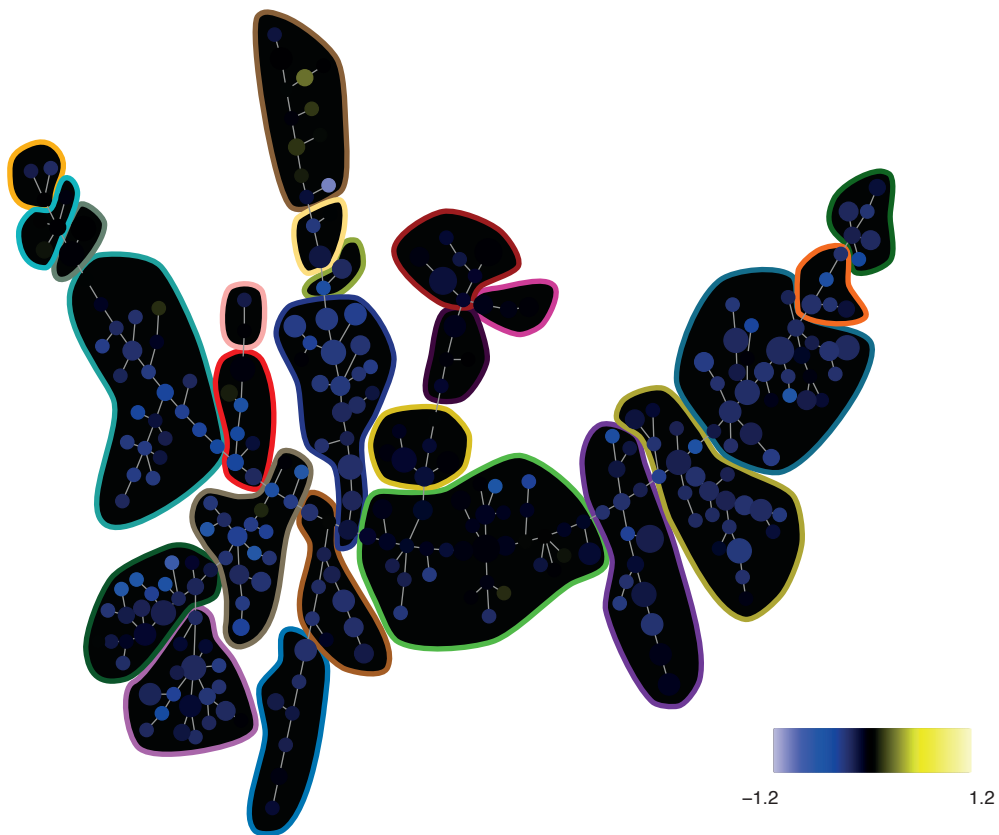


Figure S9B

159-pSTAT3 ---- Dasatinib+Unstim vs Ref Ratio

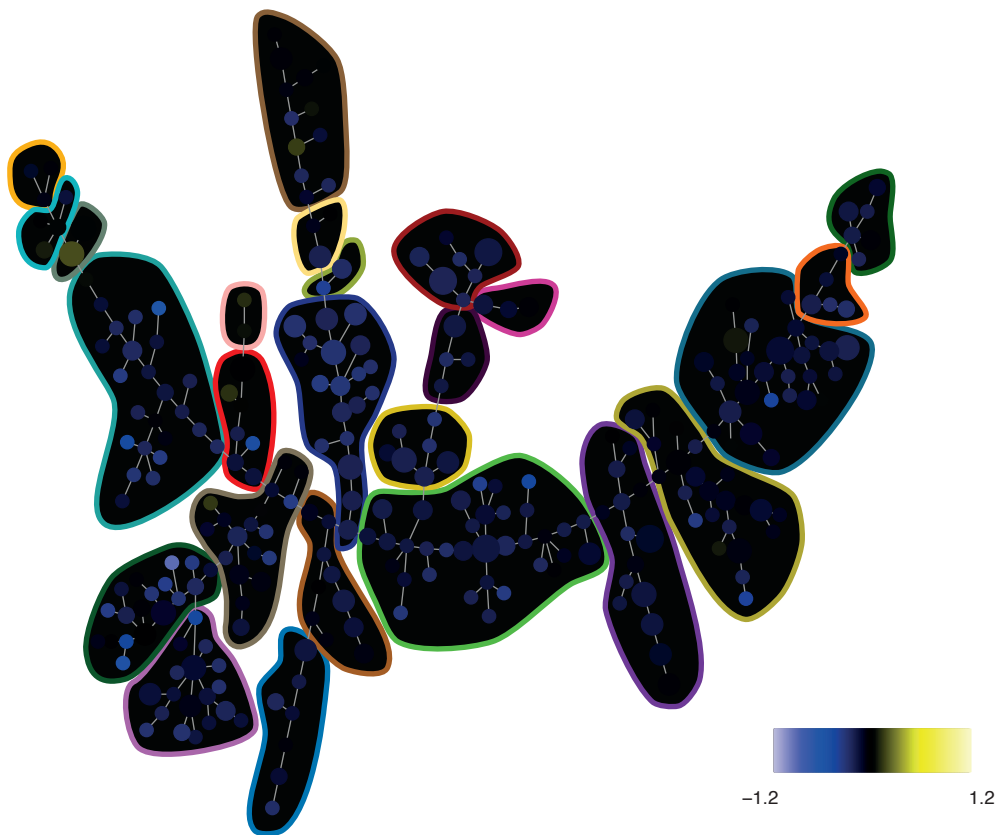


Figure S9B

164-pSLP-76 ---- Dasatinib+BCR vs Ref Ratio

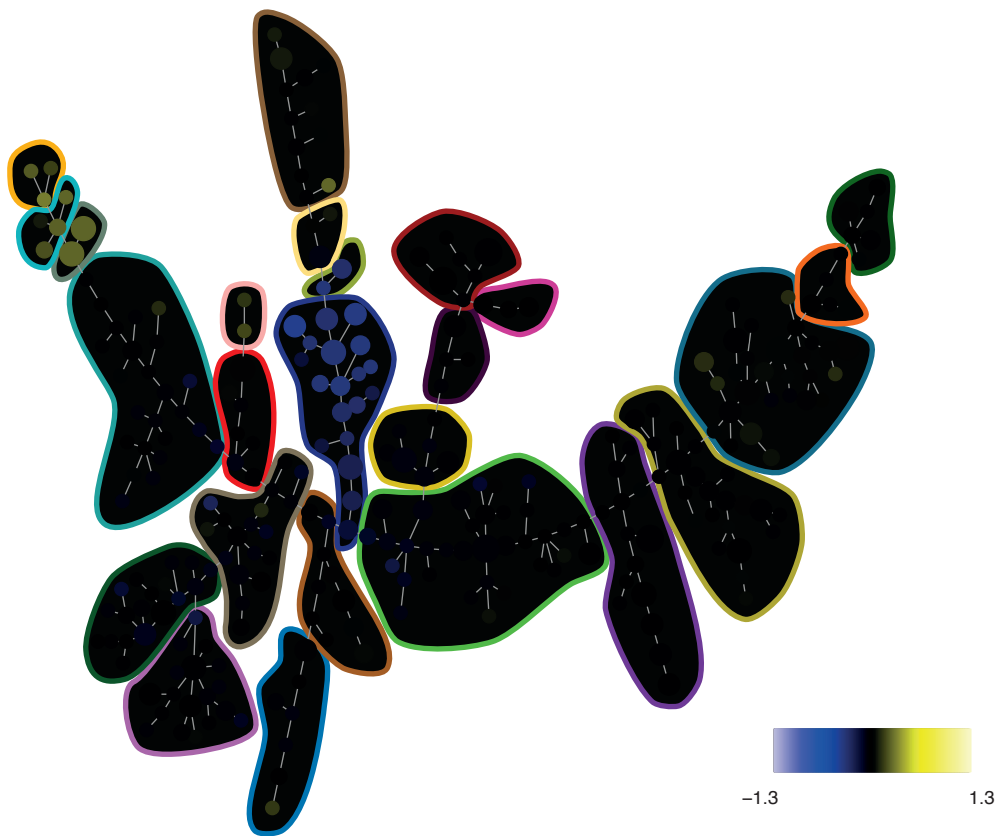


Figure S9B

164-pSLP-76 ---- Dasatinib+Flt3L vs Ref Ratio

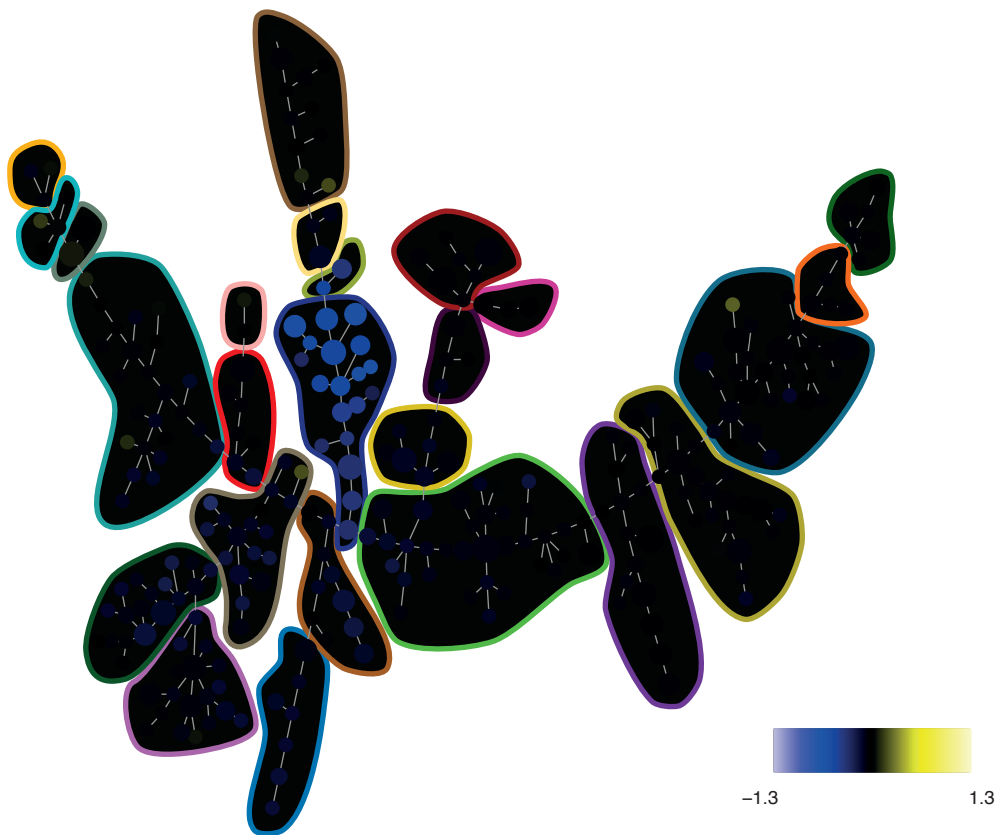


Figure S9B

164-pSLP-76 ---- Dasatinib+IL7 vs Ref Ratio

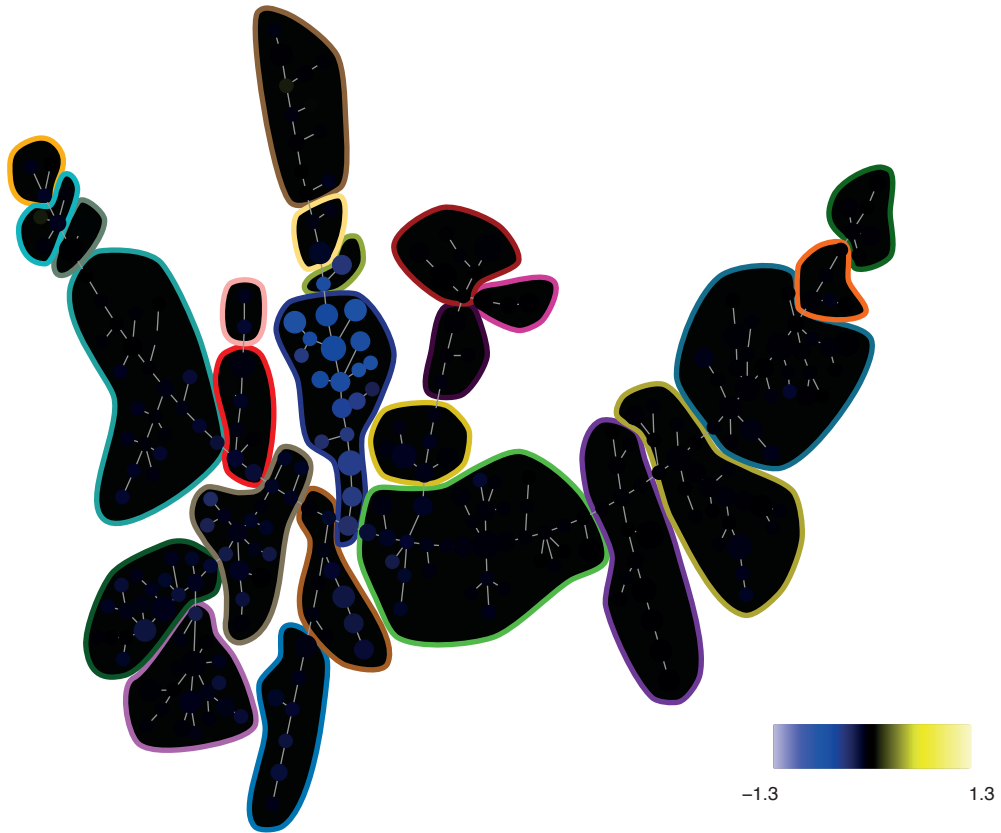


Figure S9B

164-pSLP-76 --- Dasatinib+PMAiono vs Ref Ratio

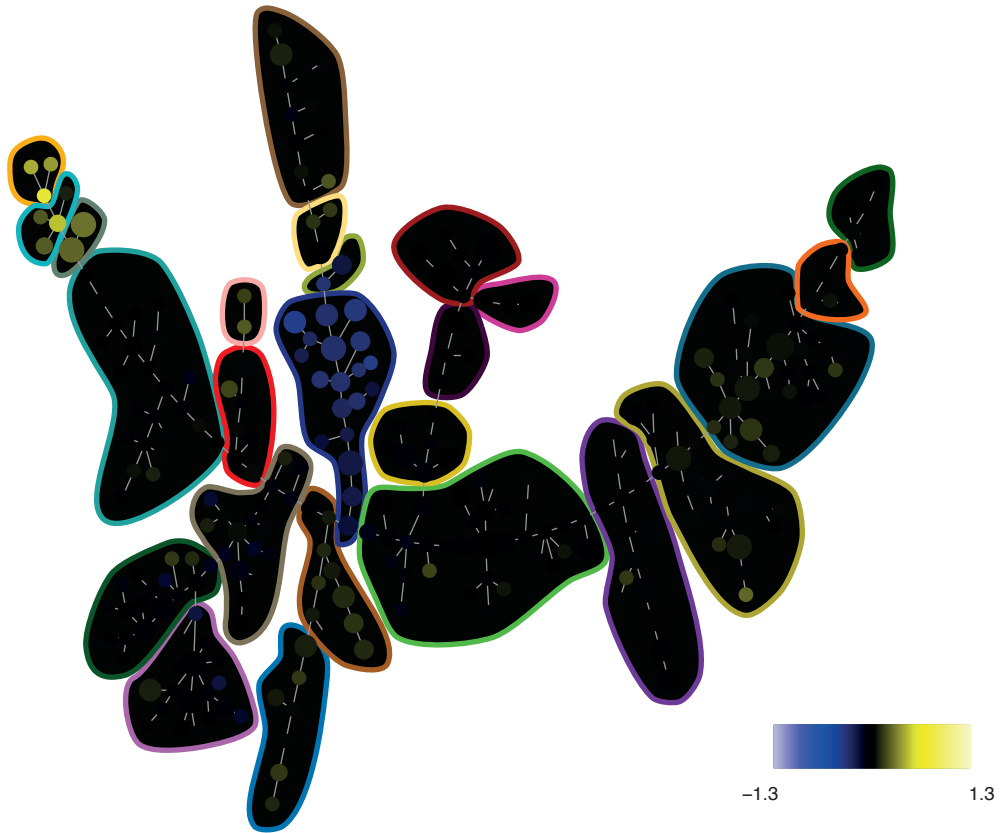


Figure S9B

164-pSLP-76 ---- Dasatinib+PVO4 vs Ref Ratio

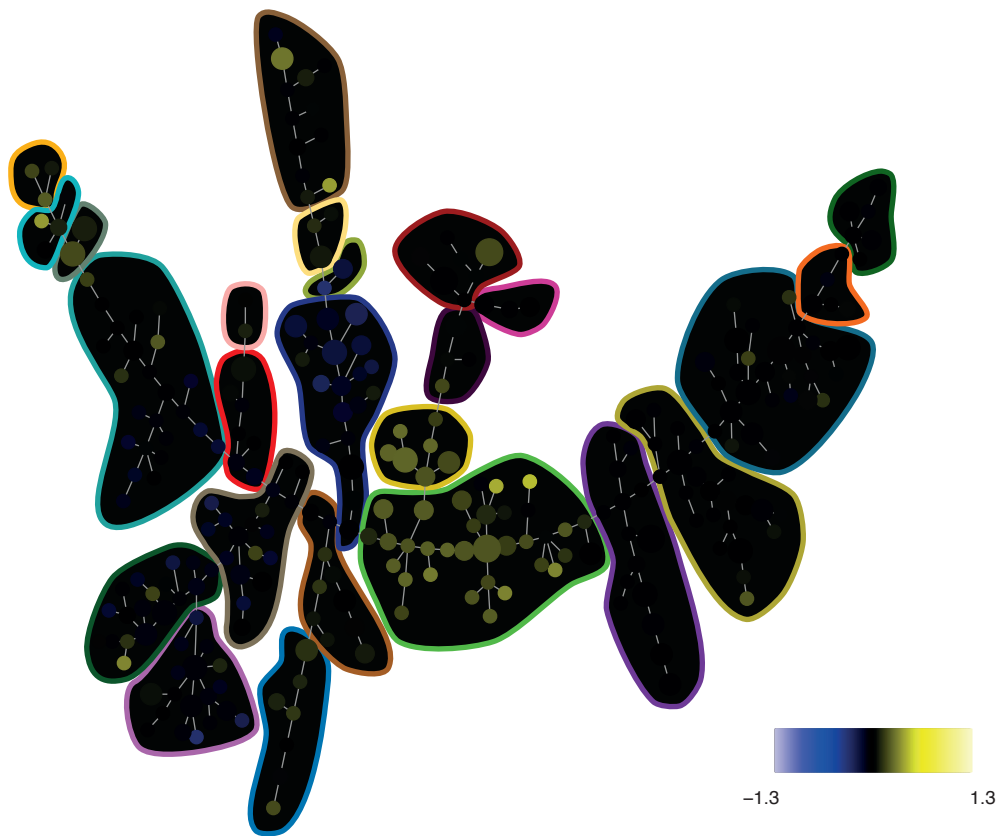


Figure S9B

164-pSLP-76 --- Dasatinib+Unstim vs Ref Ratio

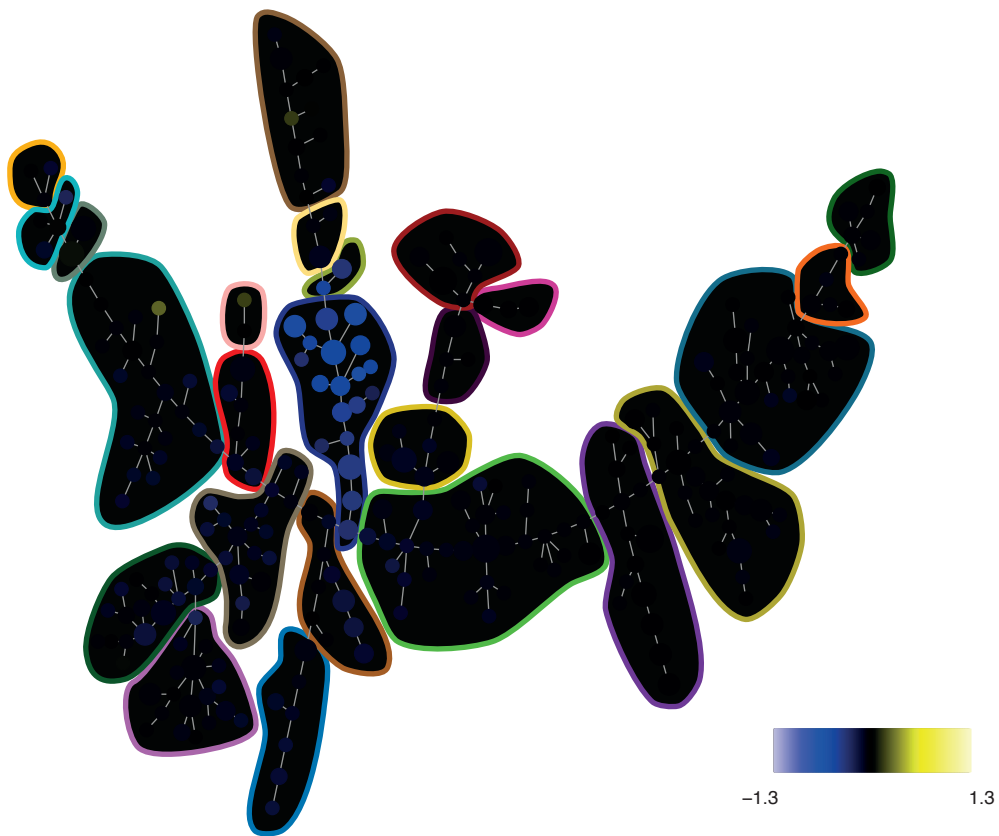


Figure S9B

165-pNFkB --- Dasatinib+BCR vs Ref Ratio

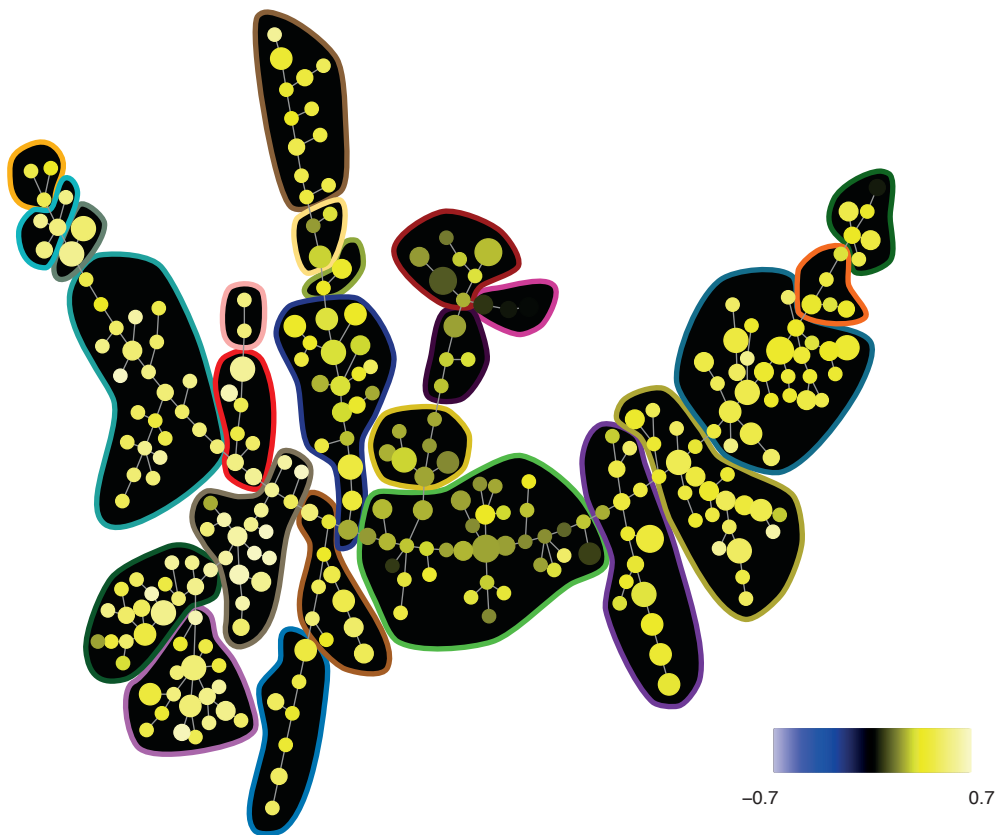


Figure S9B

165-pNFkB ---- Dasatinib+Flt3L vs Ref Ratio

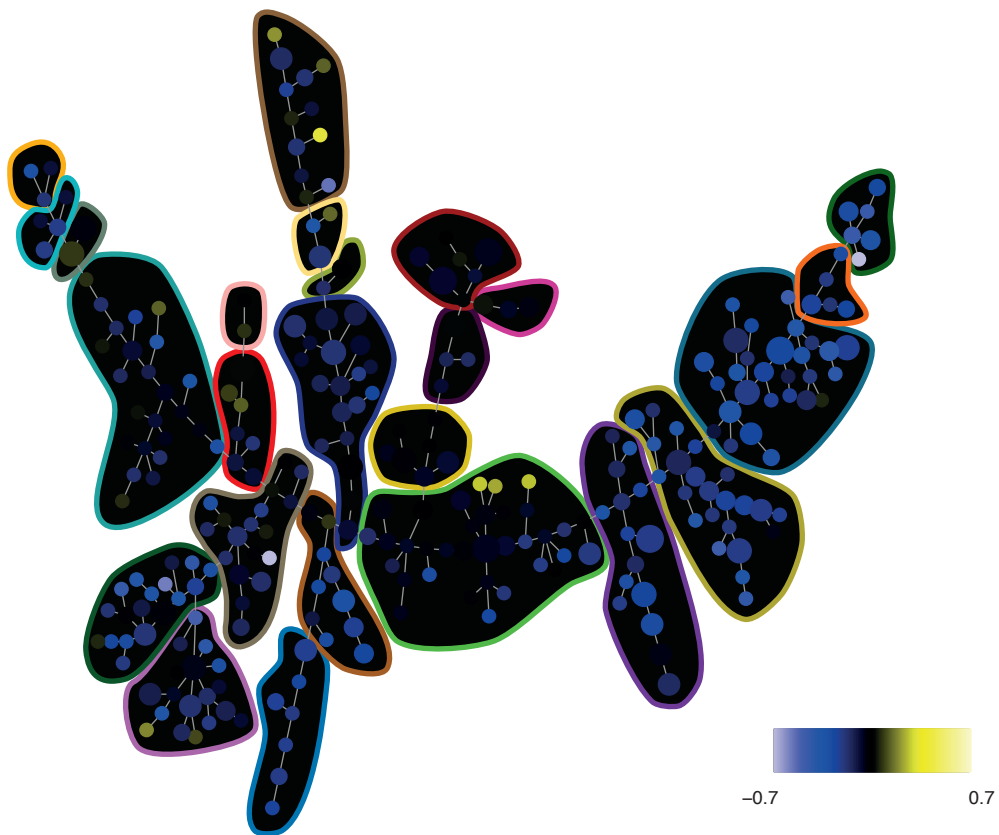


Figure S9B

165-pNFkB ---- Dasatinib+IL7 vs Ref Ratio

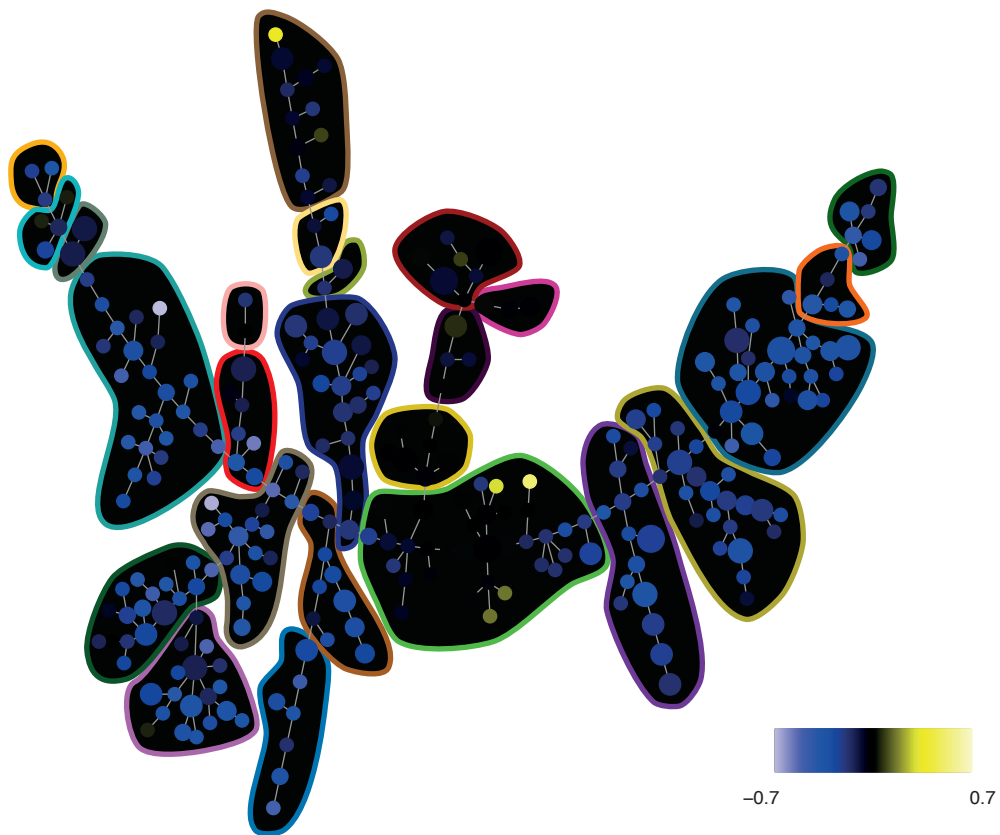


Figure S9B

165-pNFkB ---- Dasatinib+PMAiono vs Ref Ratio

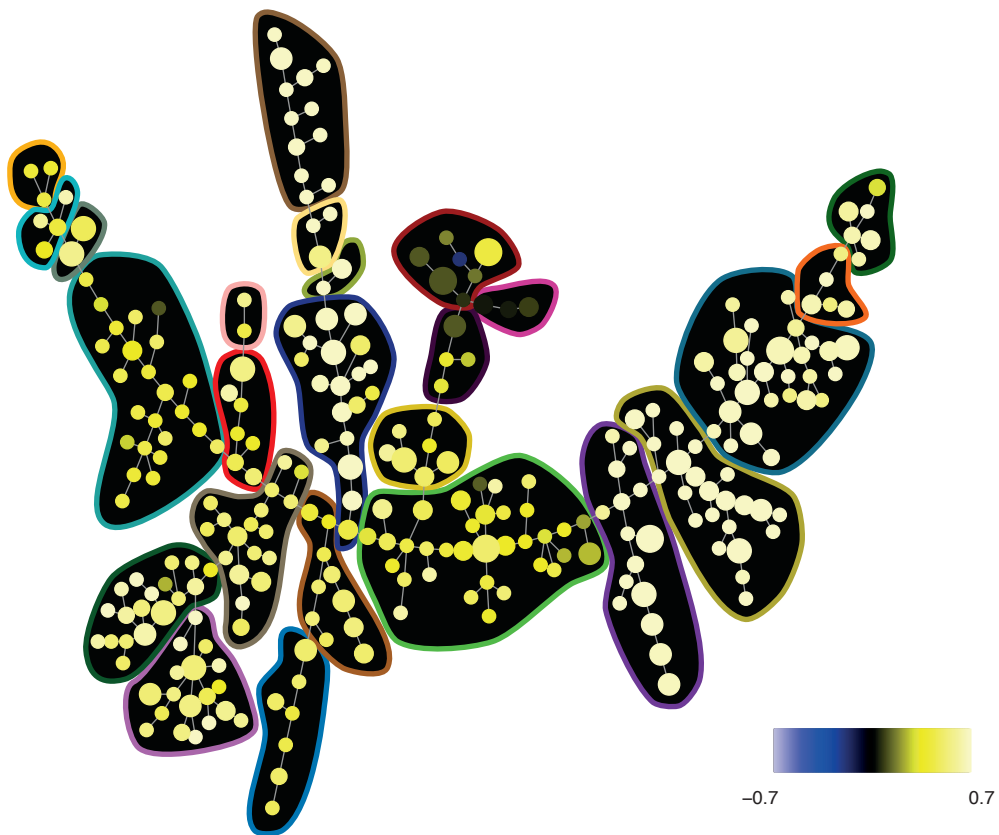


Figure S9B

165-pNFkB ---- Dasatinib+PVO4 vs Ref Ratio

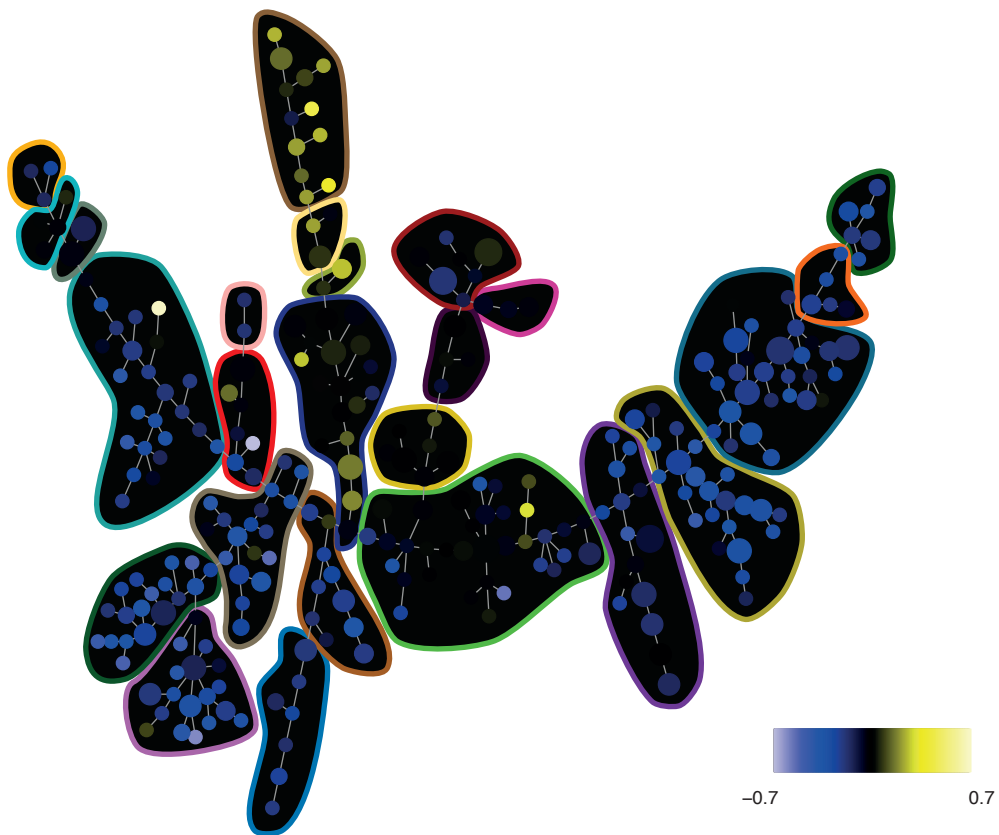


Figure S9B

165-pNFkB --- Dasatinib+Unstim vs Ref Ratio

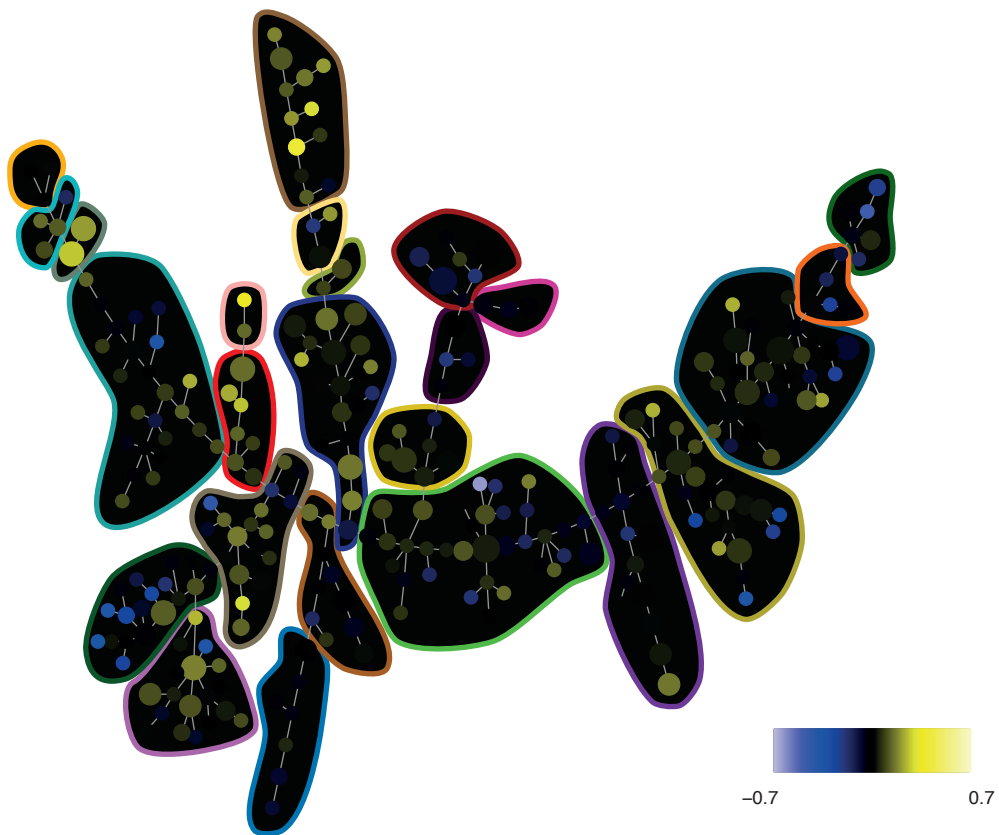


Figure S9B

166-IkBalpa ---- Dasatinib+BCR vs Ref Ratio

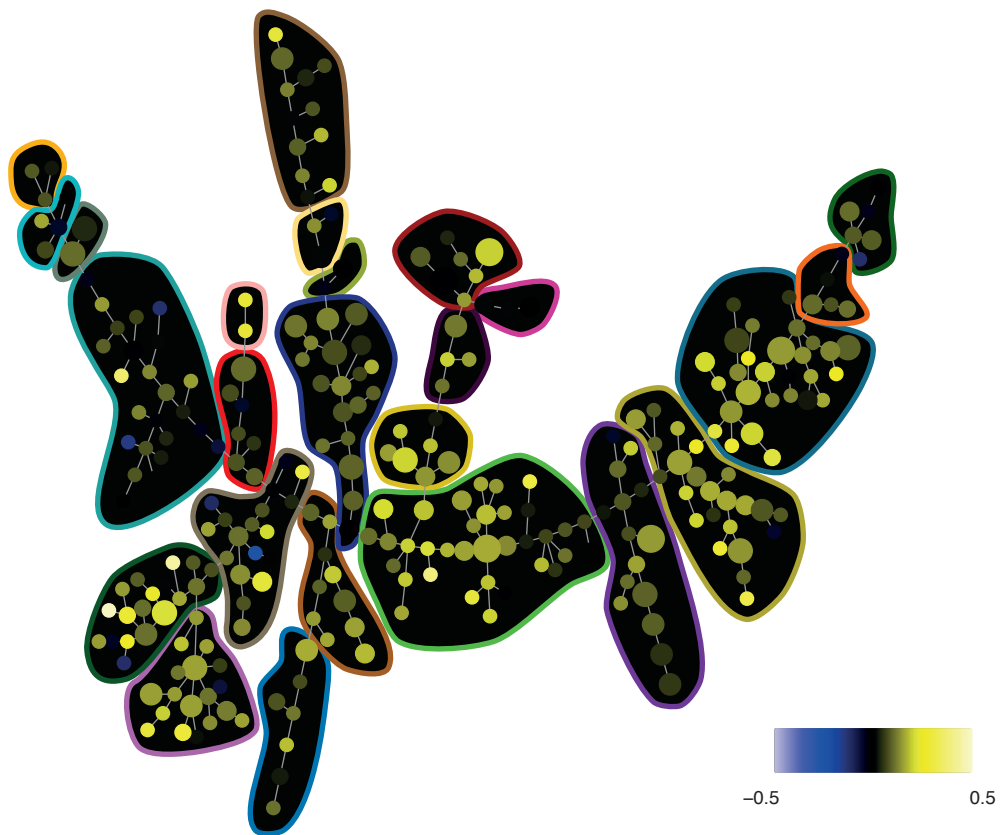


Figure S9B

166-1kBaIpha ---- Dasatinib+Flt3L vs Ref Ratio

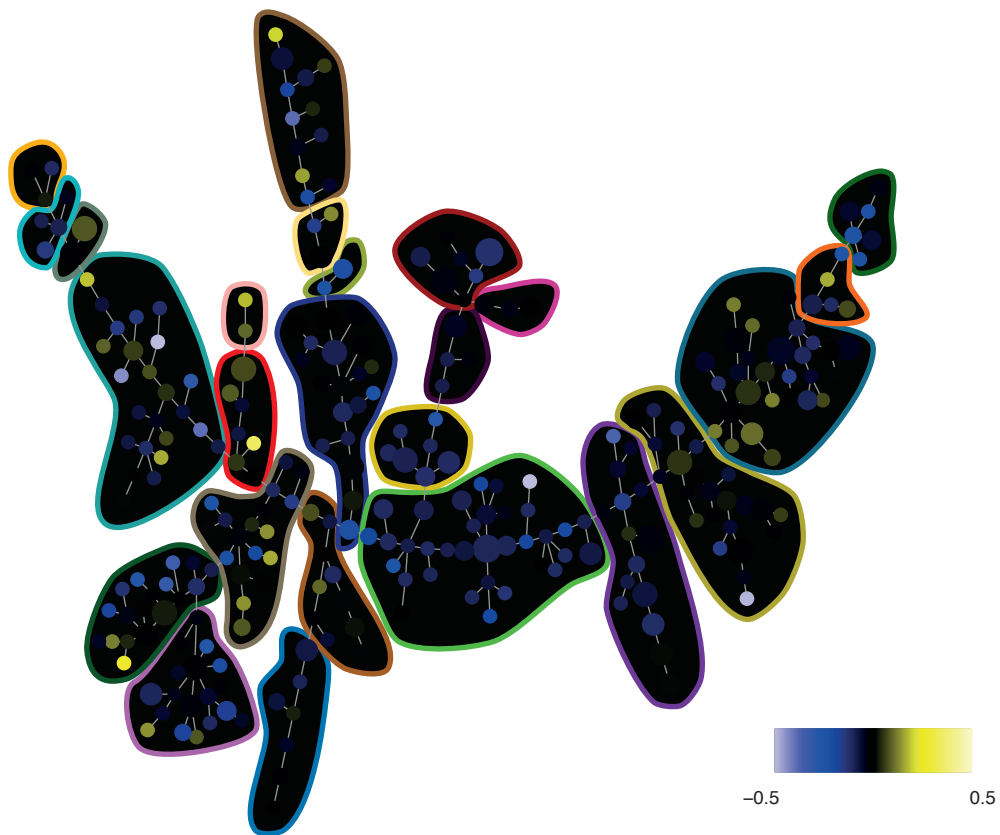


Figure S9B

166-IkBalpha --- Dasatinib+IL7 vs Ref Ratio

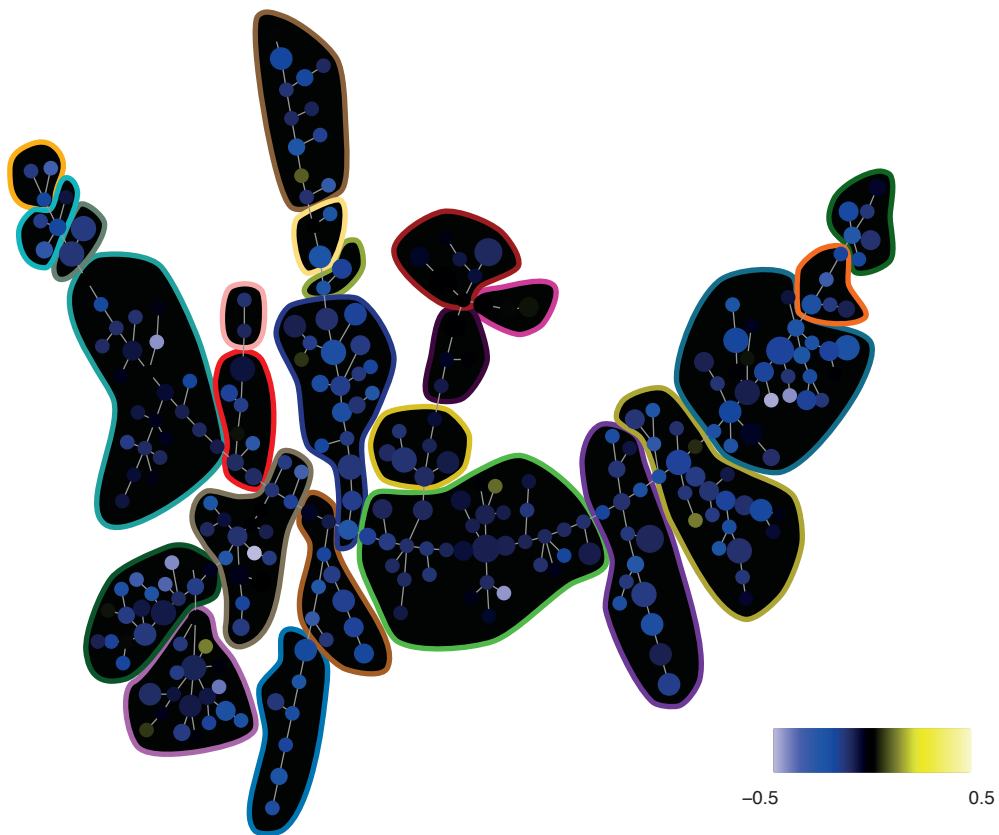


Figure S9B

166-IkBalpha --- Dasatinib+PMAiono vs Ref Ratio

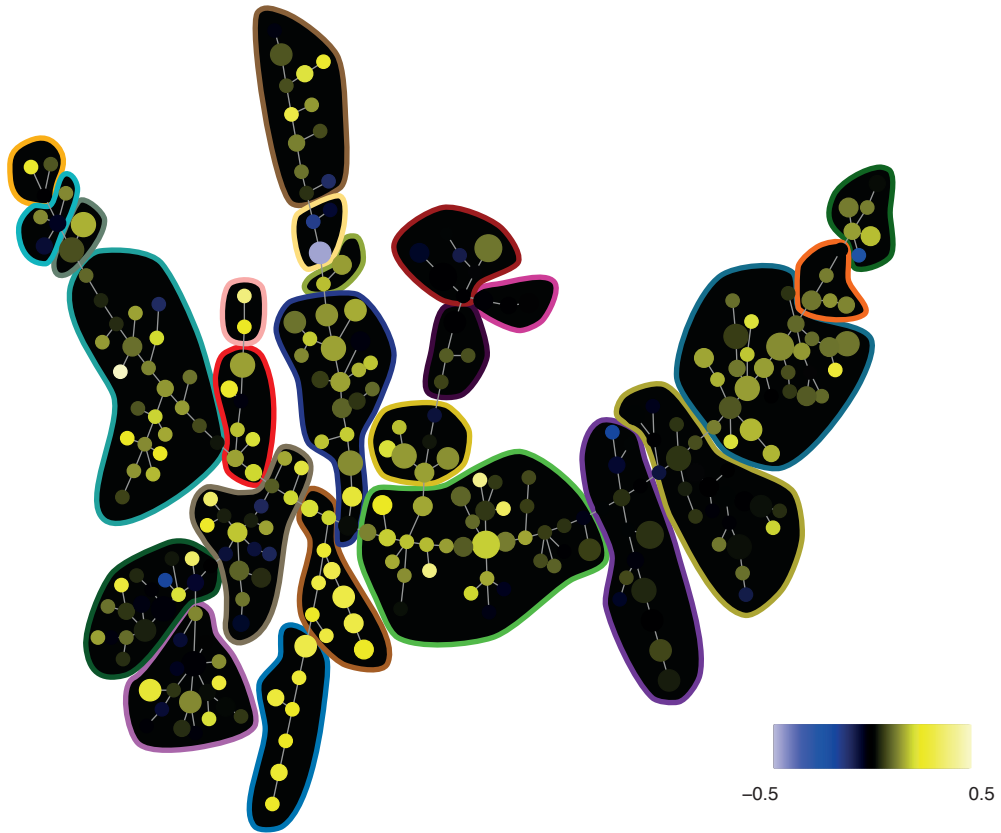


Figure S9B

166-IkBalpa ---- Dasatinib+PVO4 vs Ref Ratio

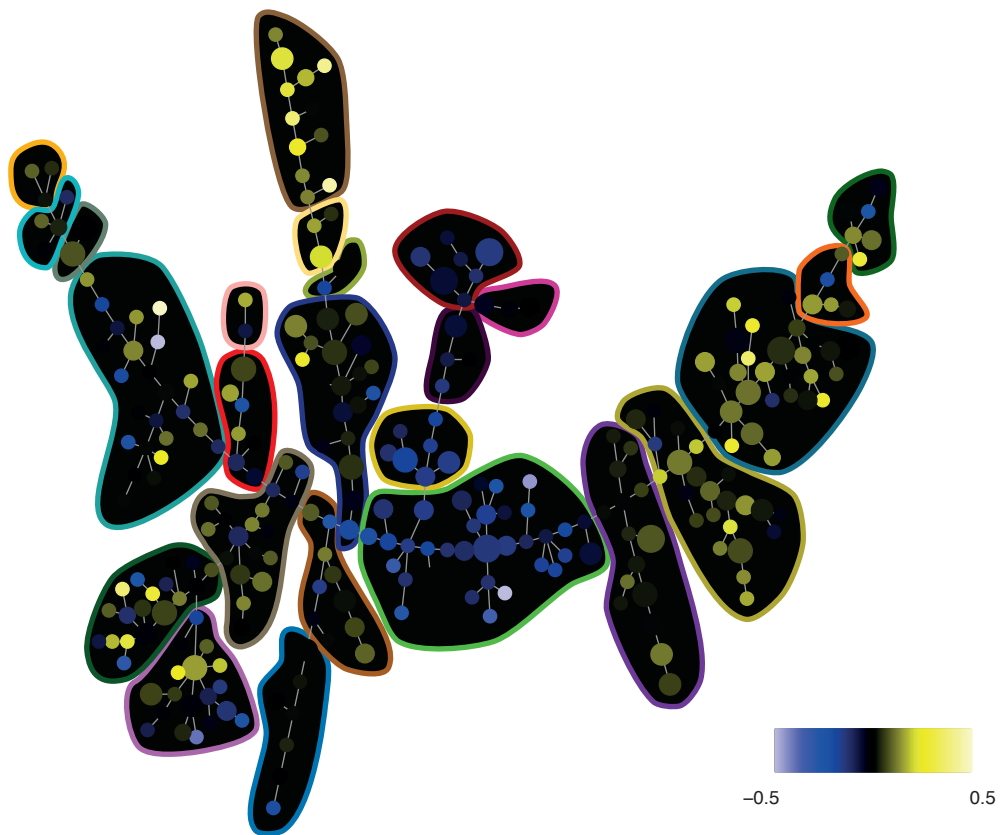


Figure S9B

166-IkBalpa ---- Dasatinib+Unstim vs Ref Ratio

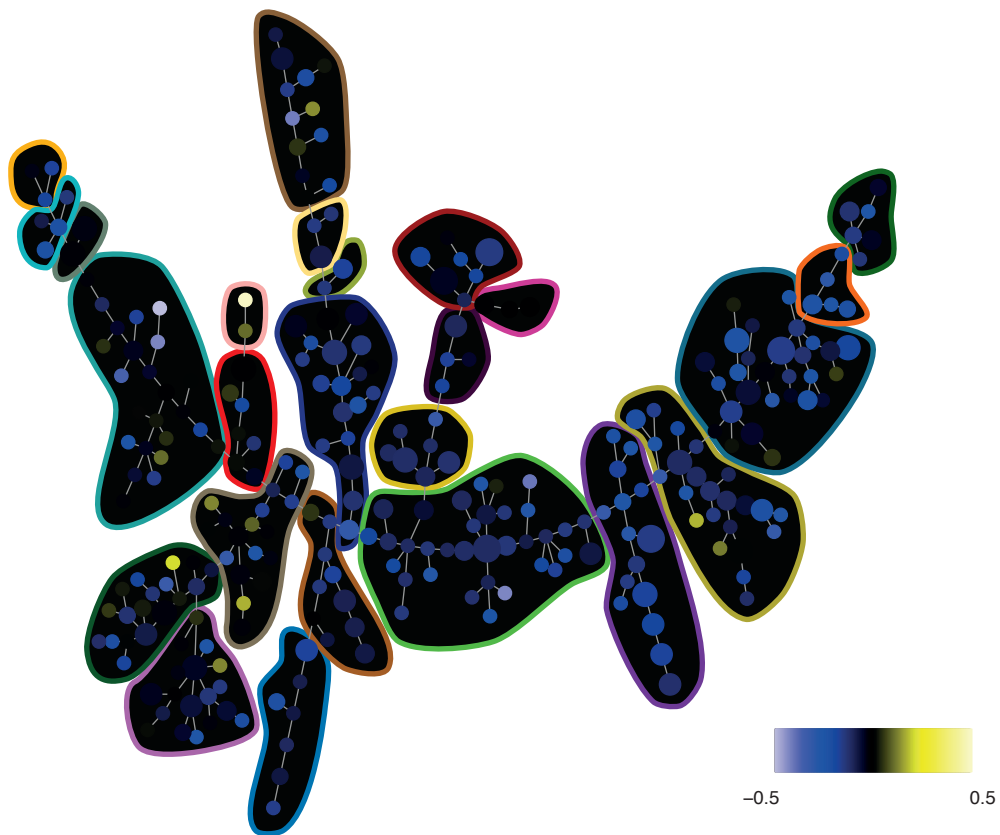


Figure S9B

168-pH3 --- Dasatinib+BCR vs Ref Ratio

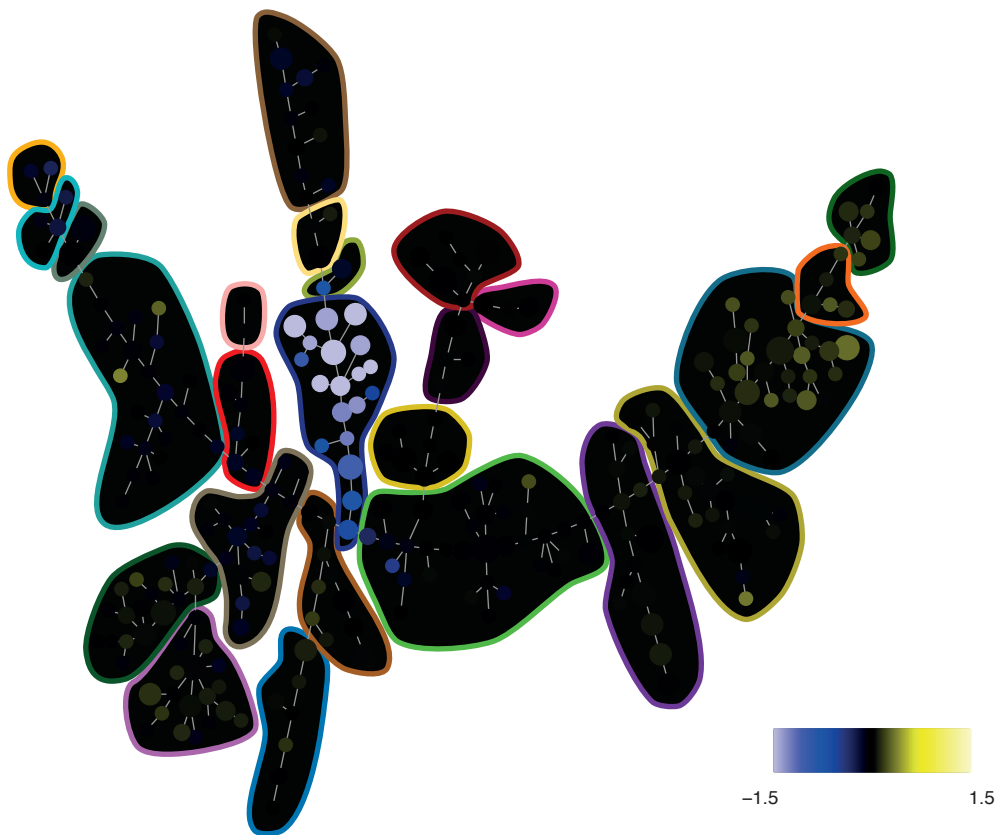


Figure S9B

168-pH3 ---- Dasatinib+Flt3L vs Ref Ratio

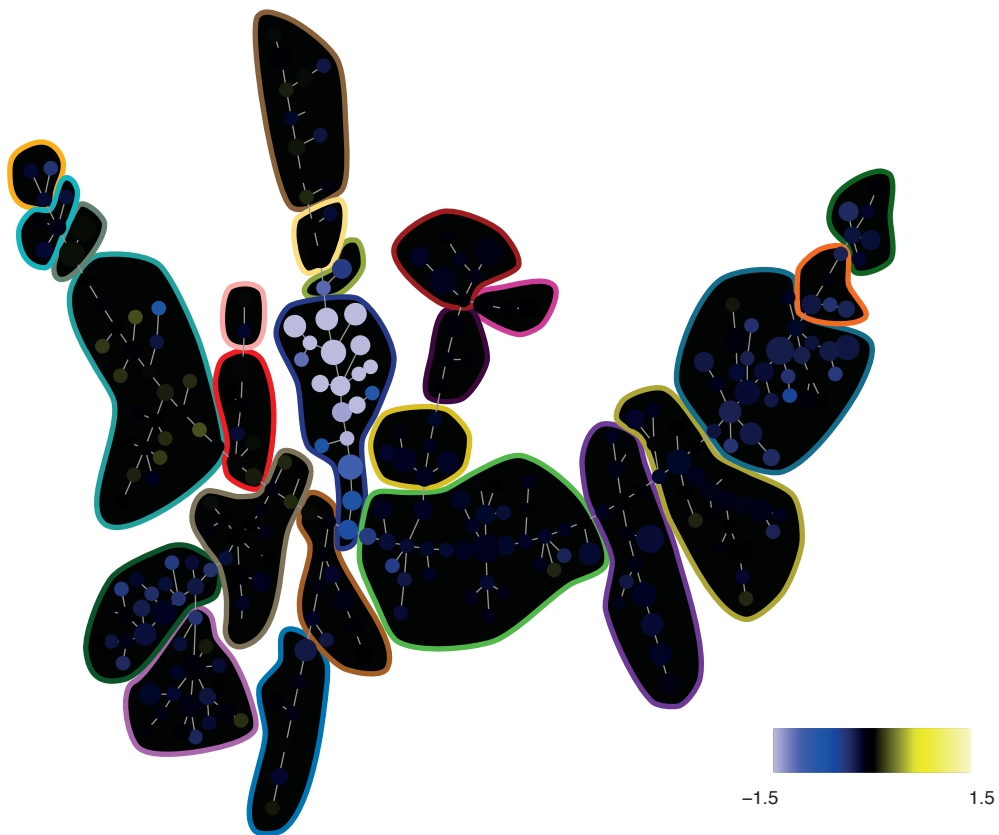


Figure S9B

168-pH3 --- Dasatinib+IL7 vs Ref Ratio

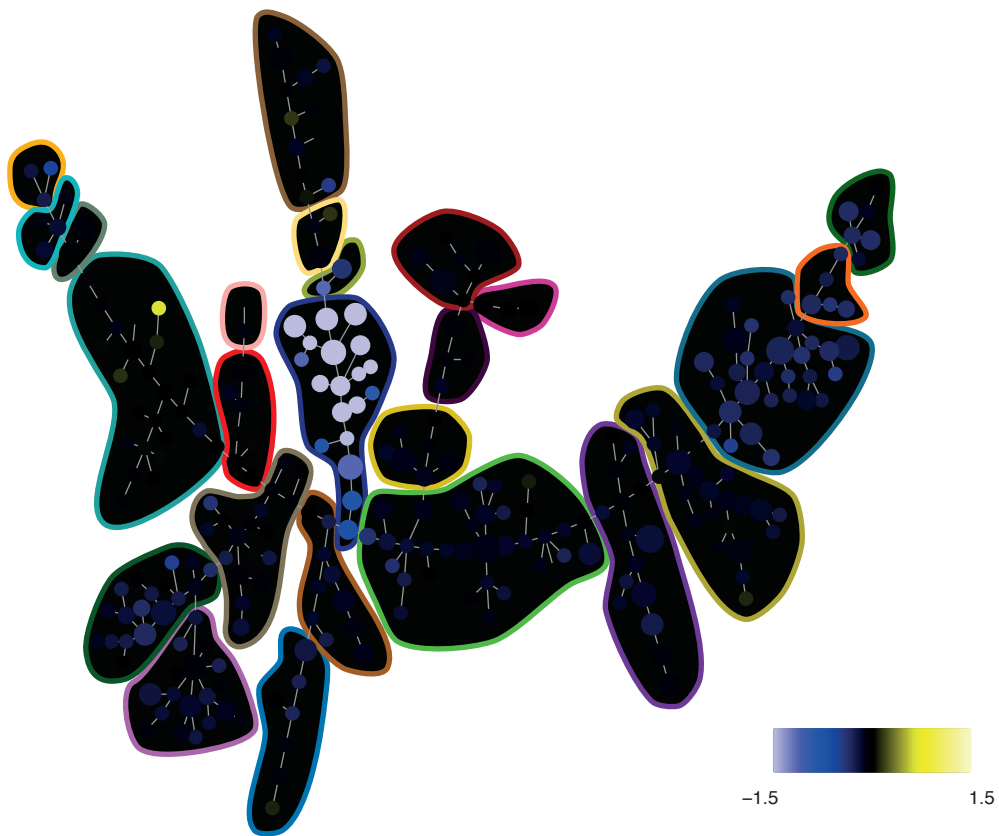


Figure S9B

168-pH3 --- Dasatinib+PMAiono vs Ref Ratio



Figure S9B

168-pH3 ---- Dasatinib+PVO4 vs Ref Ratio

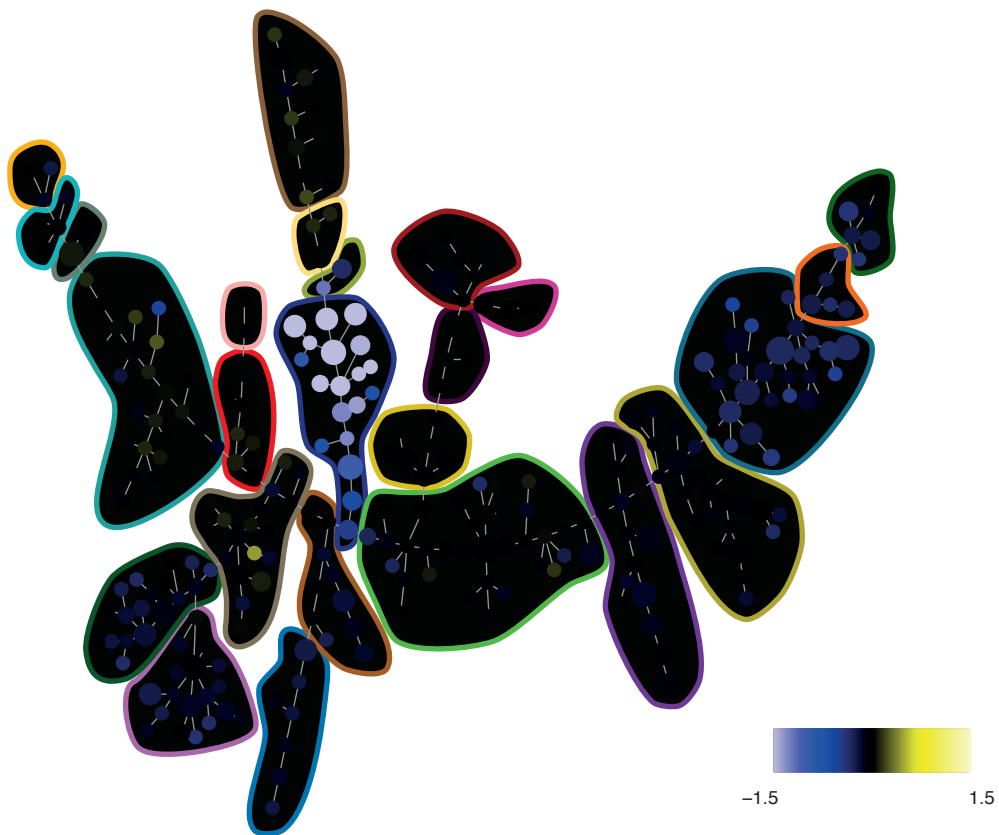


Figure S9B

168-pH3 --- Dasatinib+Unstim vs Ref Ratio

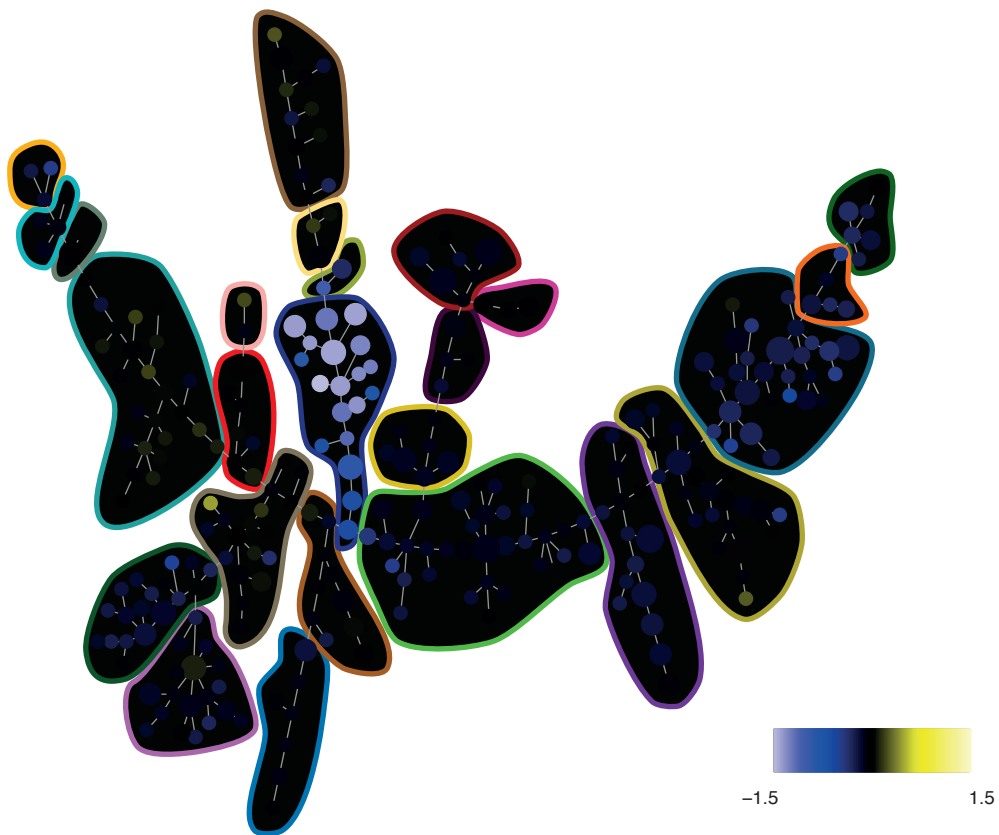


Figure S9B

169-pP38 ---- Dasatinib+BCR vs Ref Ratio

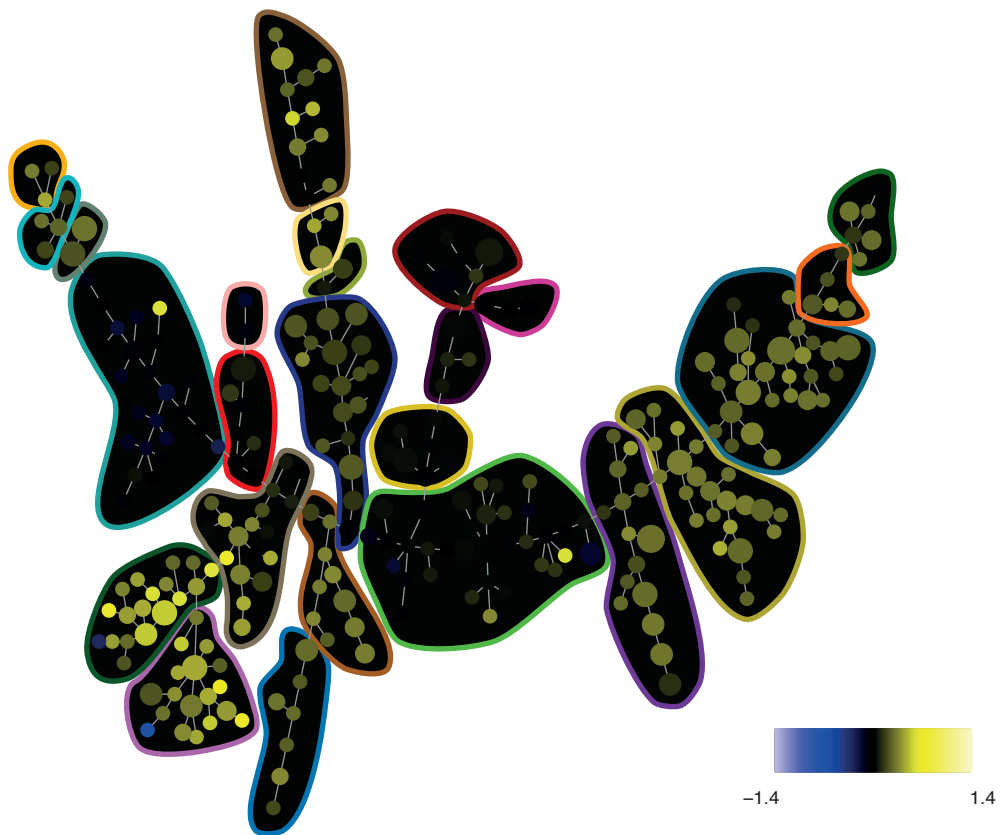


Figure S9B

169-pP38 --- Dasatinib+Fit3L vs Ref Ratio

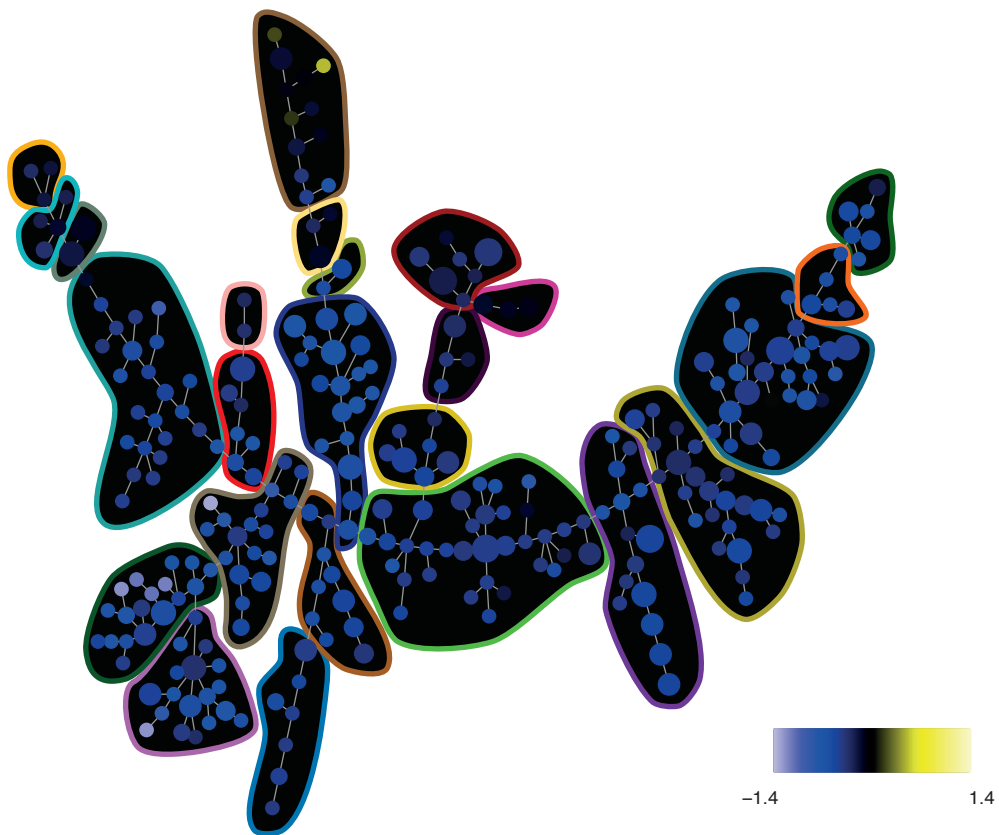


Figure S9B

169-pP38 --- Dasatinib+IL7 vs Ref Ratio

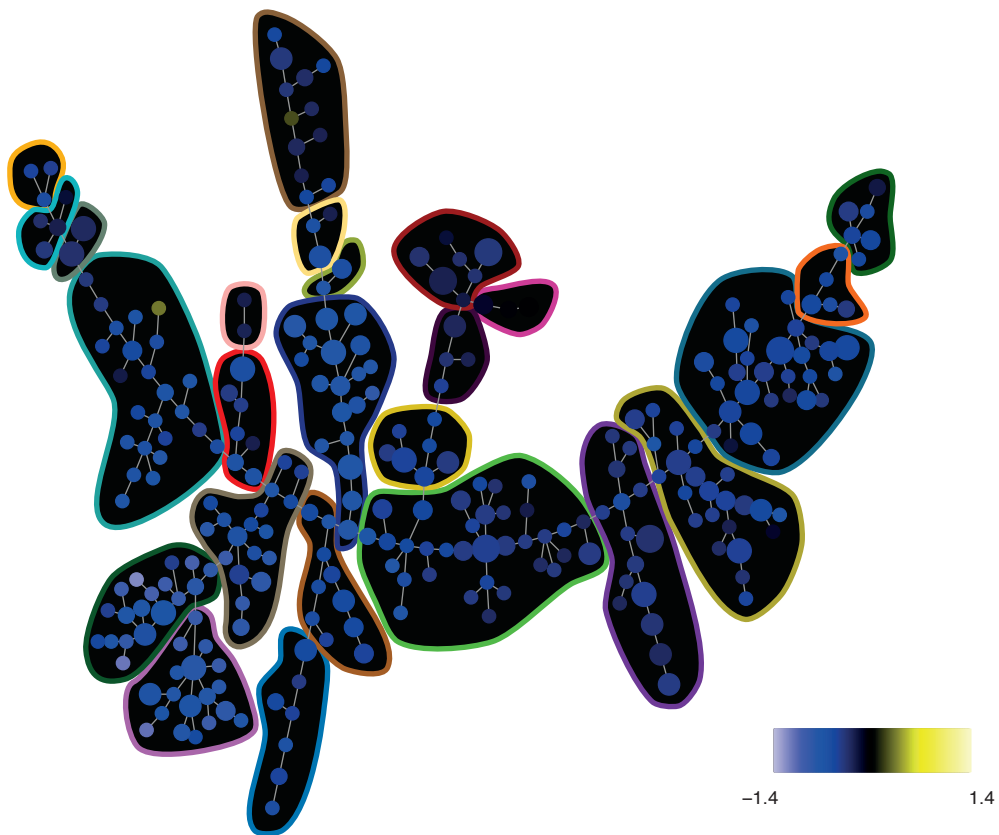


Figure S9B

169-pP38 — Dasatinib+PMAiono vs Ref Ratio



Figure S9B

169-pP38 ---- Dasatinib+PVO4 vs Ref Ratio



Figure S9B

169-pP38 --- Dasatinib+Unstim vs Ref Ratio

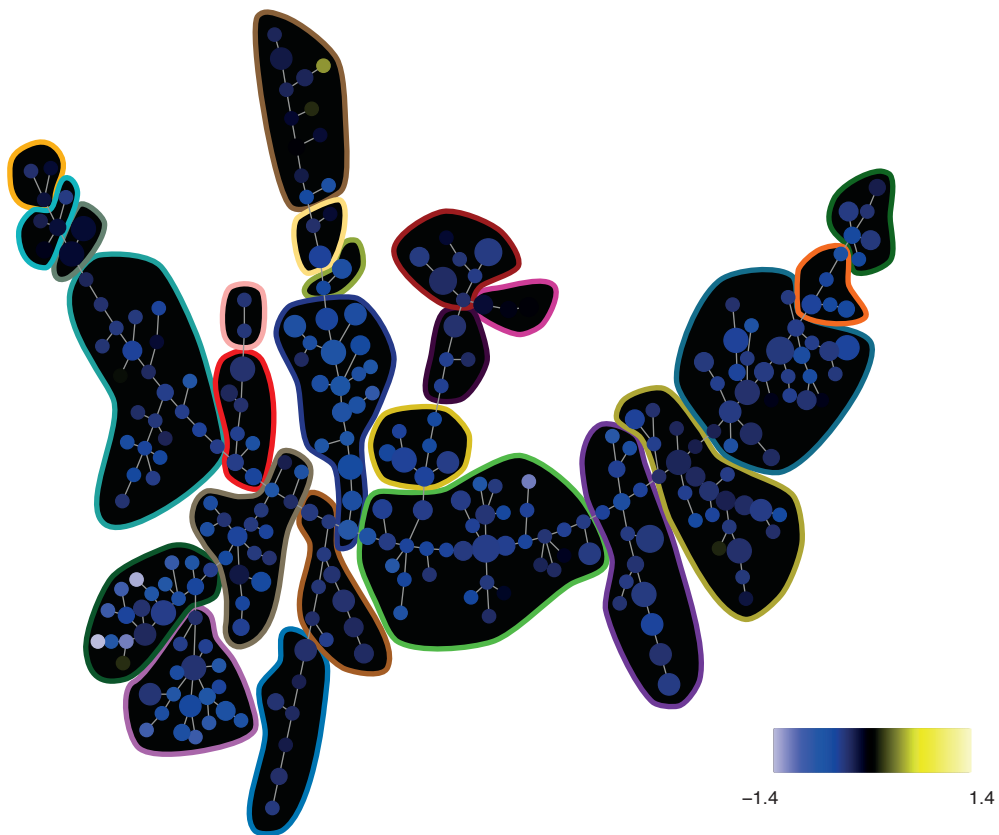


Figure S9B

171-pBtk/Itk --- Dasatinib+BCR vs Ref Ratio

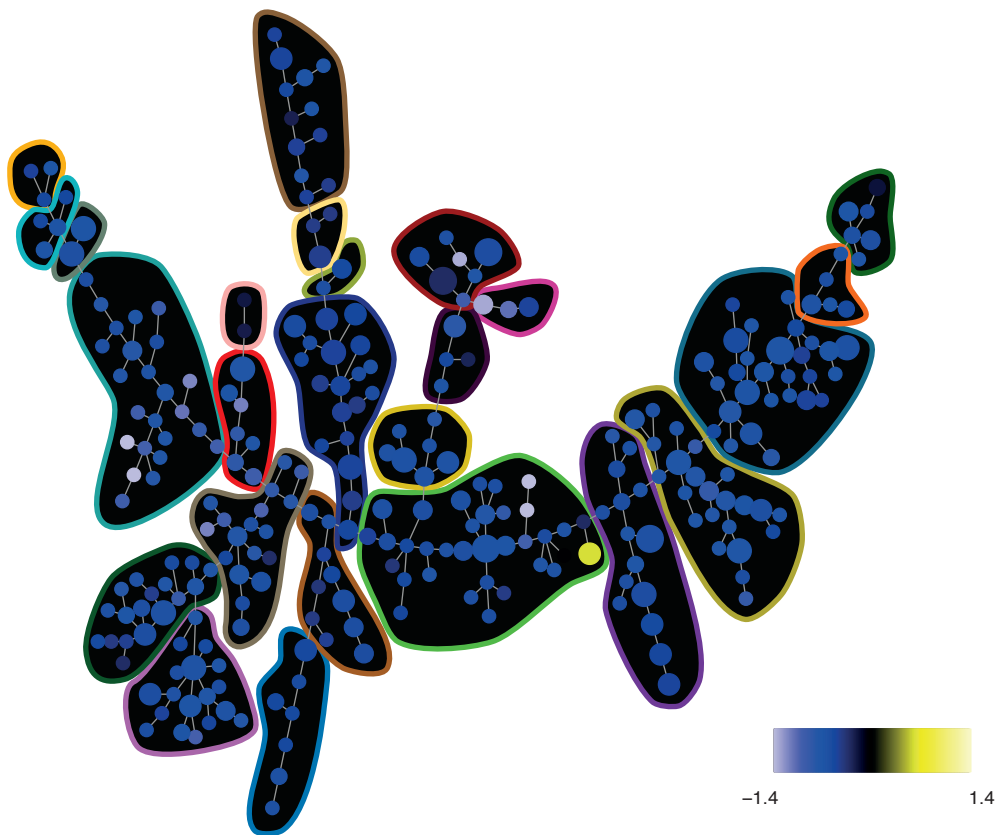


Figure S9B

171-pBtk/Itk --- Dasatinib+Flt3L vs Ref Ratio

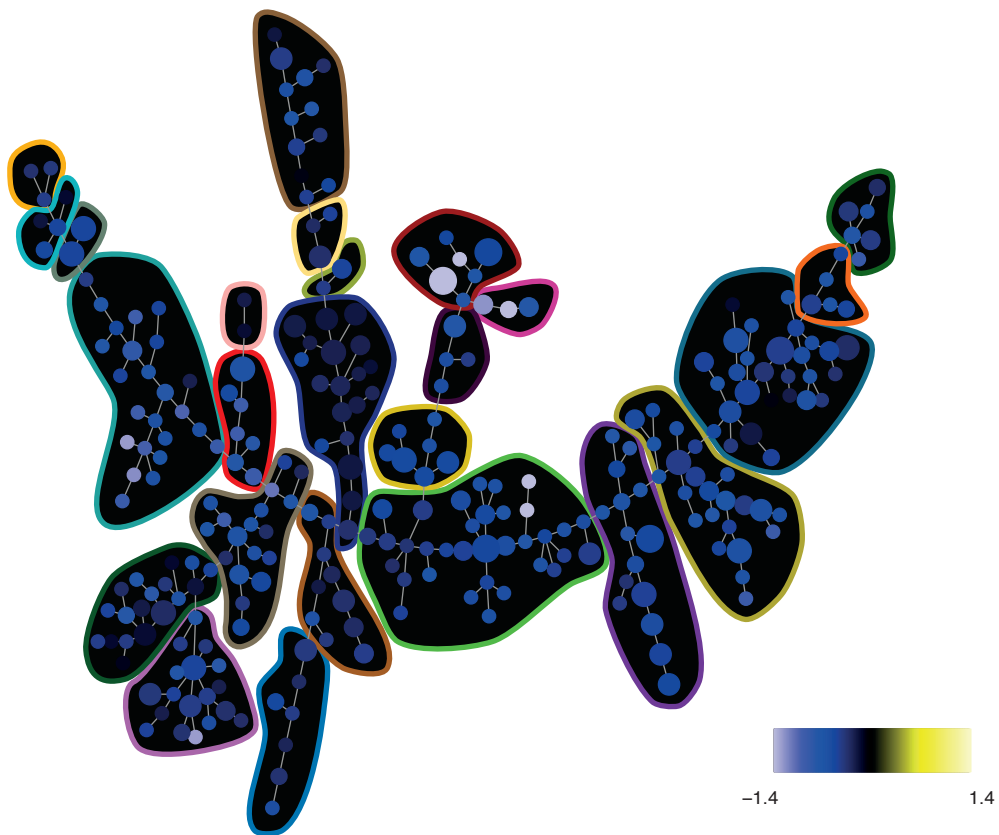


Figure S9B

171-pBtk/Itk — Dasatinib+IL7 vs Ref Ratio

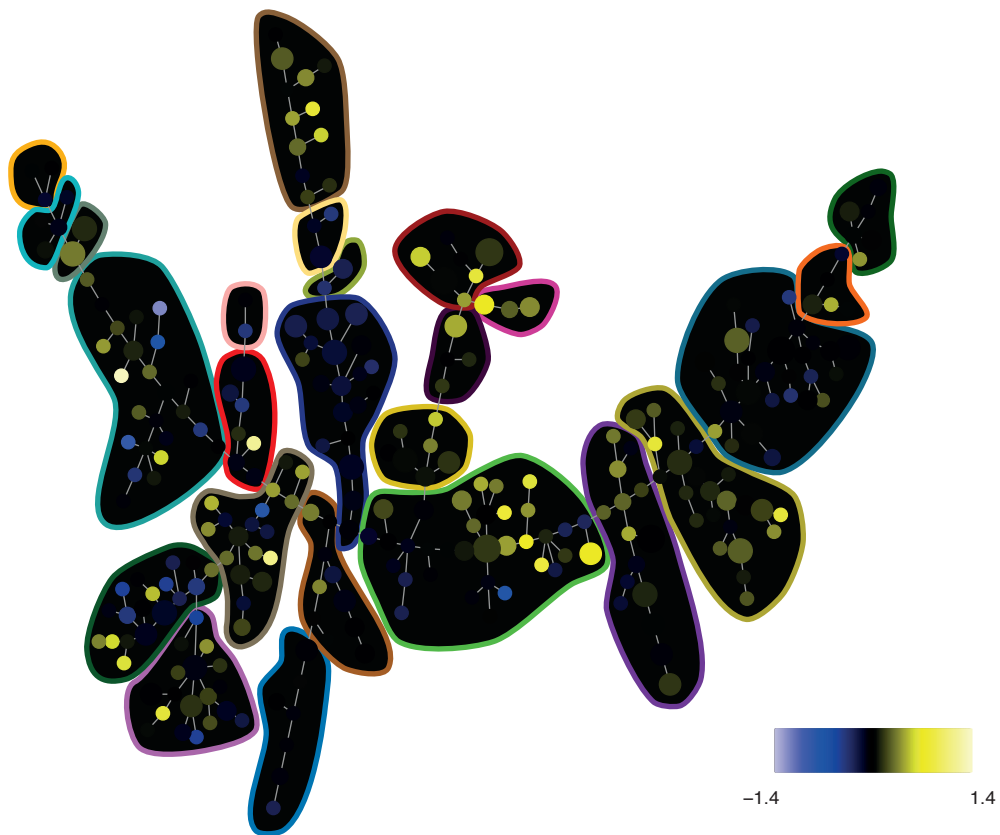


Figure S9B

171-pBtk/Itk ---- Dasatinib+PMAiono vs Ref Ratio

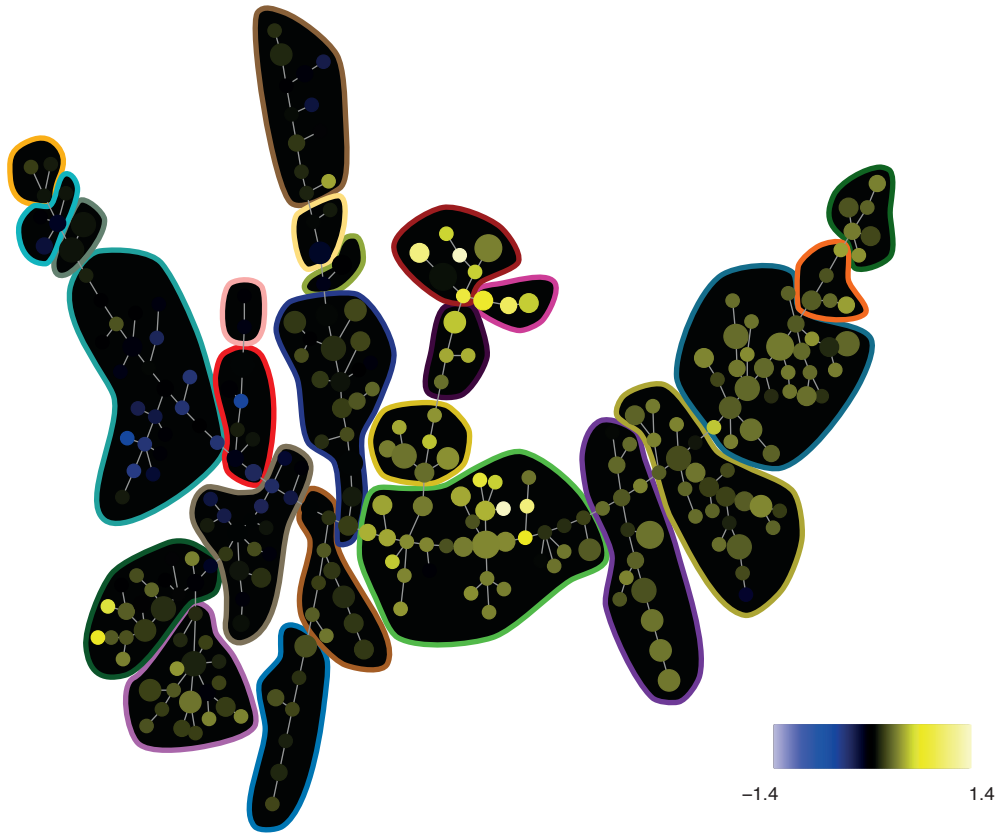


Figure S9B

171-pBtk/Itk — Dasatinib+PVO4 vs Ref Ratio

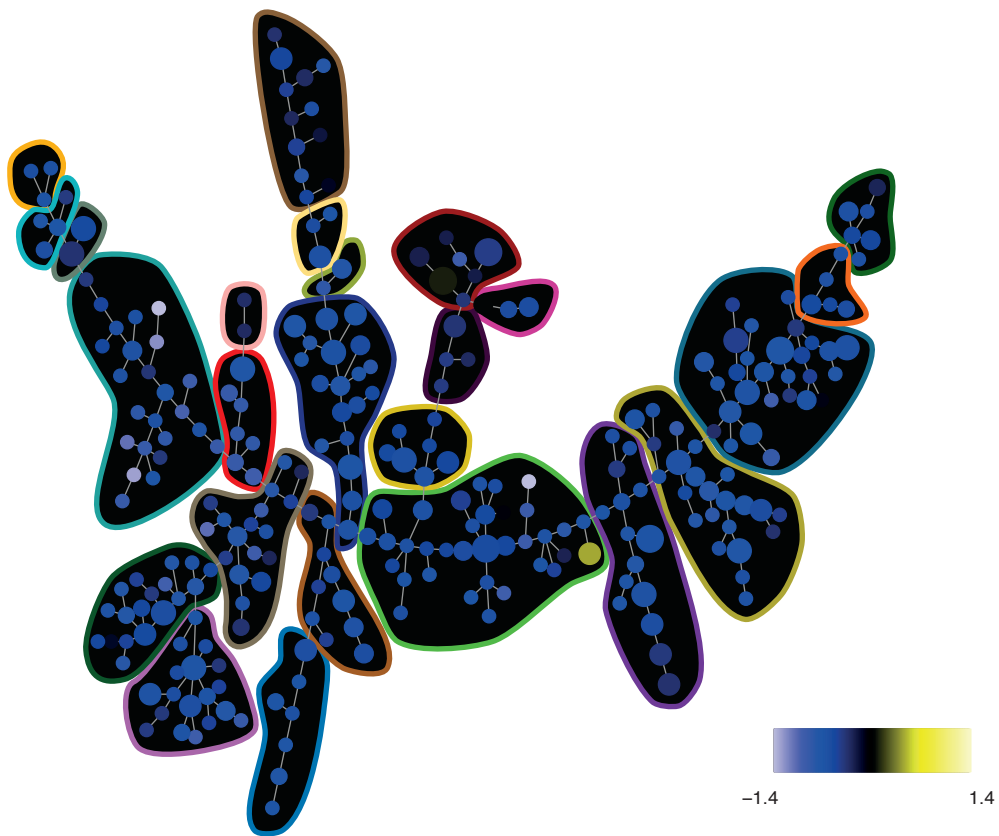


Figure S9B

171-pBtk/Itk ---- Dasatinib+Unstim vs Ref Ratio

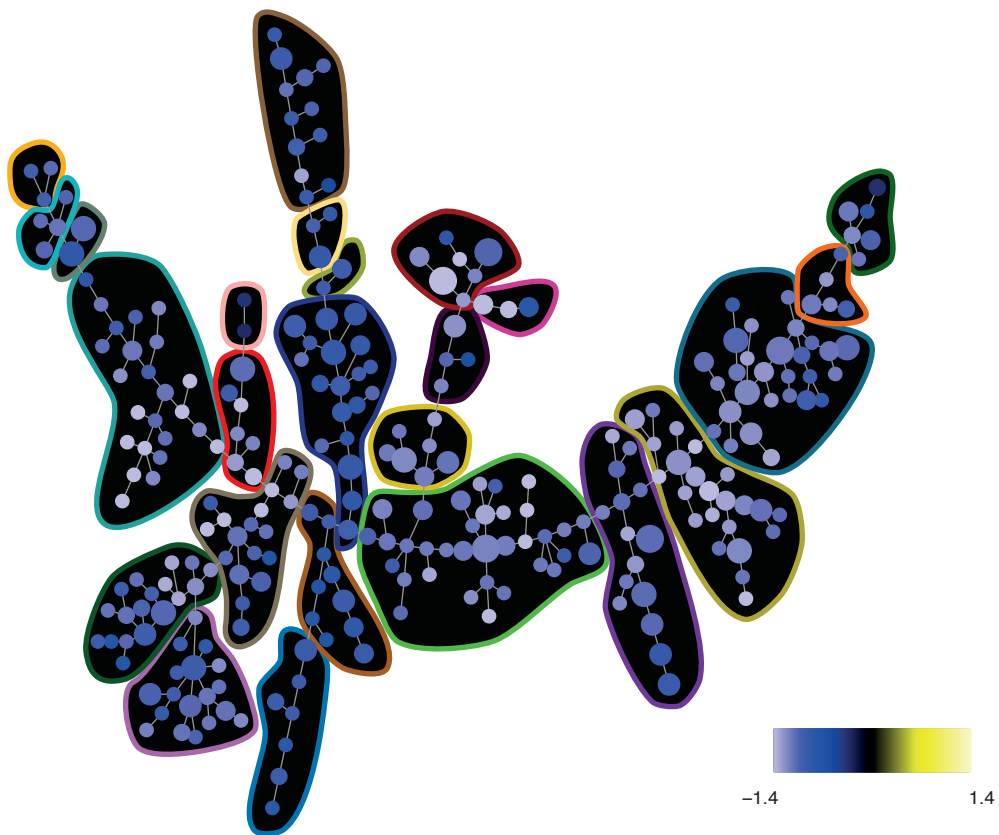


Figure S9B

172-pS6 ---- Dasatinib+BCR vs Ref Ratio

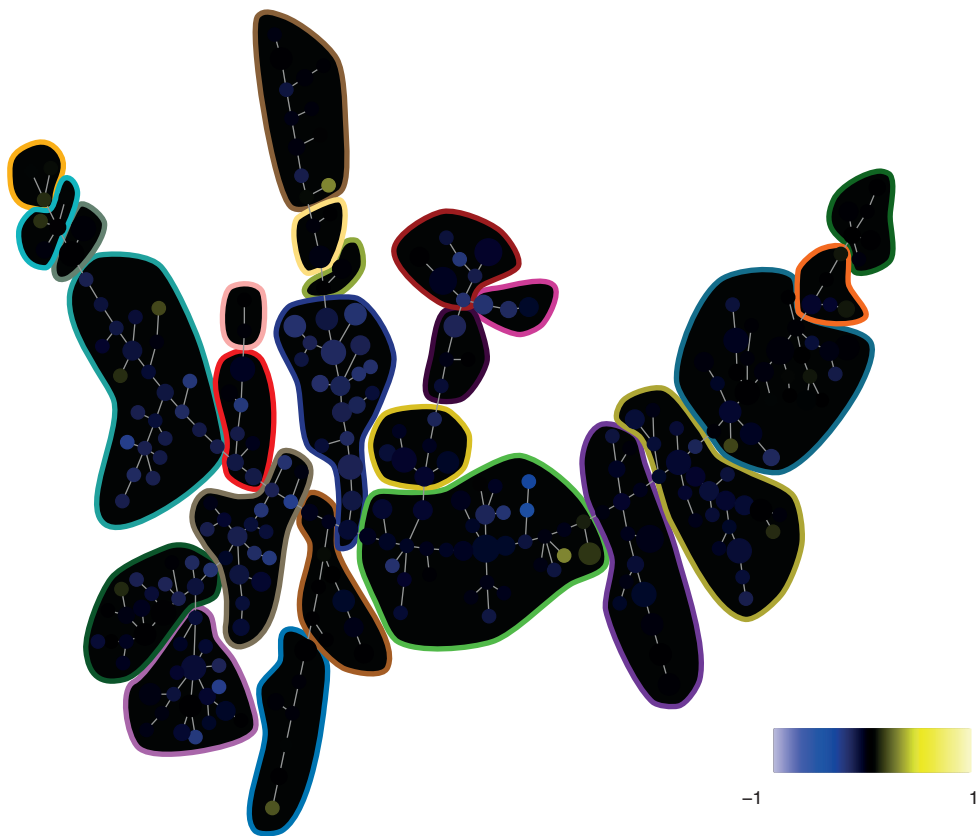


Figure S9B

172-pS6 ---- Dasatinib+Flt3L vs Ref Ratio

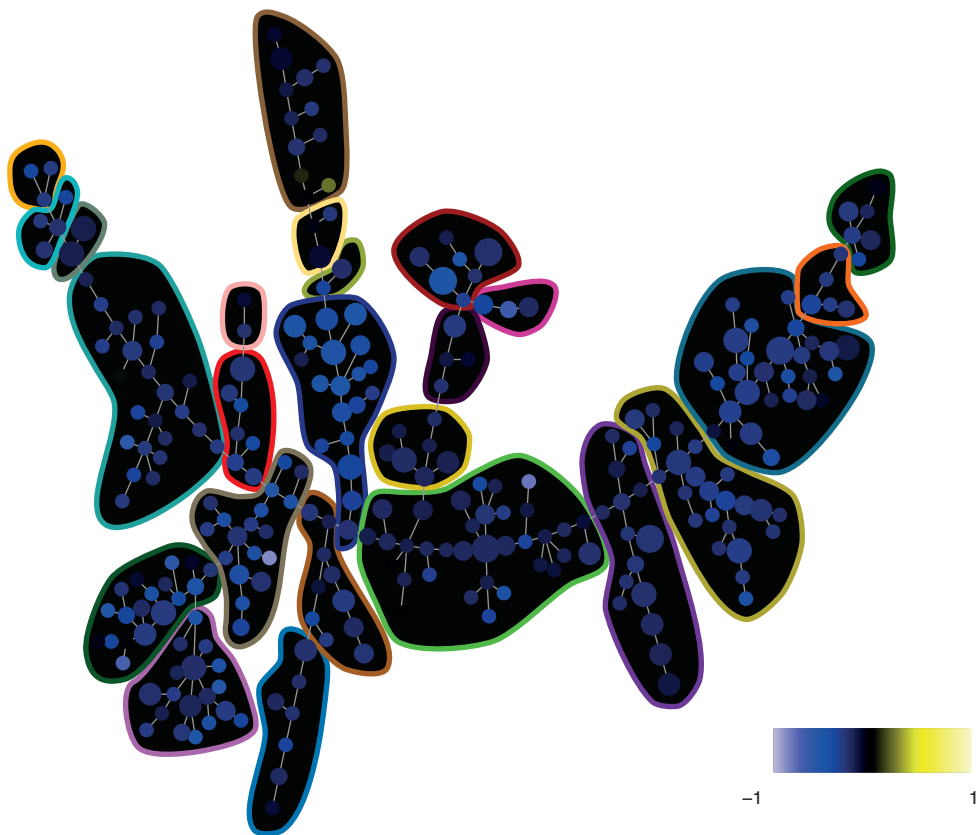


Figure S9B

172-pS6 ---- Dasatinib+IL7 vs Ref Ratio

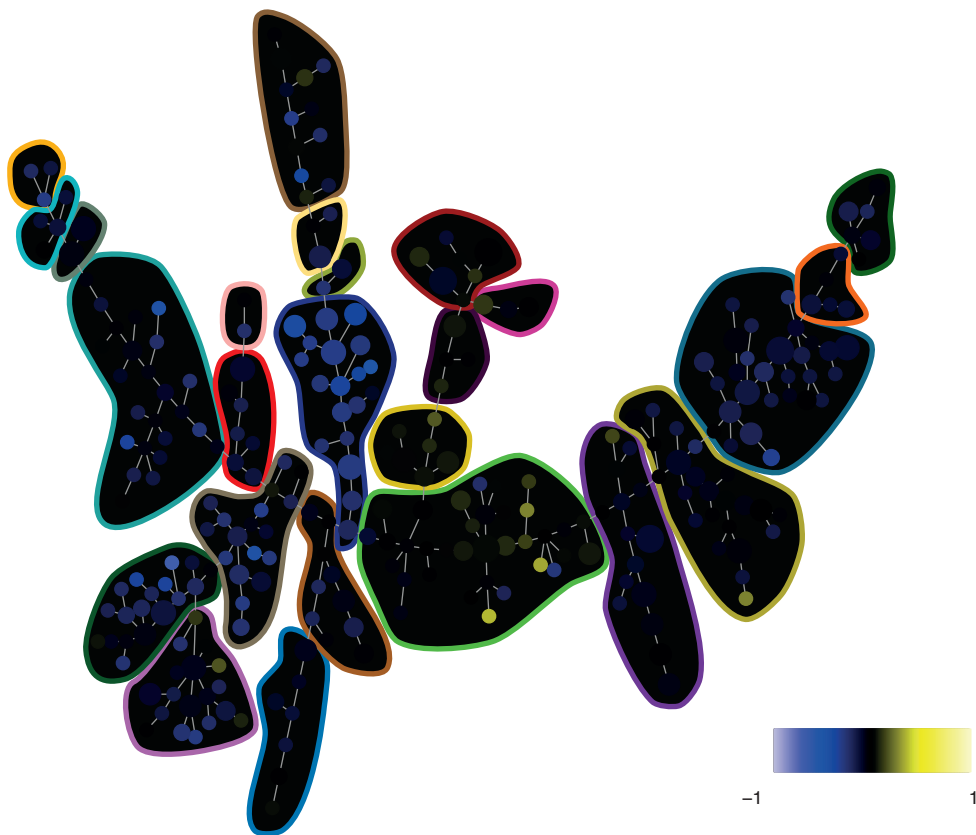


Figure S9B

172-pS6 --- Dasatinib+PMAiono vs Ref Ratio

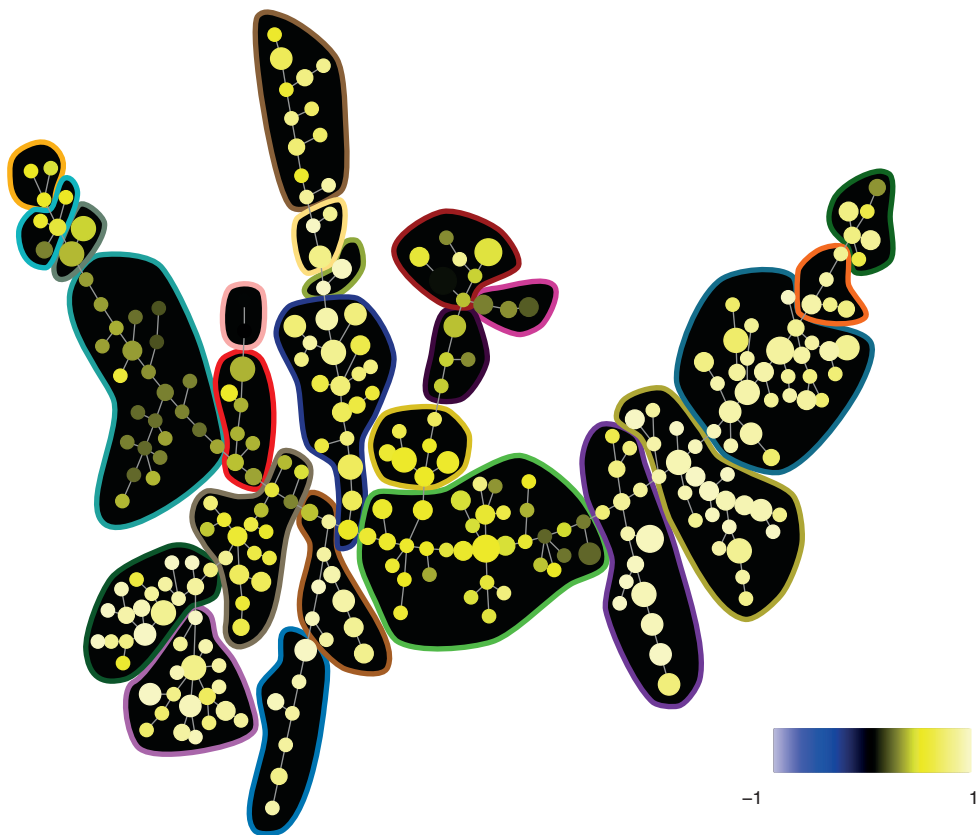


Figure S9B

172-pS6 ---- Dasatinib+PVO4 vs Ref Ratio

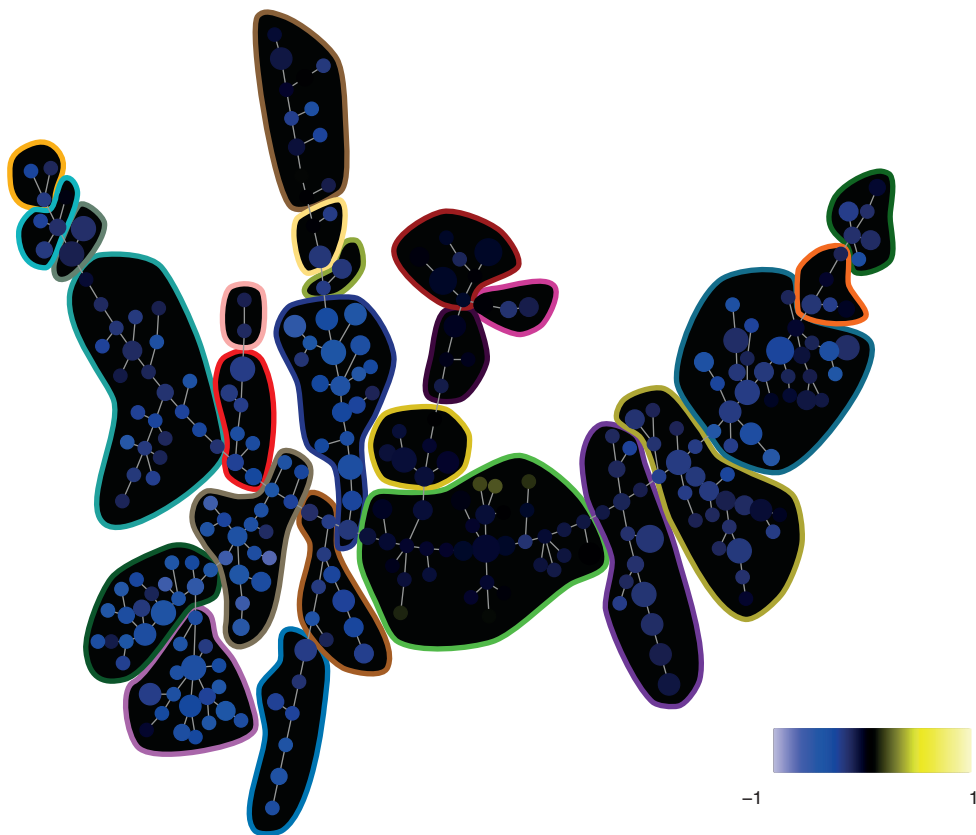


Figure S9B

172-pS6 --- Dasatinib+Unstim vs Ref Ratio

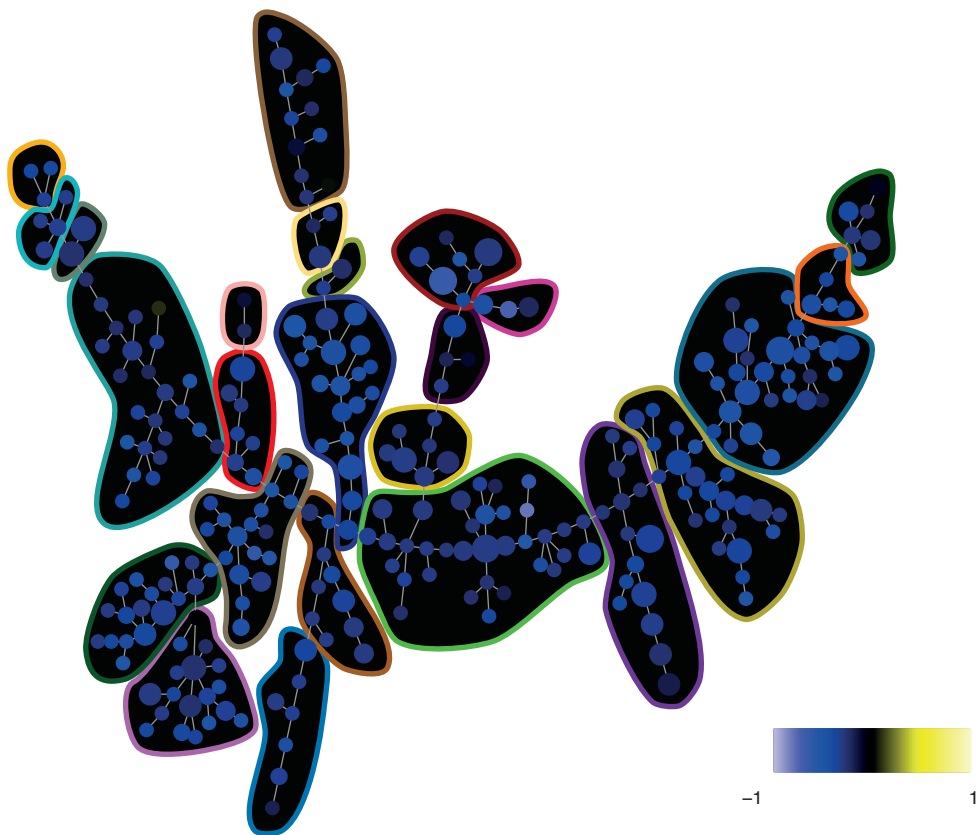


Figure S9B

174-pSrcFK ---- Dasatinib+BCR vs Ref Ratio

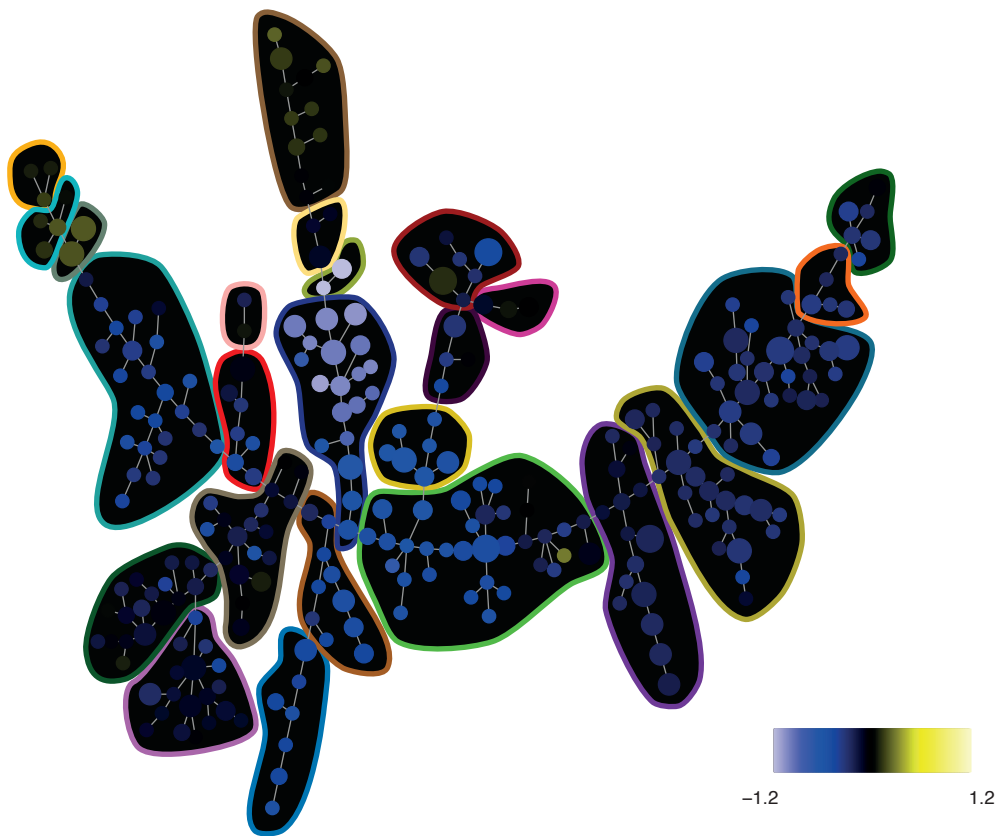


Figure S9B

174-pSrcFK --- Dasatinib+Flt3L vs Ref Ratio

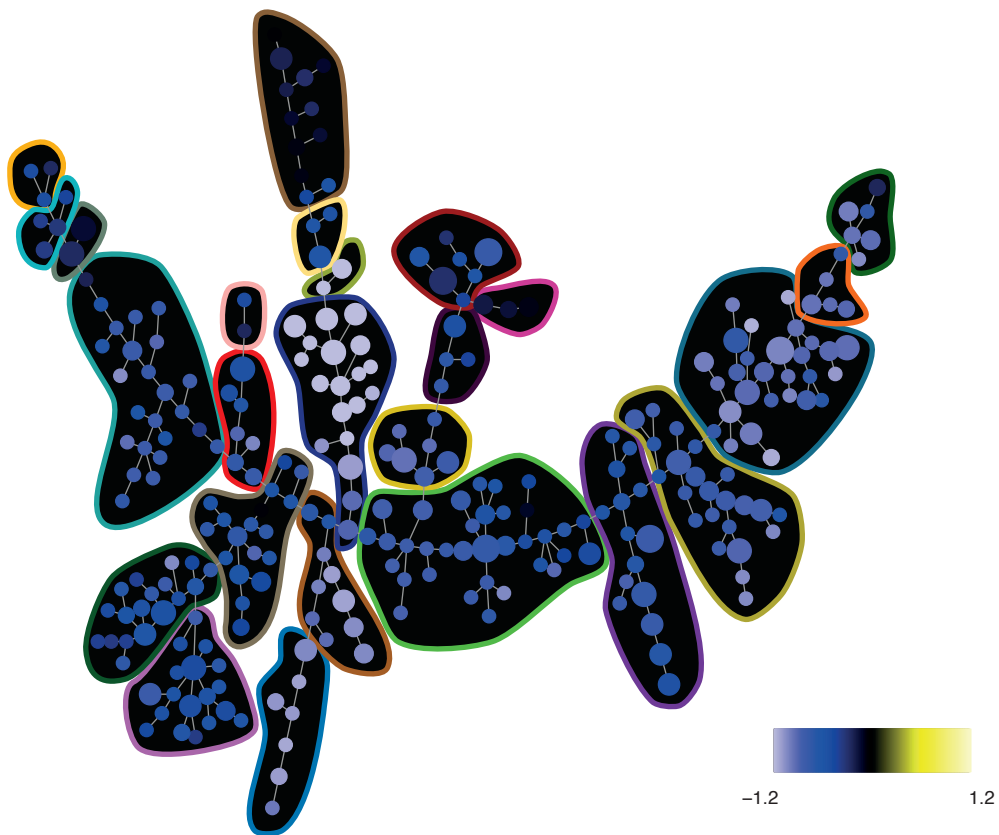


Figure S9B

174-pSrcFK — Dasatinib+IL7 vs Ref Ratio

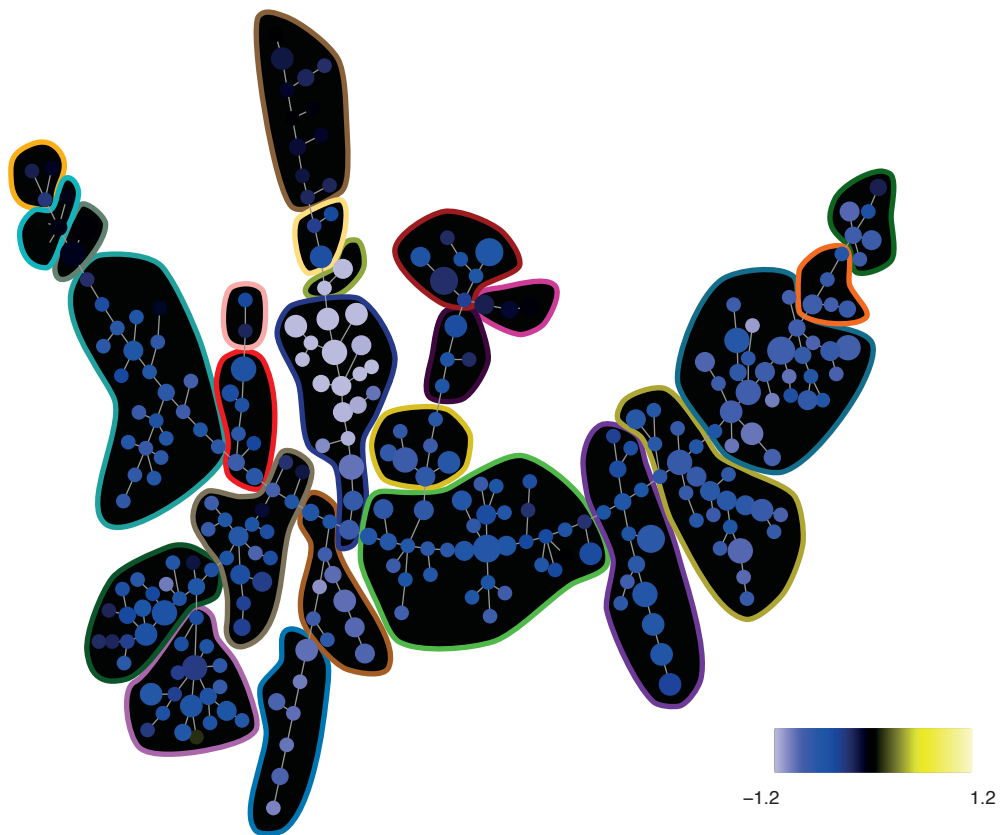


Figure S9B

174-pSrcFK ---- Dasatinib+PMAiono vs Ref Ratio



Figure S9B

174-pSrcFK — Dasatinib+PVO4 vs Ref Ratio

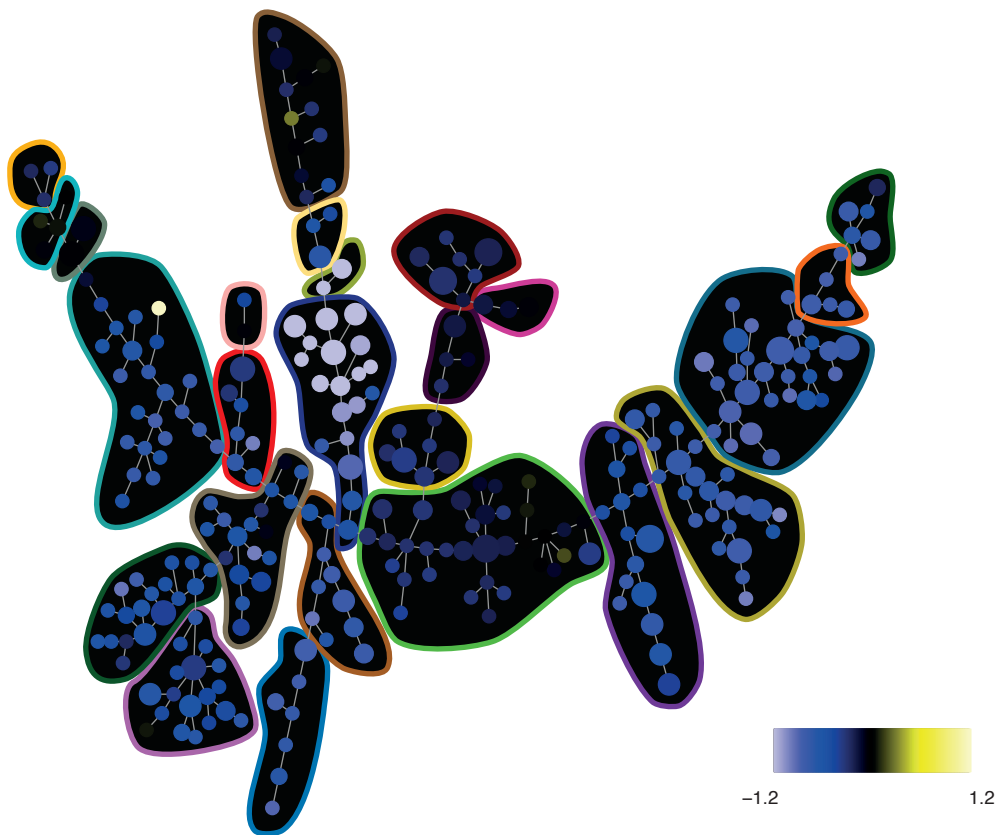


Figure S9B

174-pSrcFK ---- Dasatinib+Unstim vs Ref Ratio

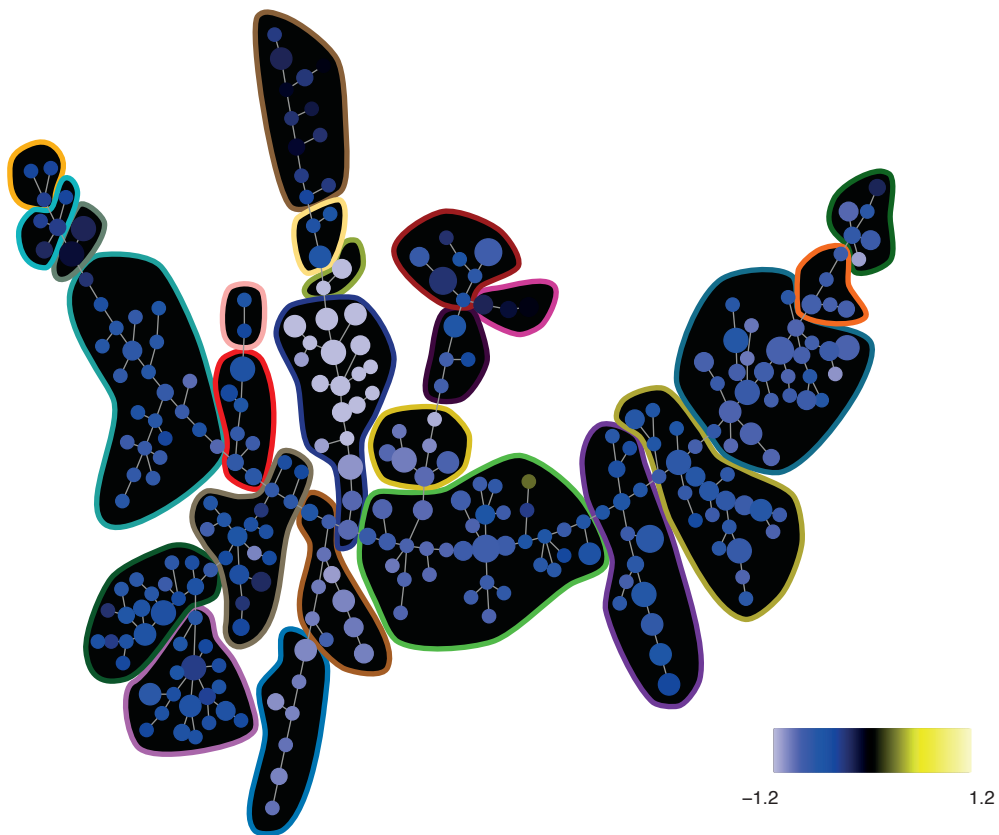


Figure S9B

175-pCrkL ---- Dasatinib+BCR vs Ref Ratio

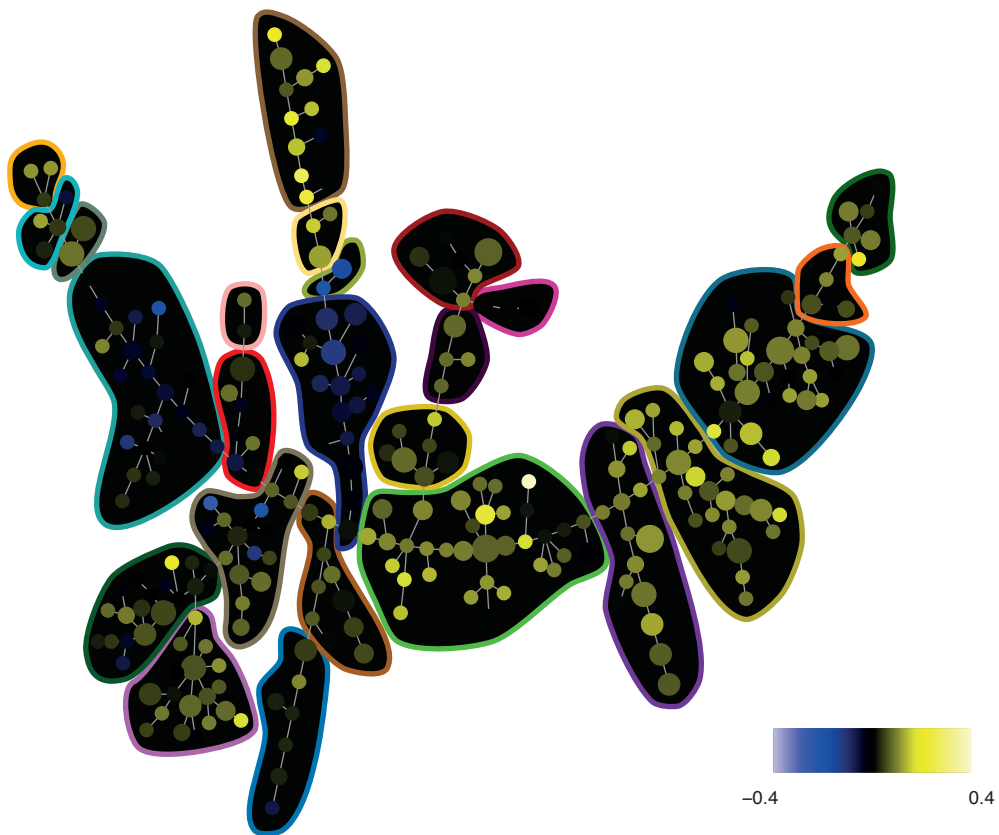


Figure S9B

175-pCrkL ---- Dasatinib+Flt3L vs Ref Ratio

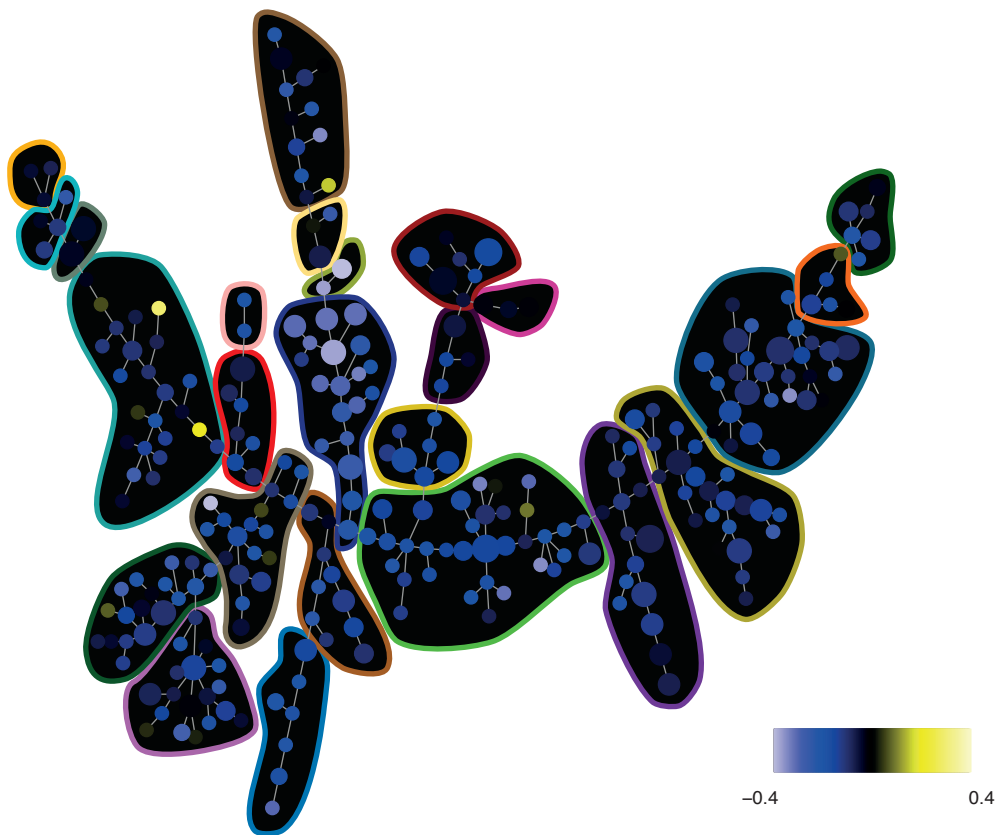


Figure S9B

175-pCrkL ---- Dasatinib+IL7 vs Ref Ratio

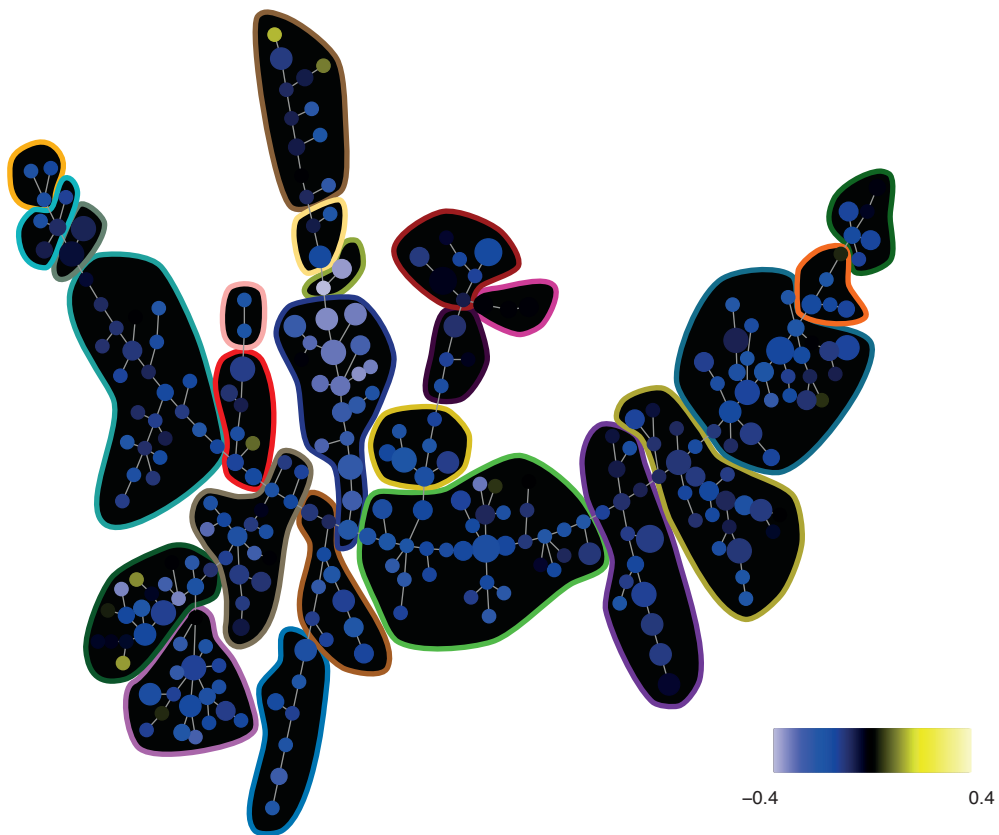


Figure S9B

175-pCrkL --- Dasatinib+PMAiono vs Ref Ratio

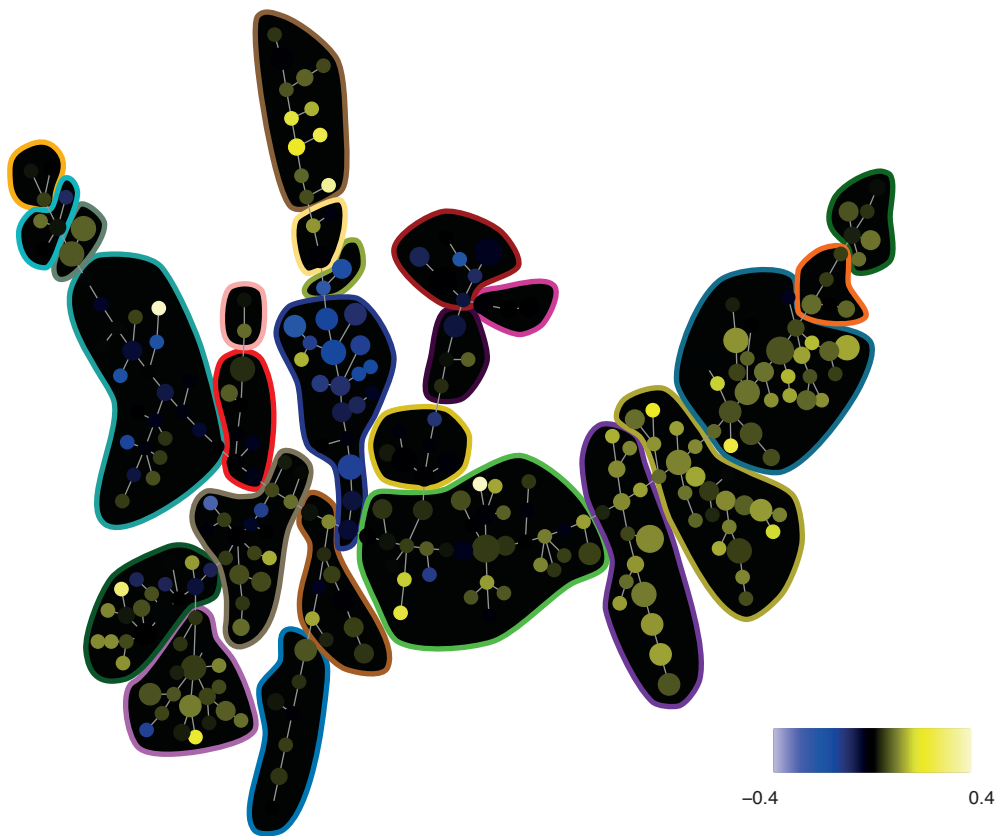


Figure S9B

175-pCrkL --- Dasatinib+PVO4 vs Ref Ratio

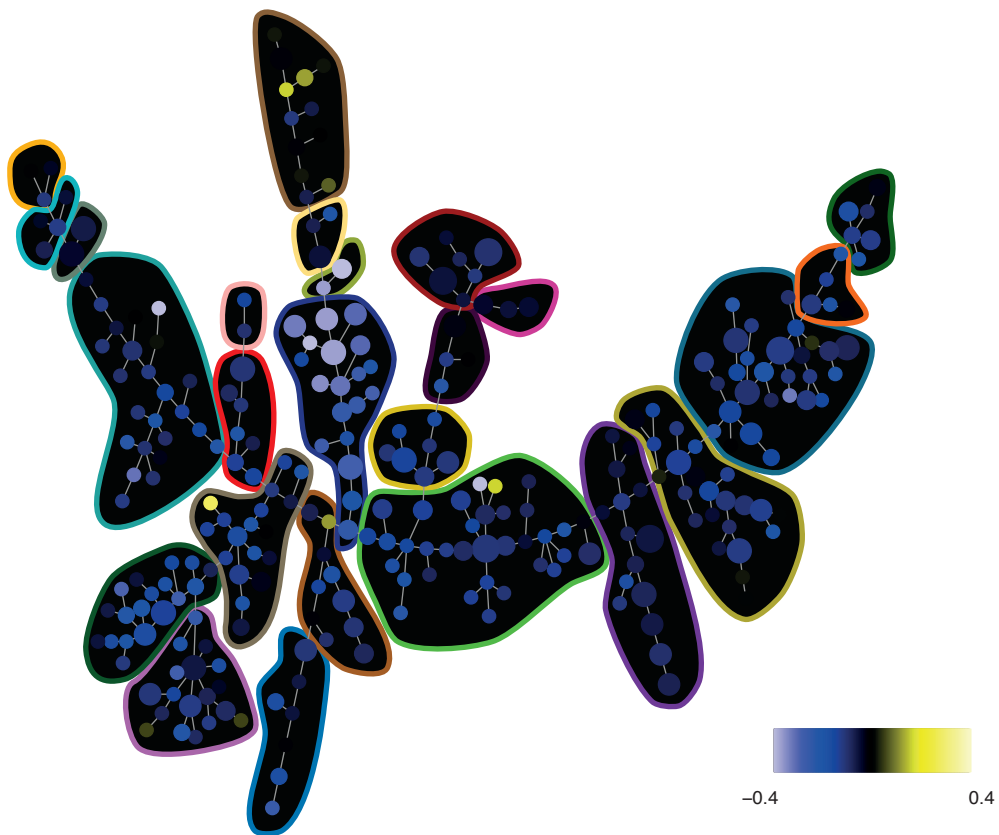


Figure S9B

175-pCrkL --- Dasatinib+Unstim vs Ref Ratio

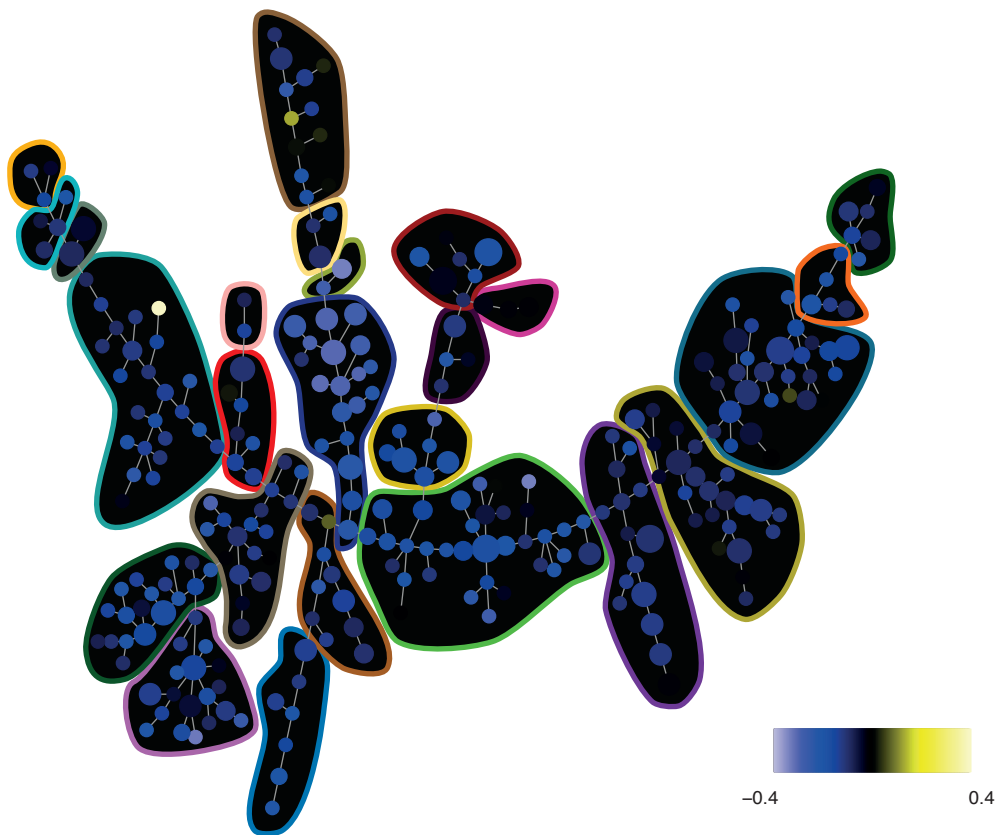


Figure S9B

176-pCREB --- Dasatinib+BCR vs Ref Ratio

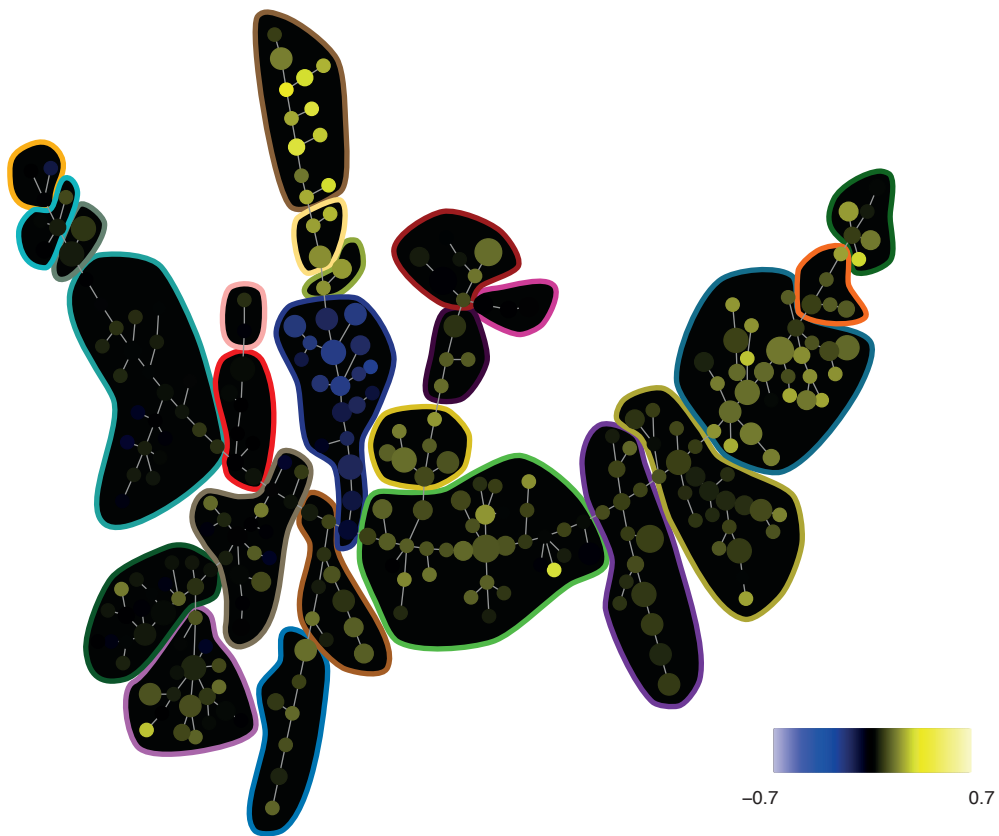


Figure S9B

176-pCREB --- Dasatinib+Flt3L vs Ref Ratio

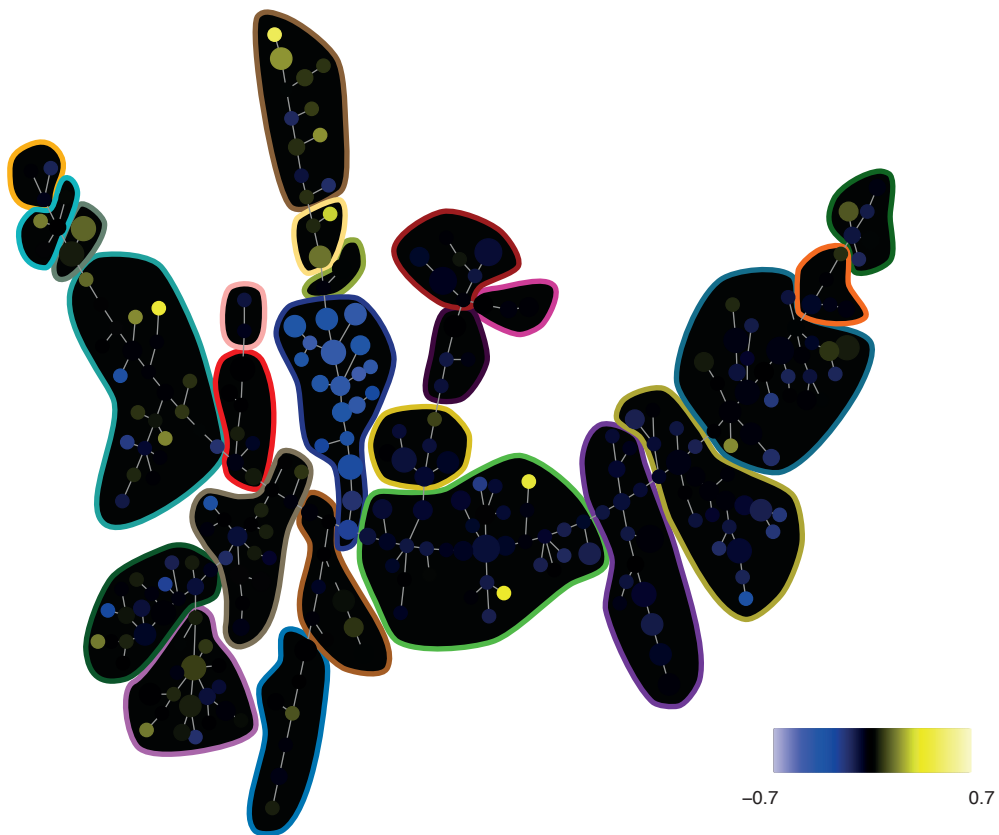


Figure S9B

176-pCREB — Dasatinib+IL7 vs Ref Ratio

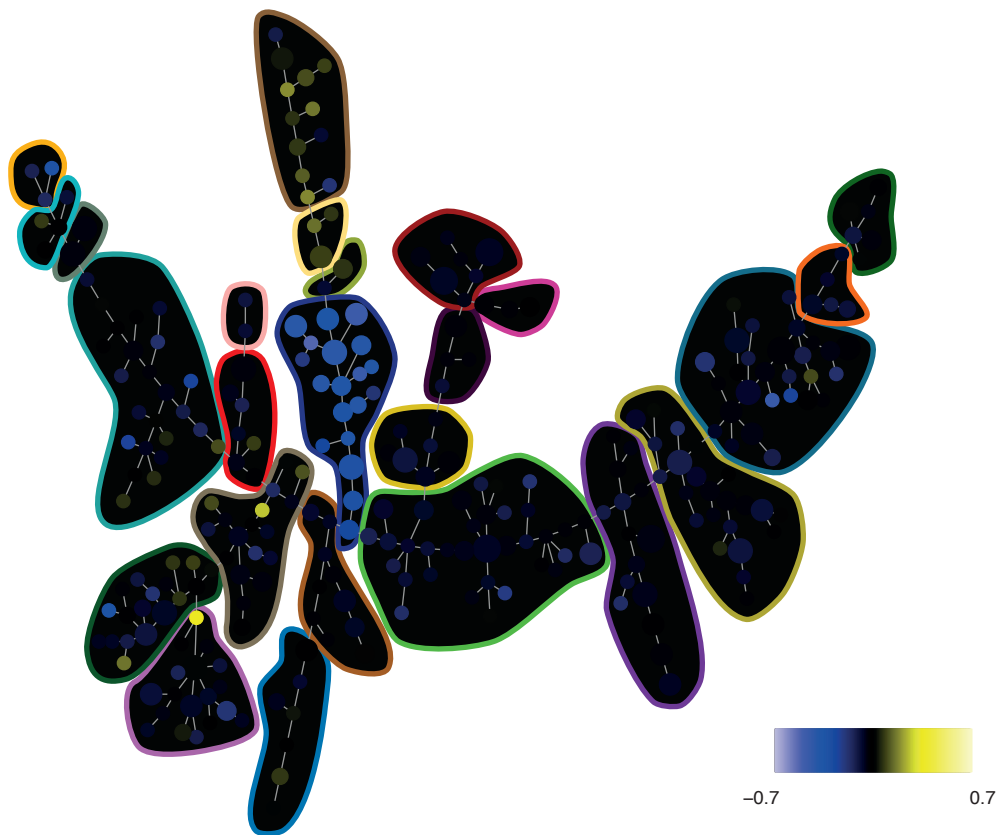


Figure S9B

176-pCREB ---- Dasatinib+PMAiono vs Ref Ratio

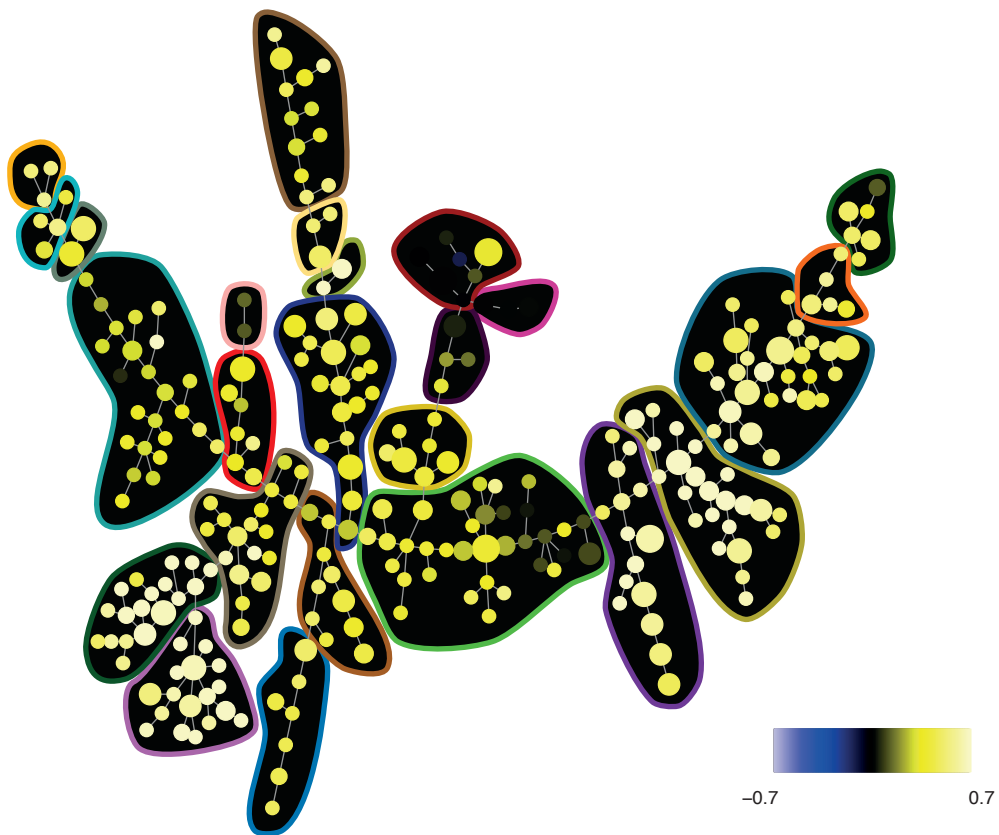


Figure S9B

176-pCREB — Dasatinib+PVO4 vs Ref Ratio

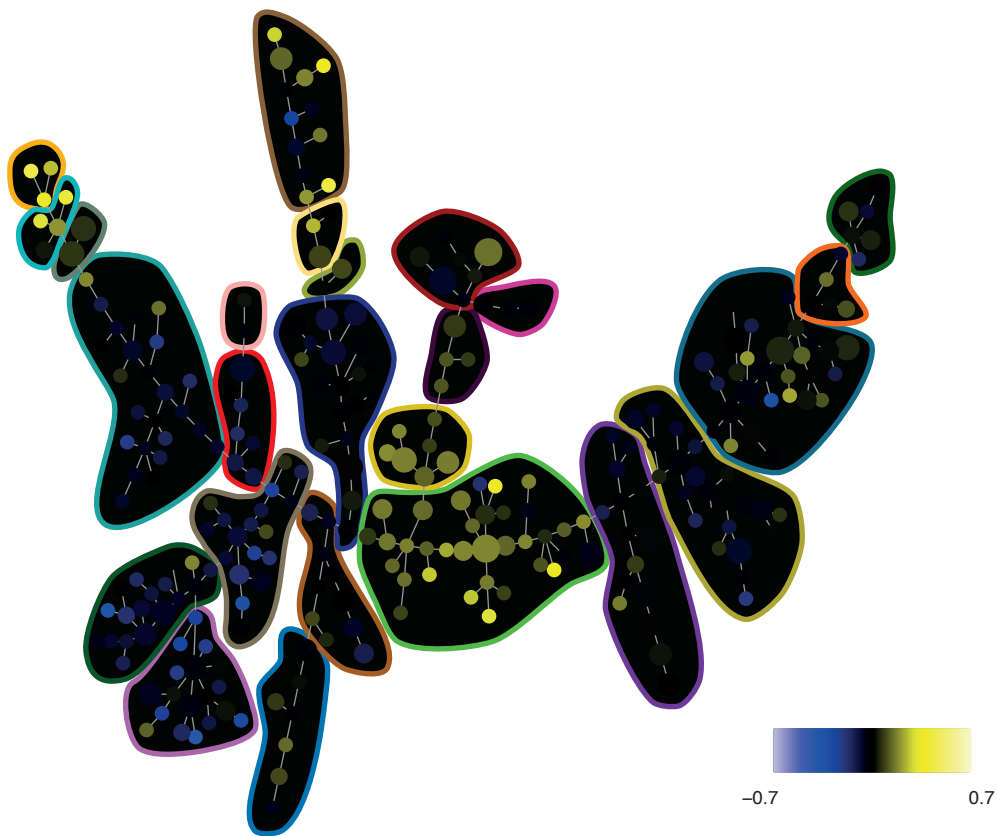


Figure S9B

176-pCREB --- Dasatinib+Unstim vs Ref Ratio

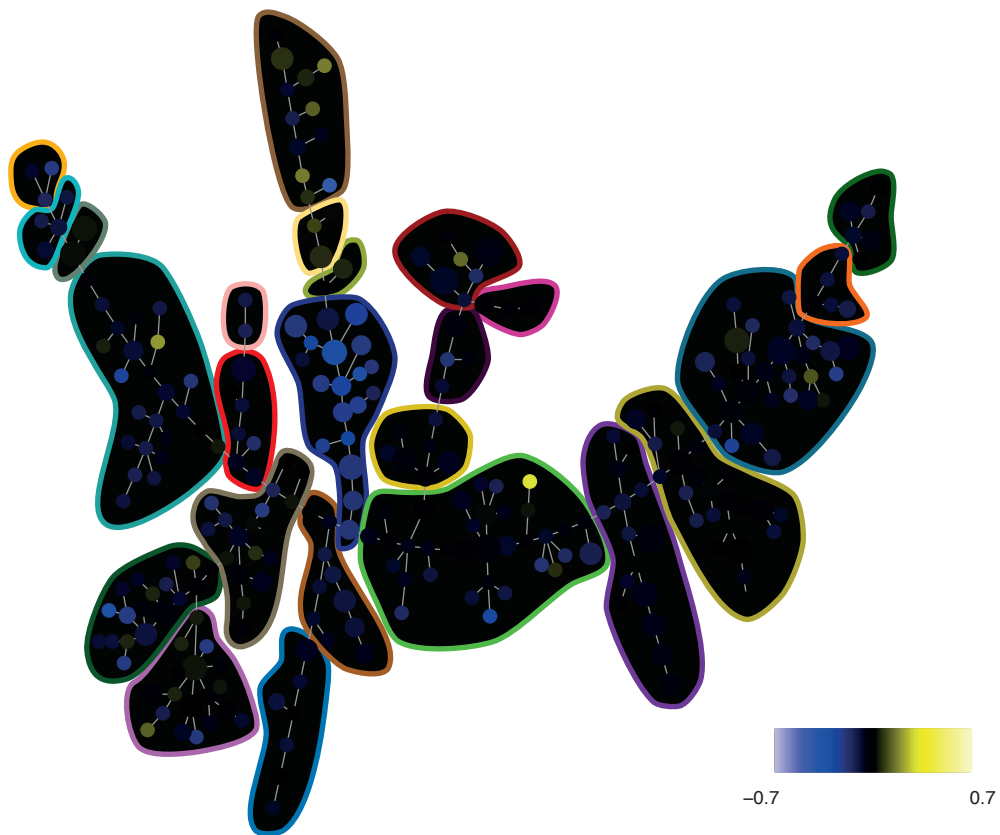


Figure S9C

141-pPLCgamma2 --- JAKi+GCSF vs Ref Ratio

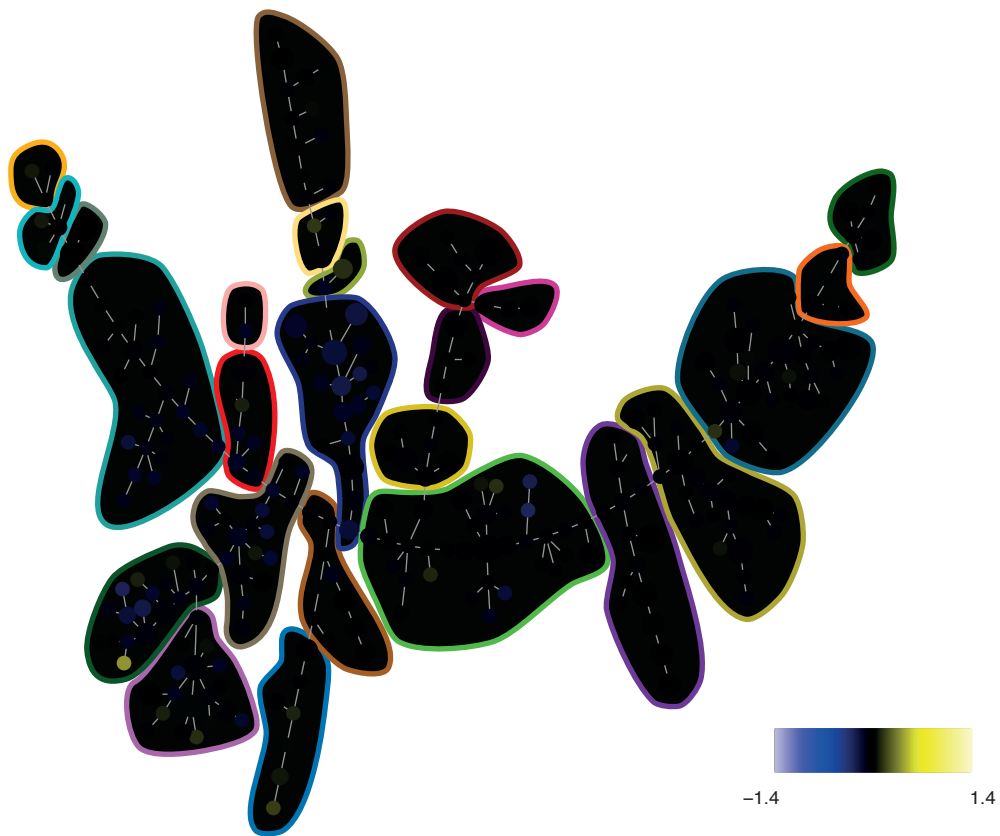


Figure S9C

141-pPLCgamma2 ---- JAKi+Unstim vs Ref Ratio

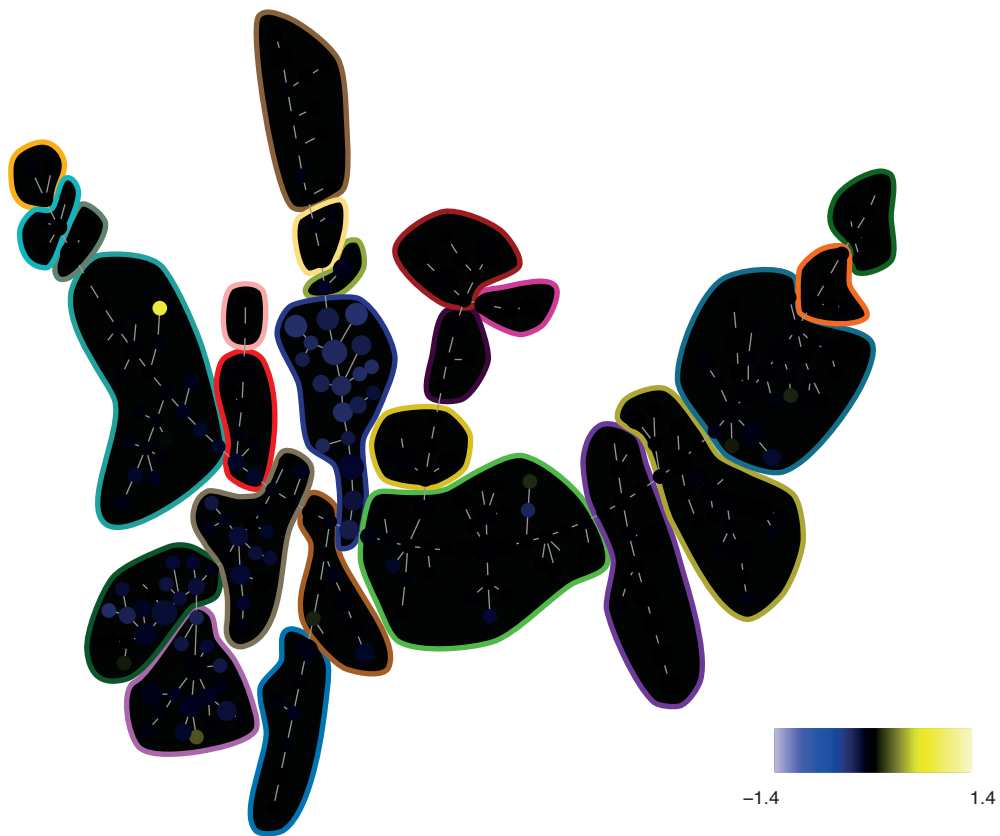


Figure S9C

150-pSTAT5 ---- JAKi+GCSF vs Ref Ratio

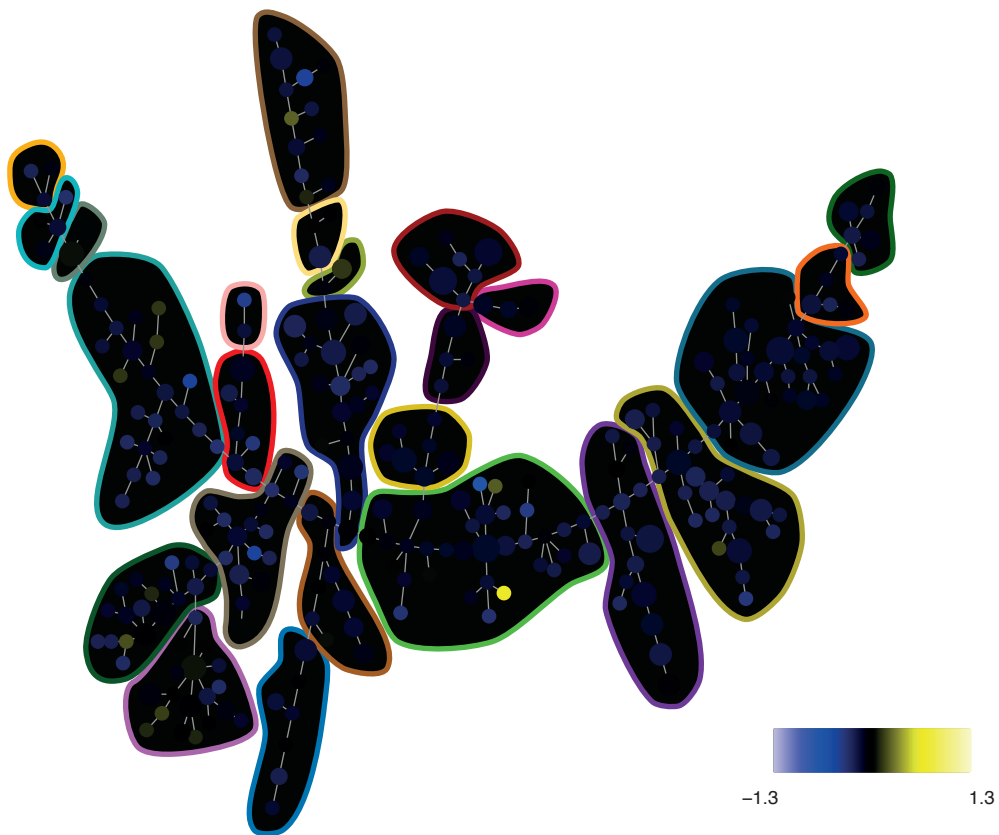


Figure S9C

150-pSTAT5 ---- JAKi+Unstim vs Ref Ratio

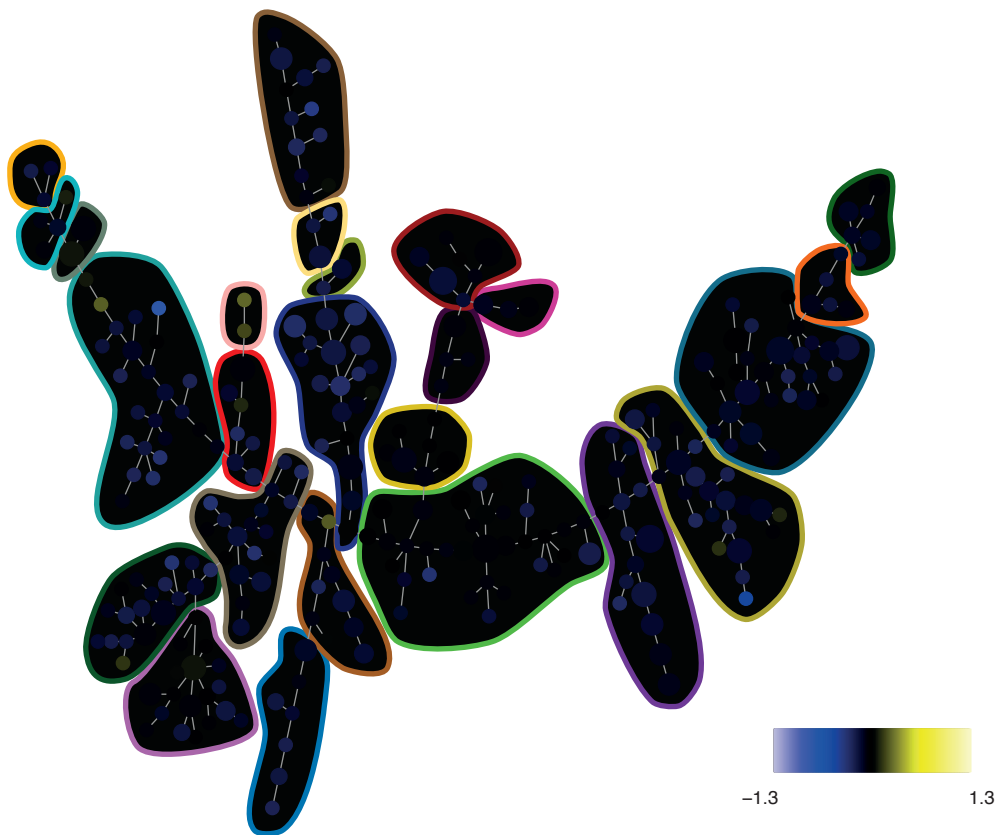


Figure S9C

151-pERK1/2 --- JAKi+GCSF vs Ref Ratio

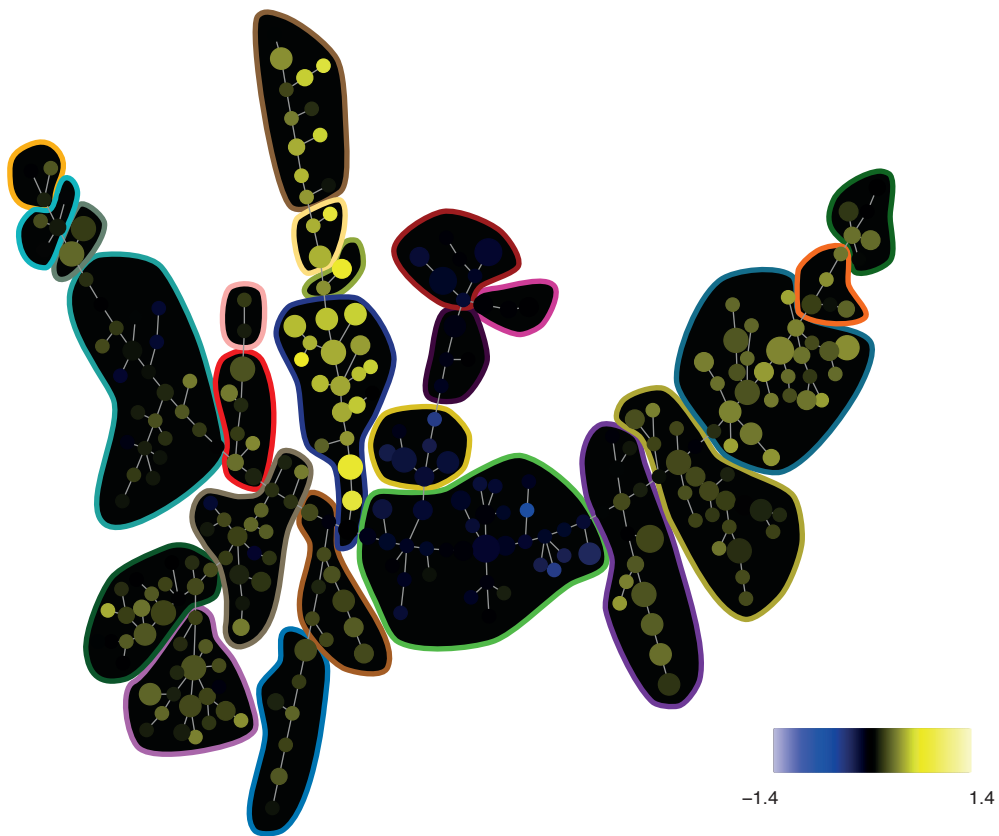


Figure S9C

151-pERK1/2 ---- JAKi+Unstim vs Ref Ratio

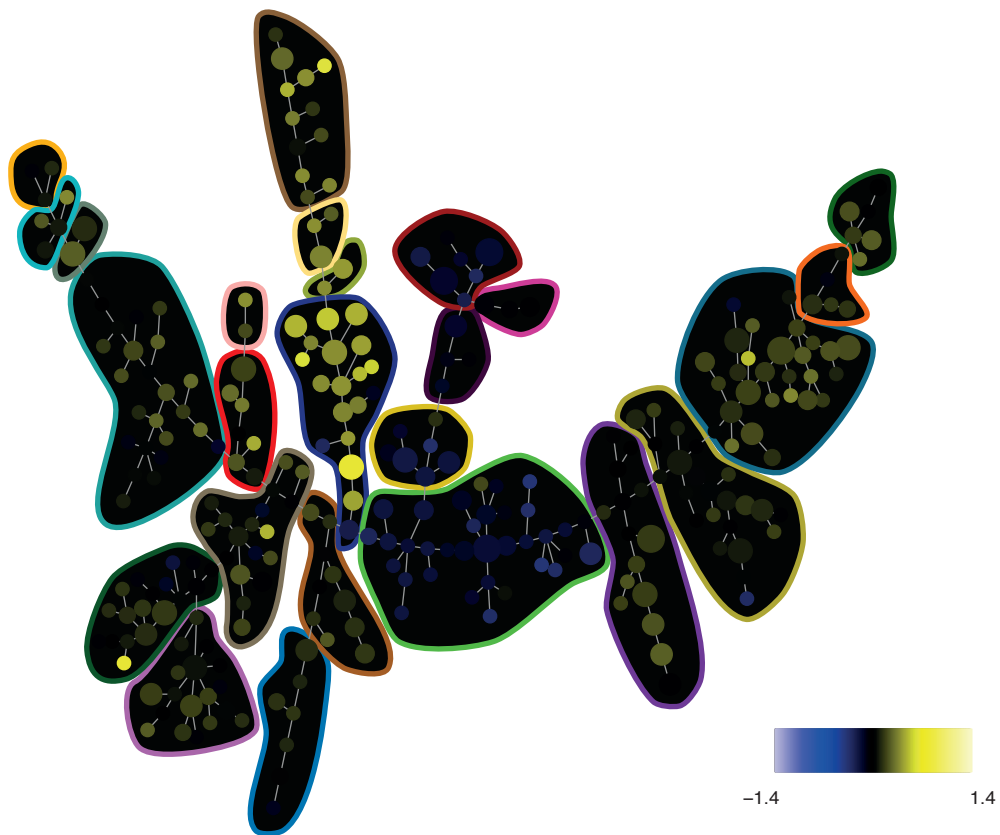


Figure S9C

152-Ki67 ---- JAKi+GCSF vs Ref Ratio

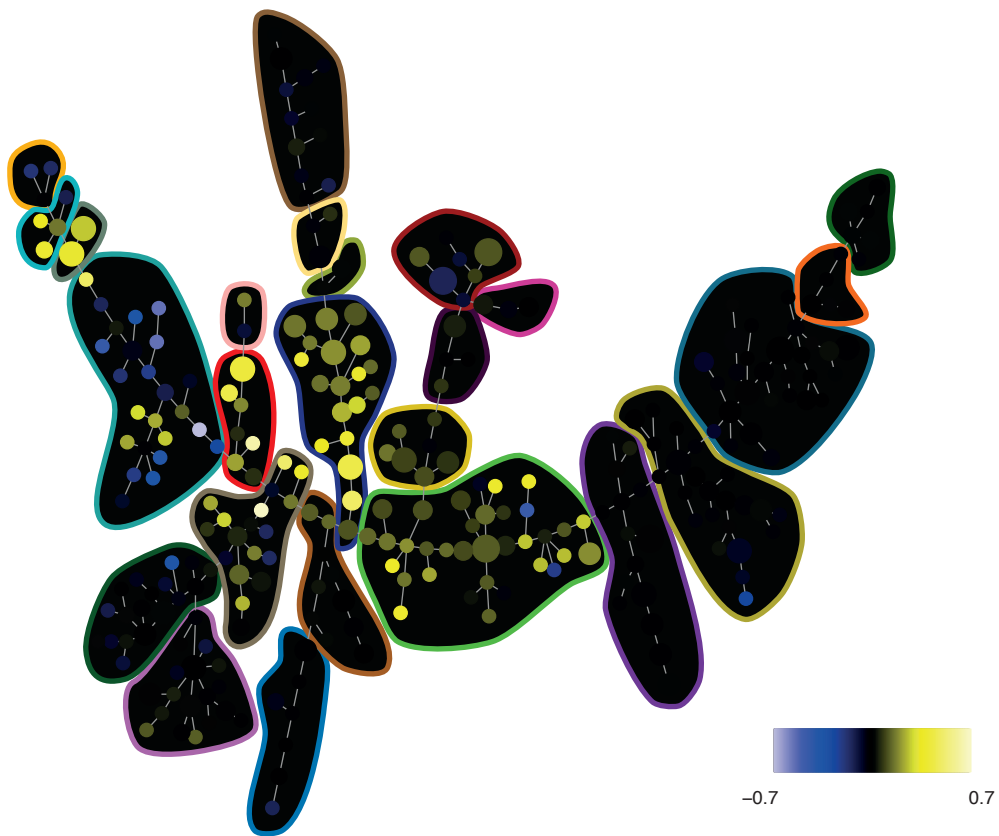


Figure S9C

152-Ki67 --- JAKi+Unstim vs Ref Ratio

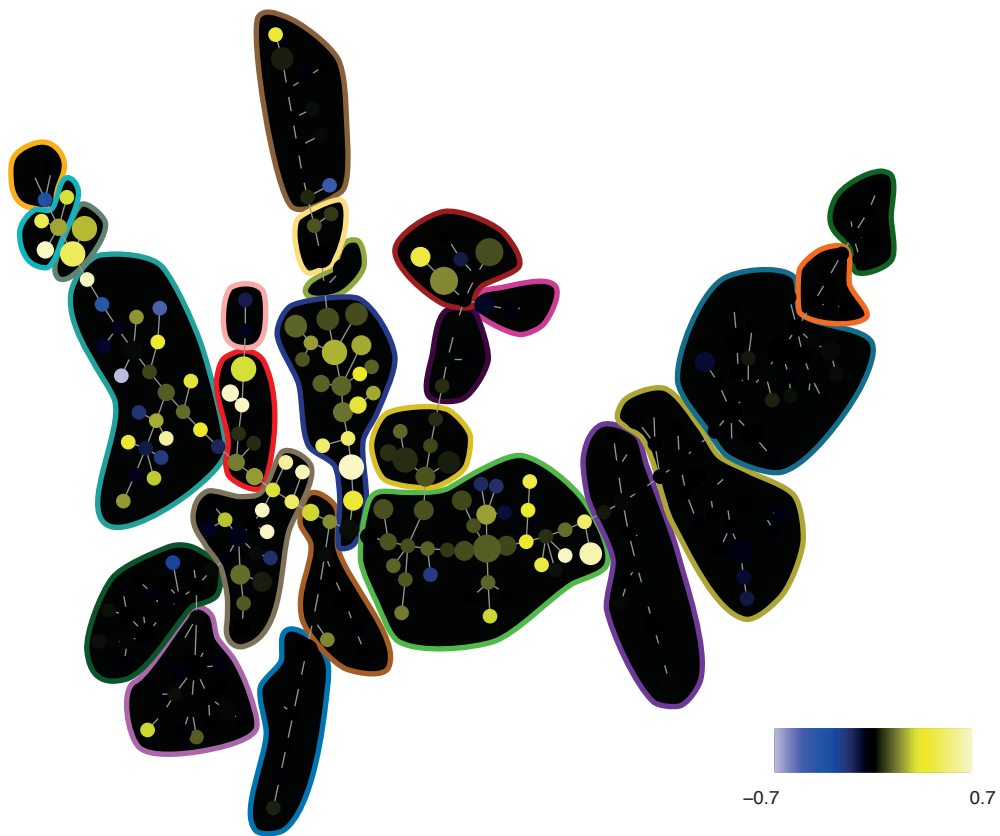


Figure S9C

153-pMAPKAPK2 ---- JAKi+GCSF vs Ref Ratio

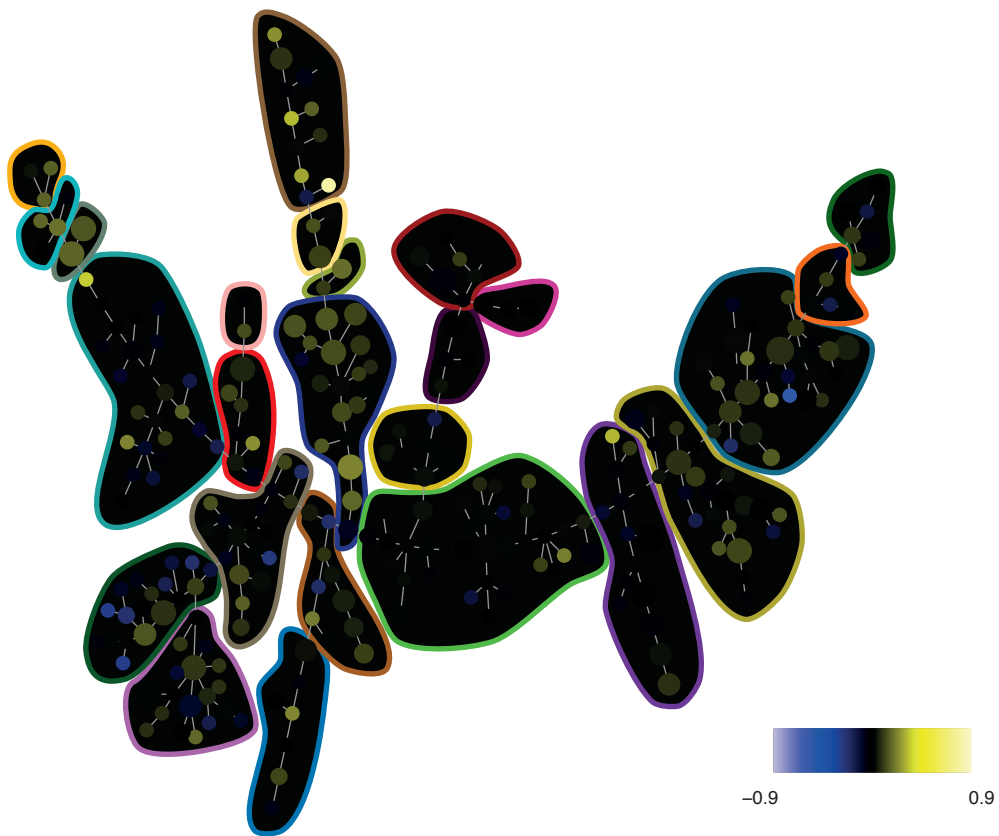


Figure S9C

153-pMAPKAPK2 ---- JAKi+Unstim vs Ref Ratio

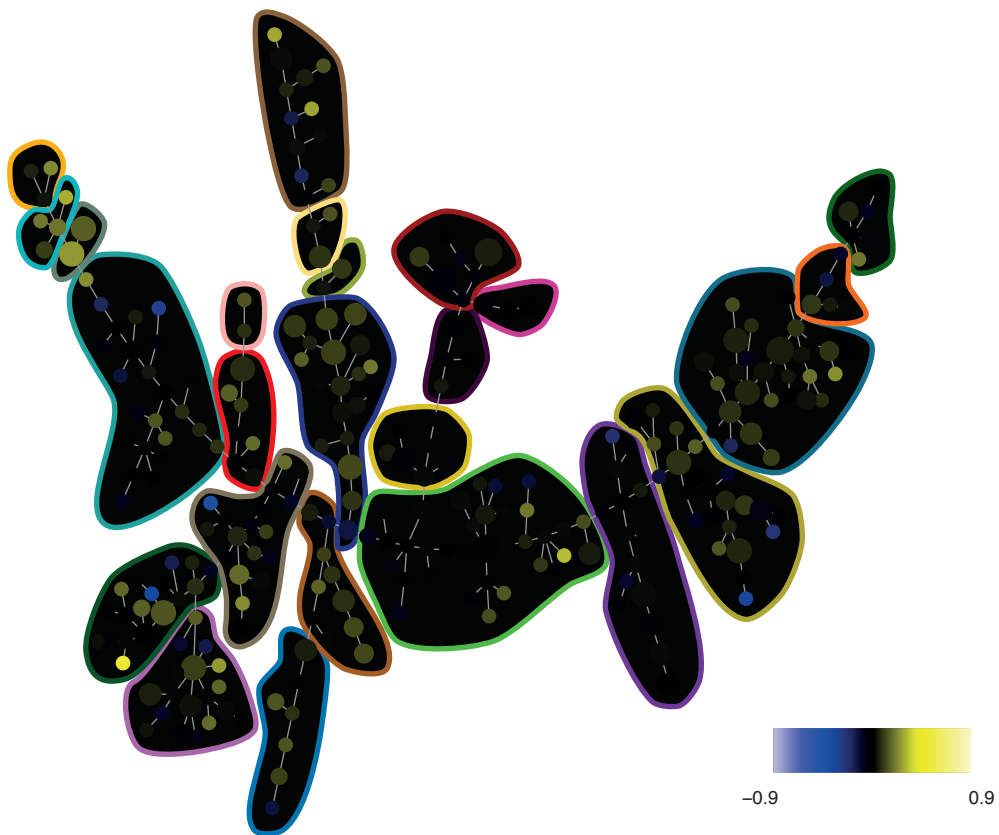


Figure S9C

154-pSHP2 ---- JAKi+GCSF vs Ref Ratio

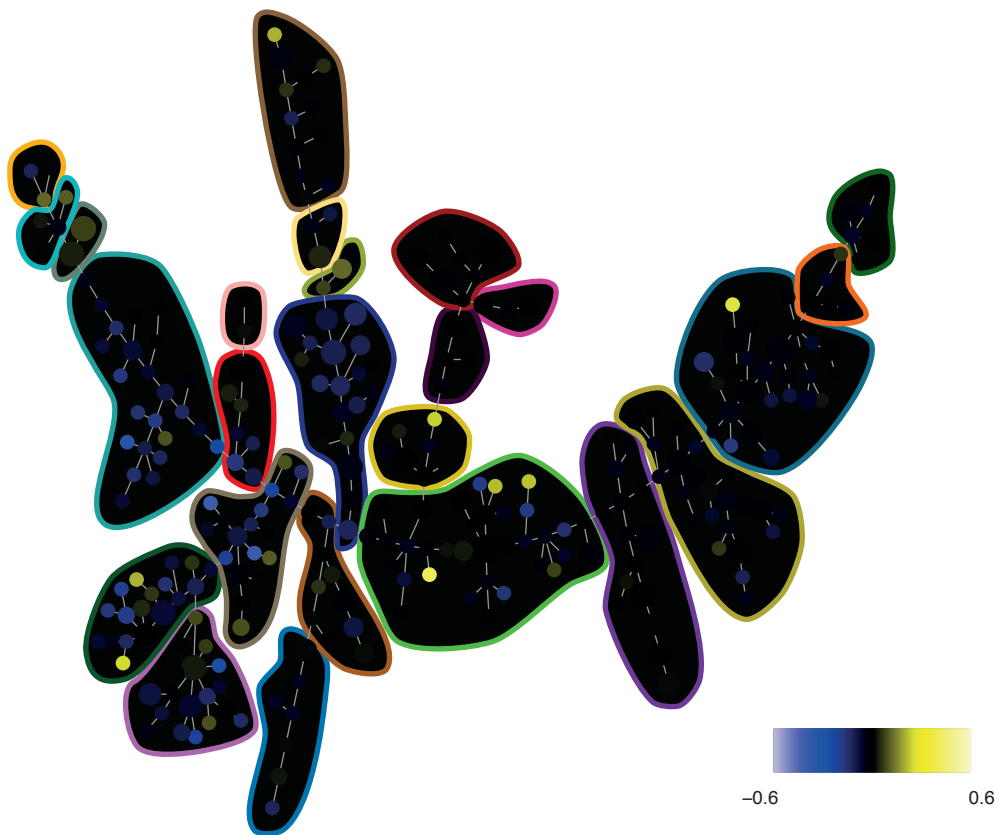


Figure S9C

154-pSHP2 --- JAKi+Unstim vs Ref Ratio

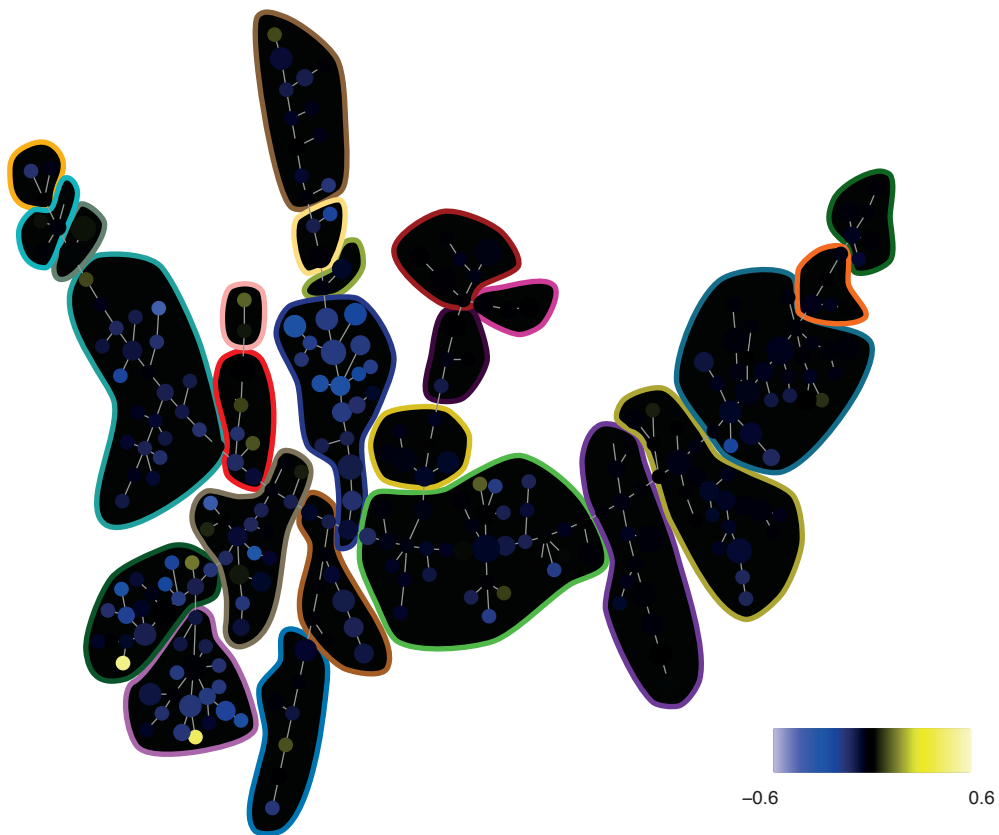


Figure S9C

156-pZAP70/Syk ---- JAKi+GCSF vs Ref Ratio

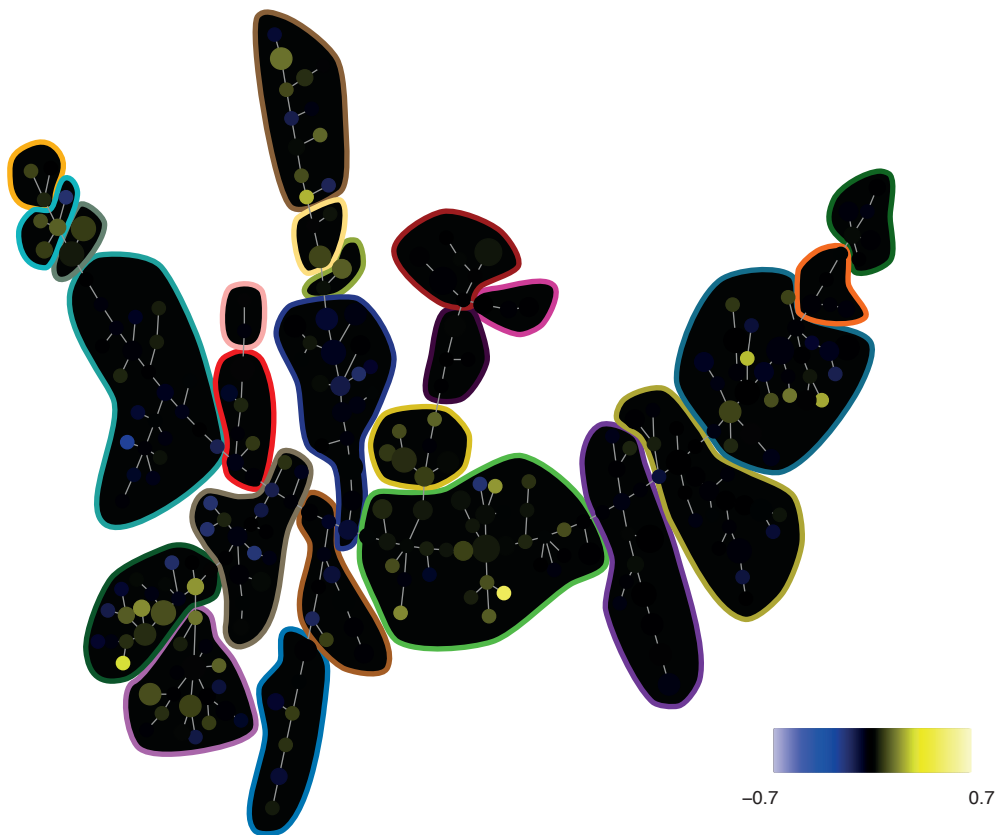


Figure S9C

156-pZAP70/Syk --- JAKi+Unstim vs Ref Ratio

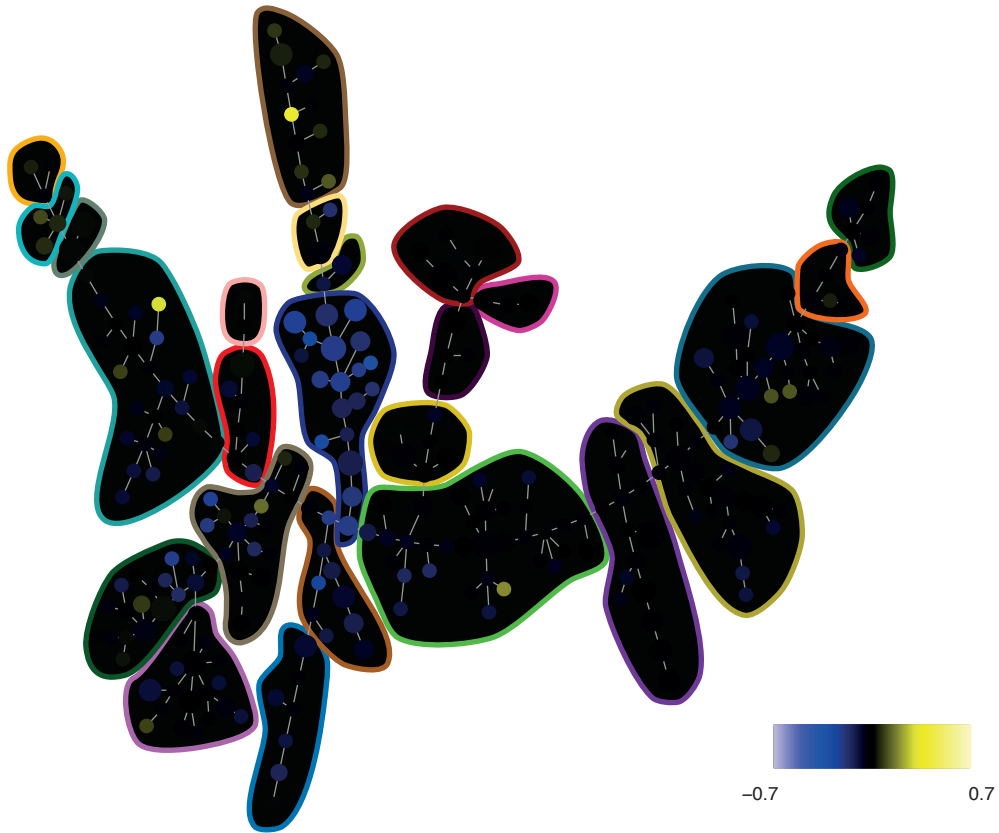


Figure S9C

159-pSTAT3 ---- JAKi+GCSF vs Ref Ratio

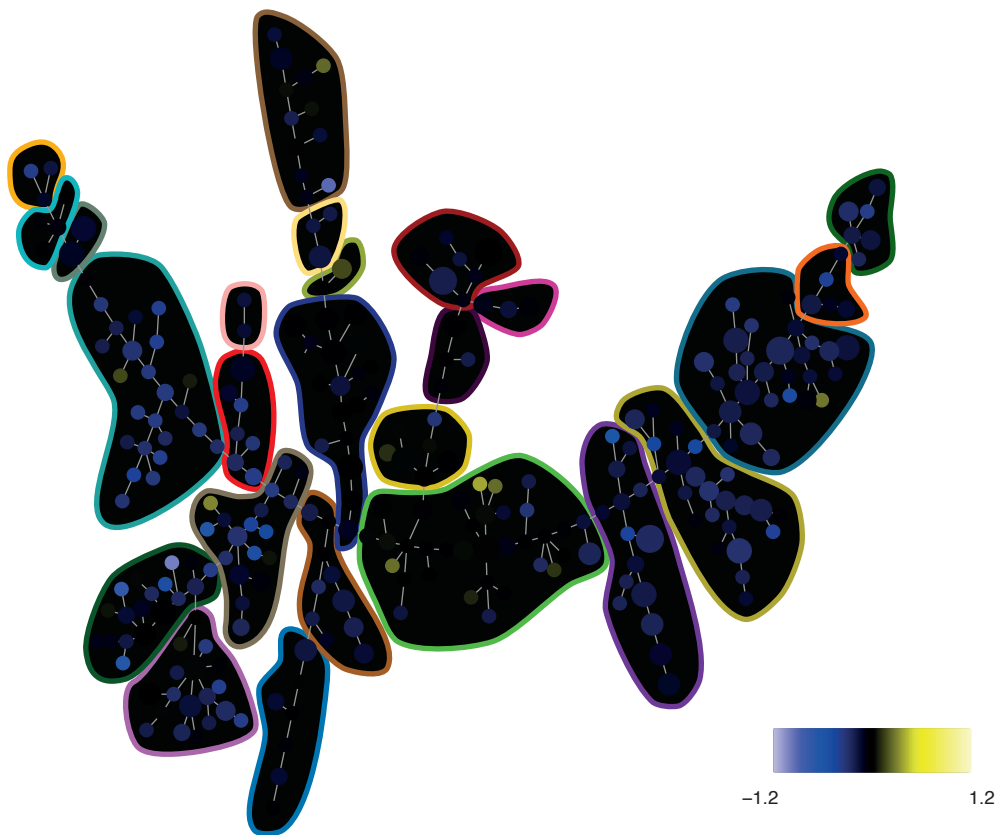


Figure S9C

159-pSTAT3 ---- JAKi+Unstim vs Ref Ratio

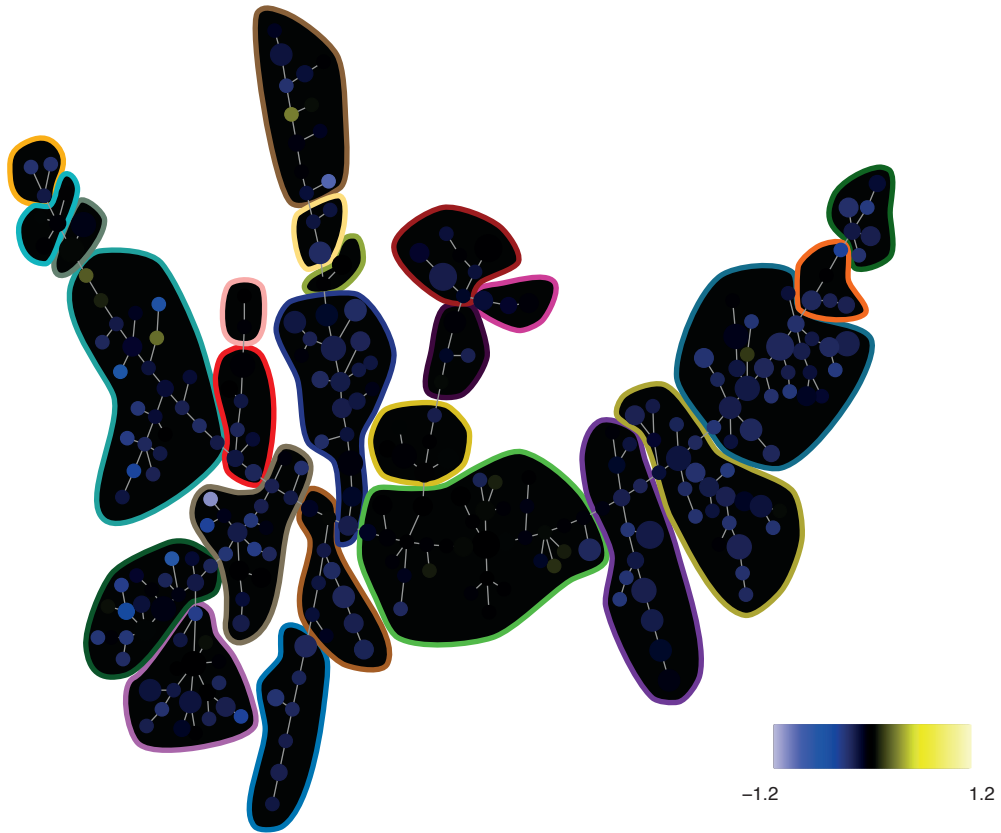


Figure S9C

164-pSLP-76 ---- JAKi+GCSF vs Ref Ratio

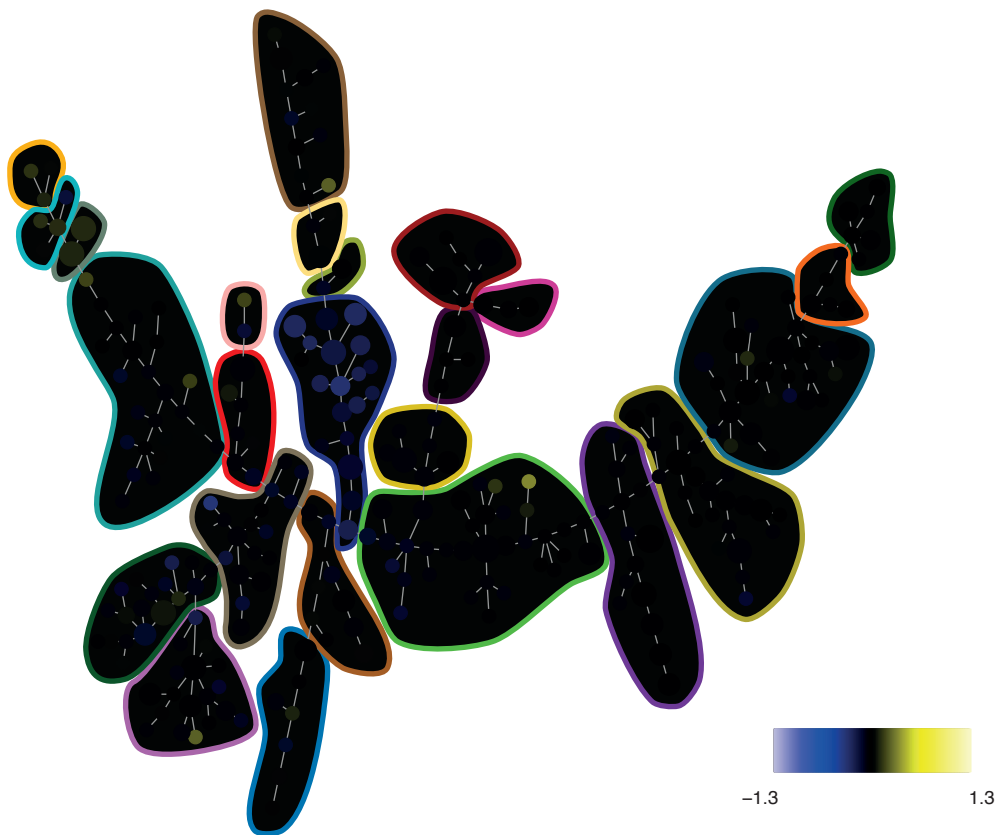


Figure S9C

164-pSLP-76 ---- JAKi+Unstim vs Ref Ratio

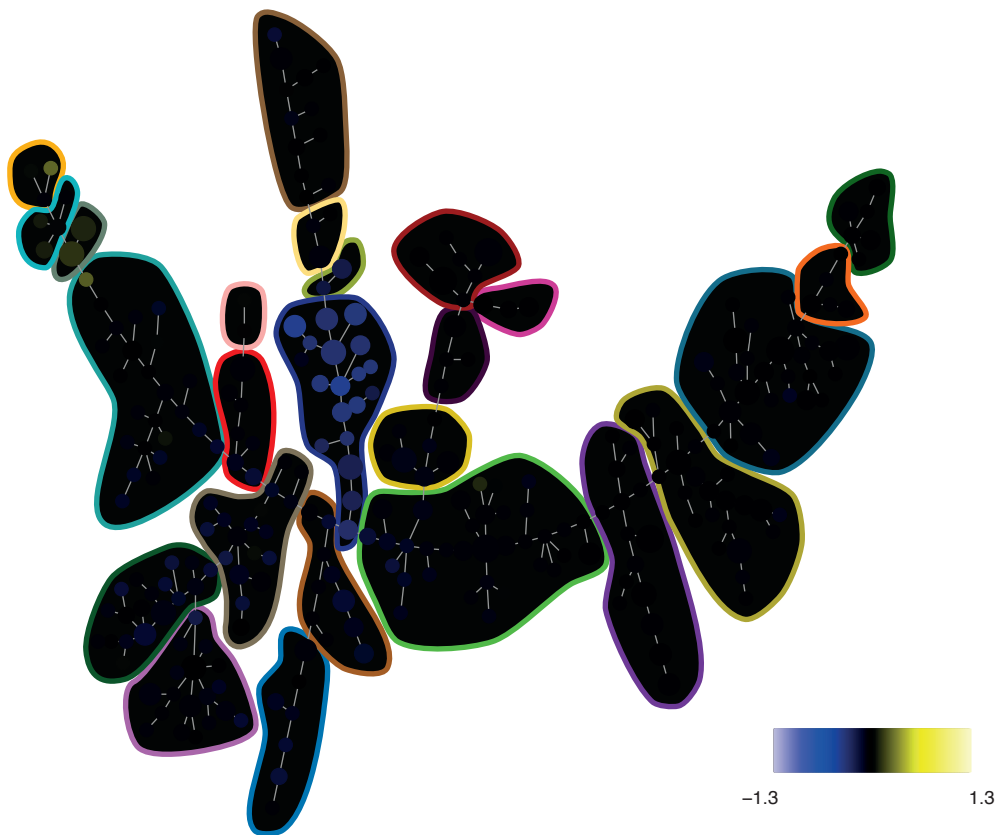


Figure S9C

165-pNFkB ---- JAKi+GCSF vs Ref Ratio

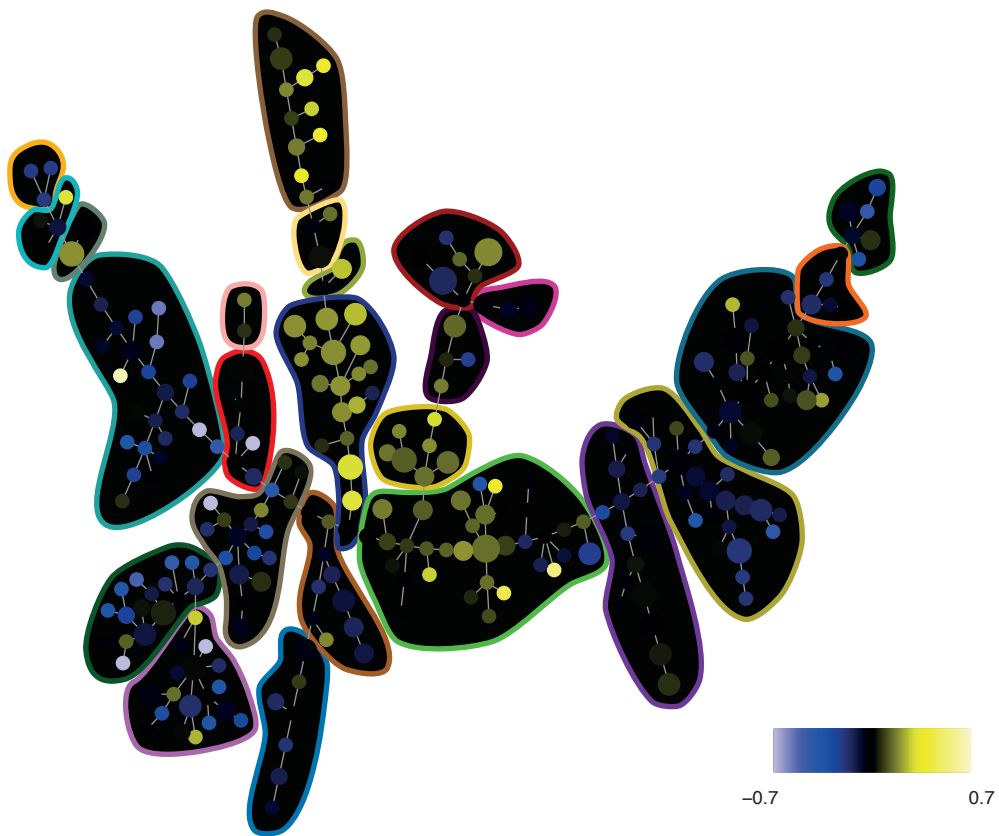


Figure S9C

165-pNFkB ---- JAKi+Unstim vs Ref Ratio

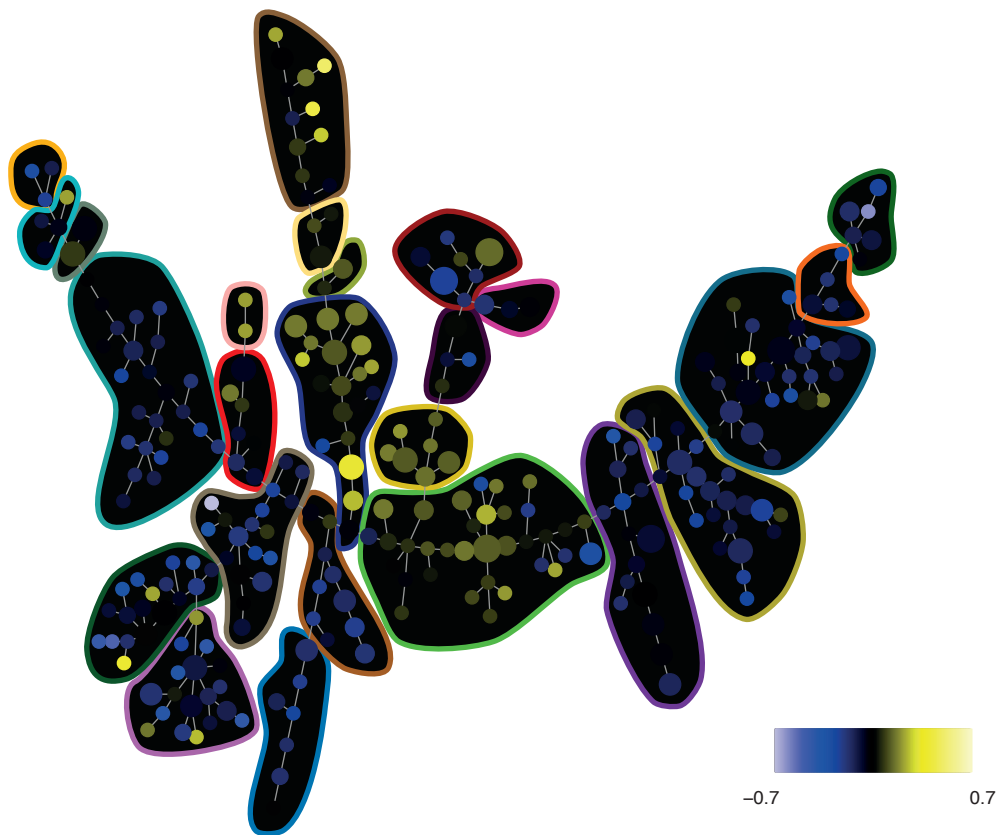


Figure S9C

166-IkBalpha ---- JAKi+GCSF vs Ref Ratio

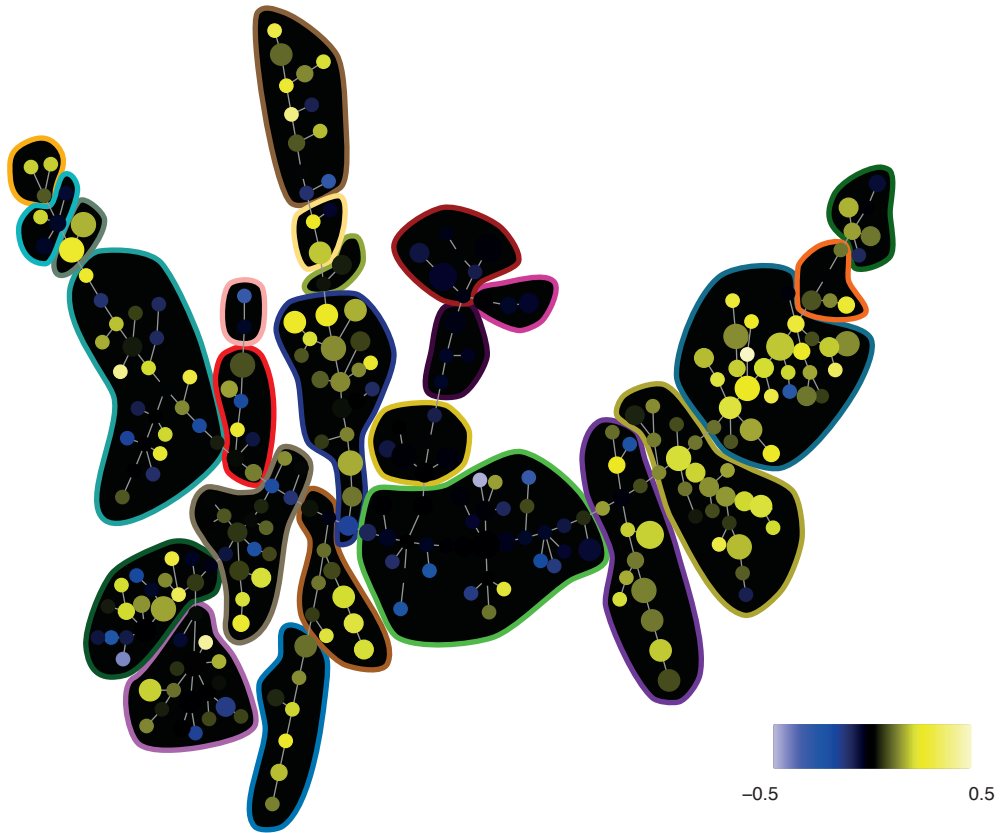


Figure S9C

166-lkBalpha ---- JAKi+Unstim vs Ref Ratio

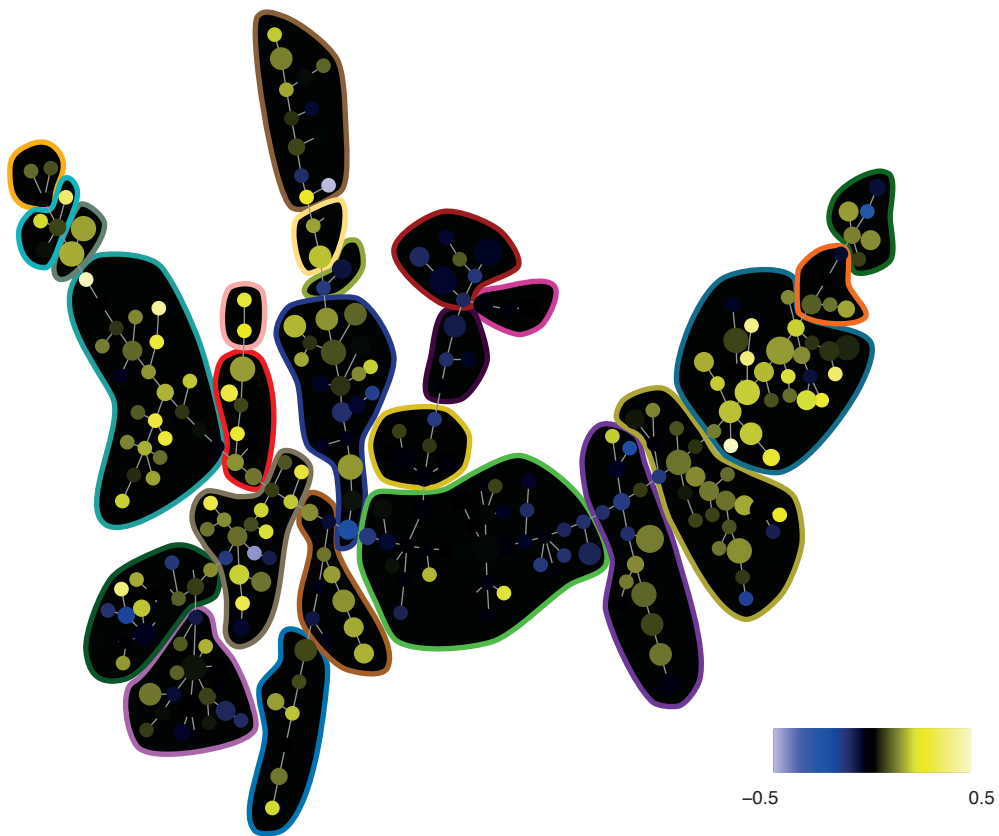


Figure S9C

168-pH3 ---- JAKi+GCSF vs Ref Ratio

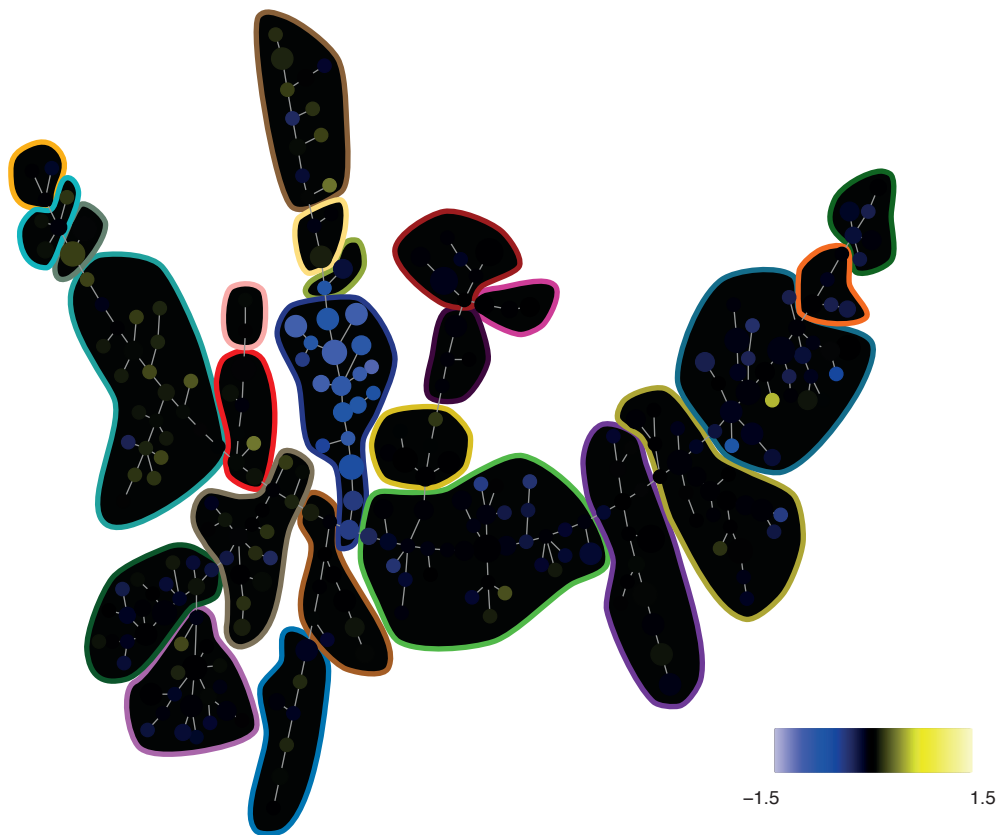


Figure S9C

168-pH3 ---- JAKi+Unstim vs Ref Ratio

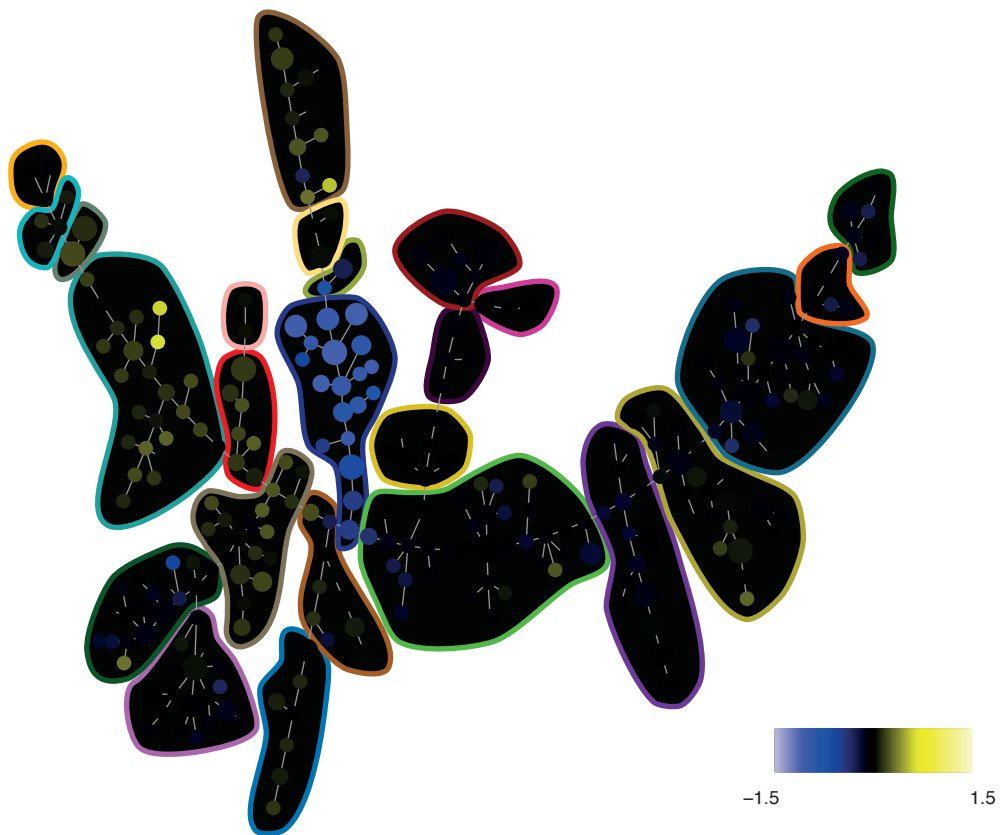


Figure S9C

169-pP38 ---- JAKi+GCSF vs Ref Ratio

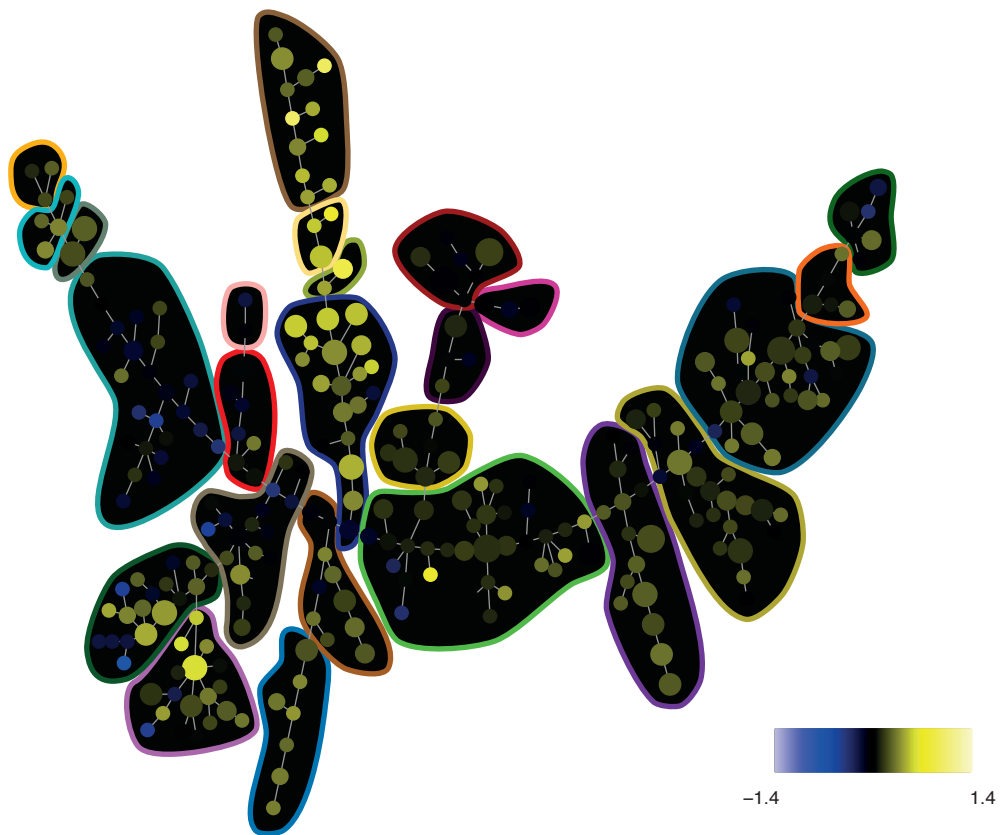


Figure S9C

169-pP38 ---- JAKi+Unstim vs Ref Ratio

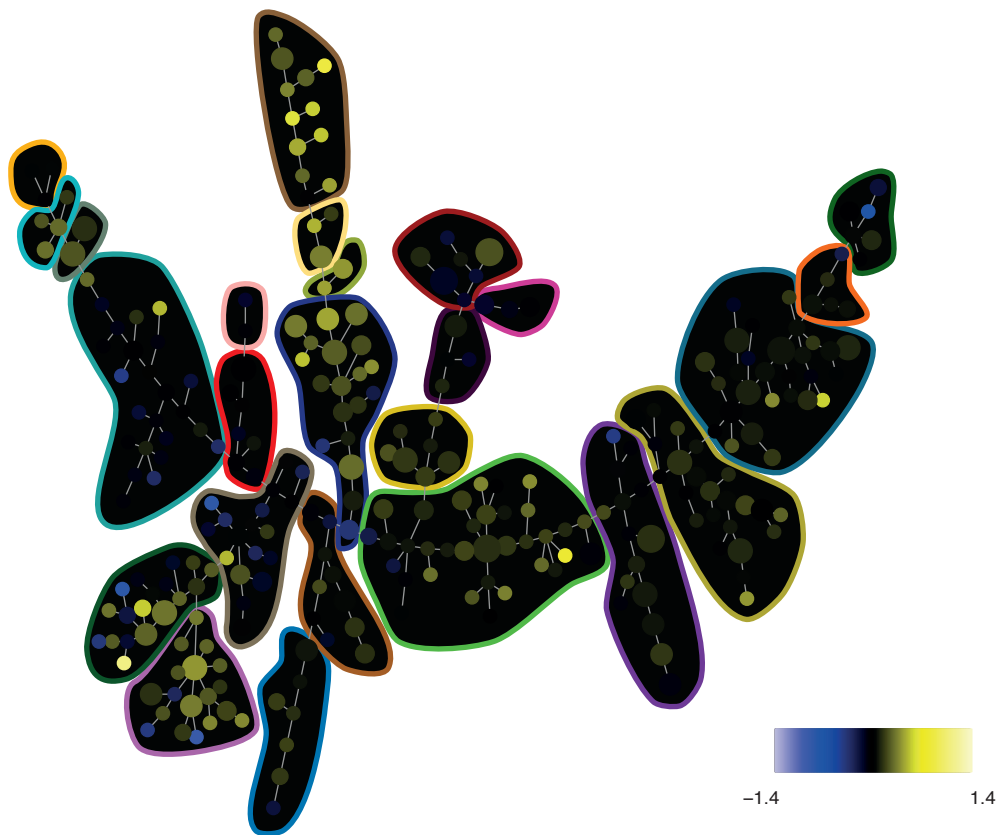


Figure S9C

171-pBtk/Itk ---- JAKi+GCSF vs Ref Ratio

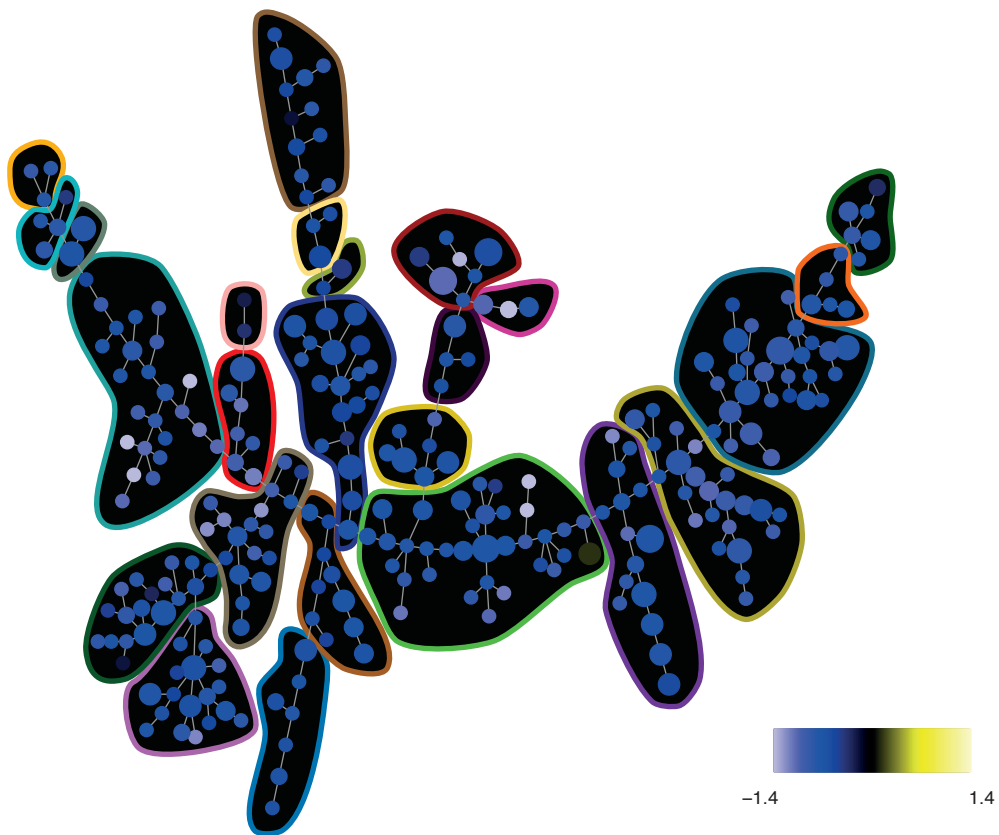


Figure S9C

171-pBtk/Itk ---- JAKi+Unstim vs Ref Ratio

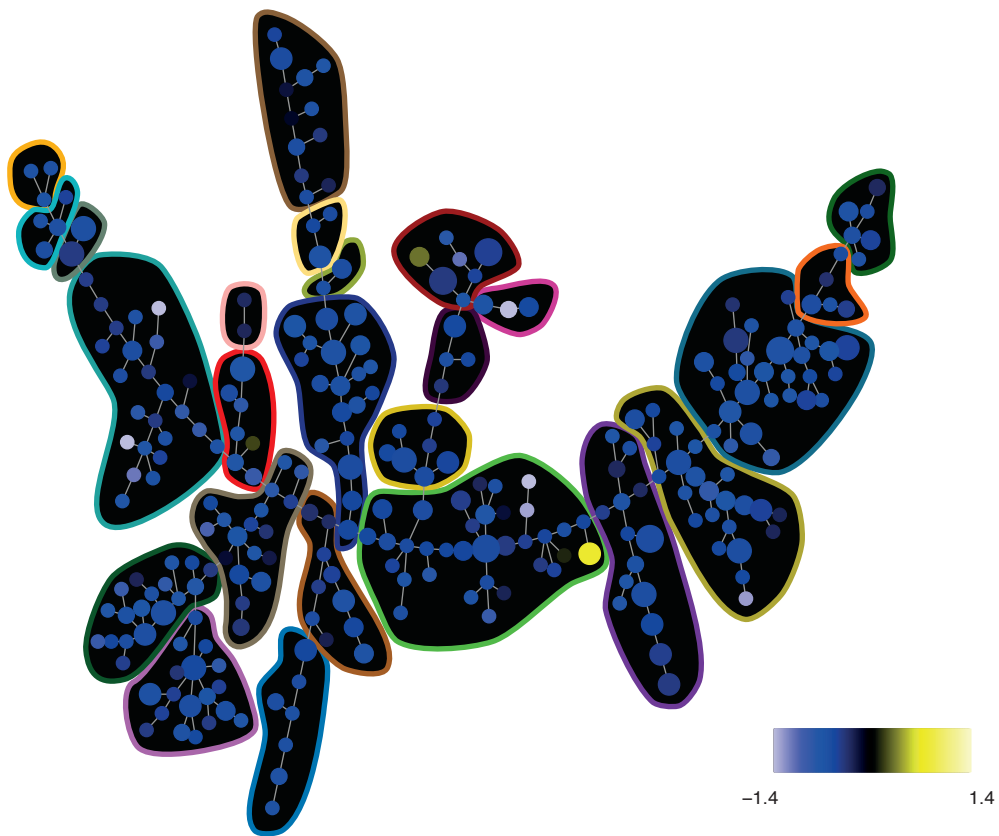


Figure S9C

172-pS6 ---- JAKi+GCSF vs Ref Ratio

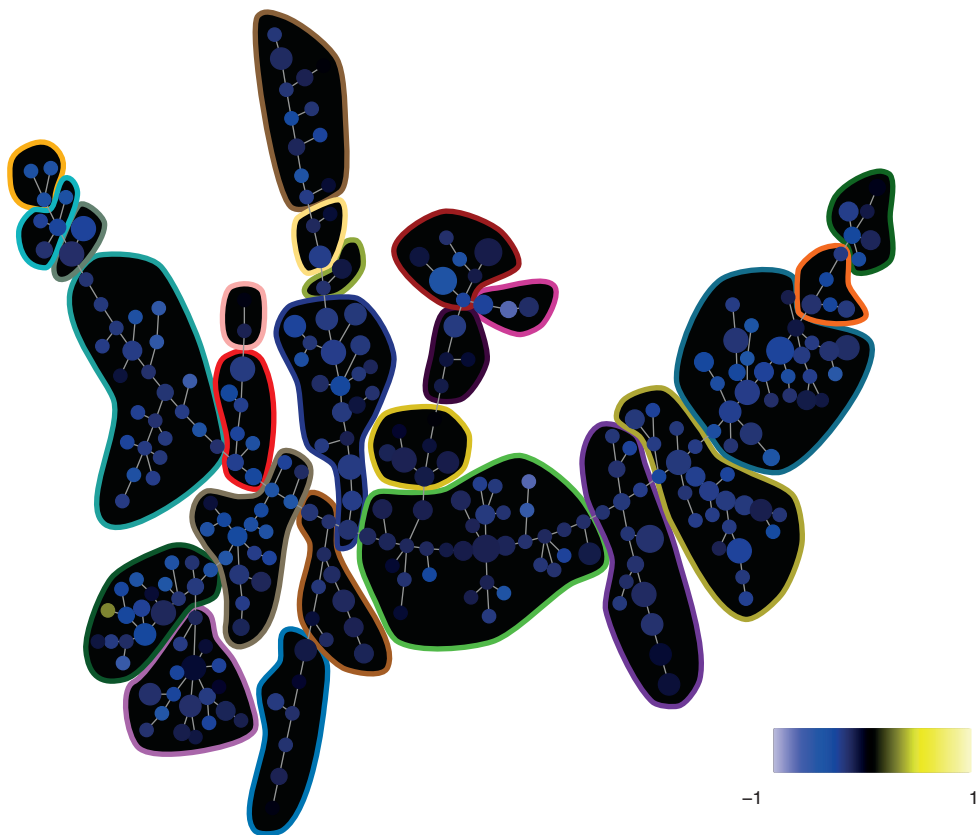


Figure S9C

172-pS6 ---- JAKi+Unstim vs Ref Ratio

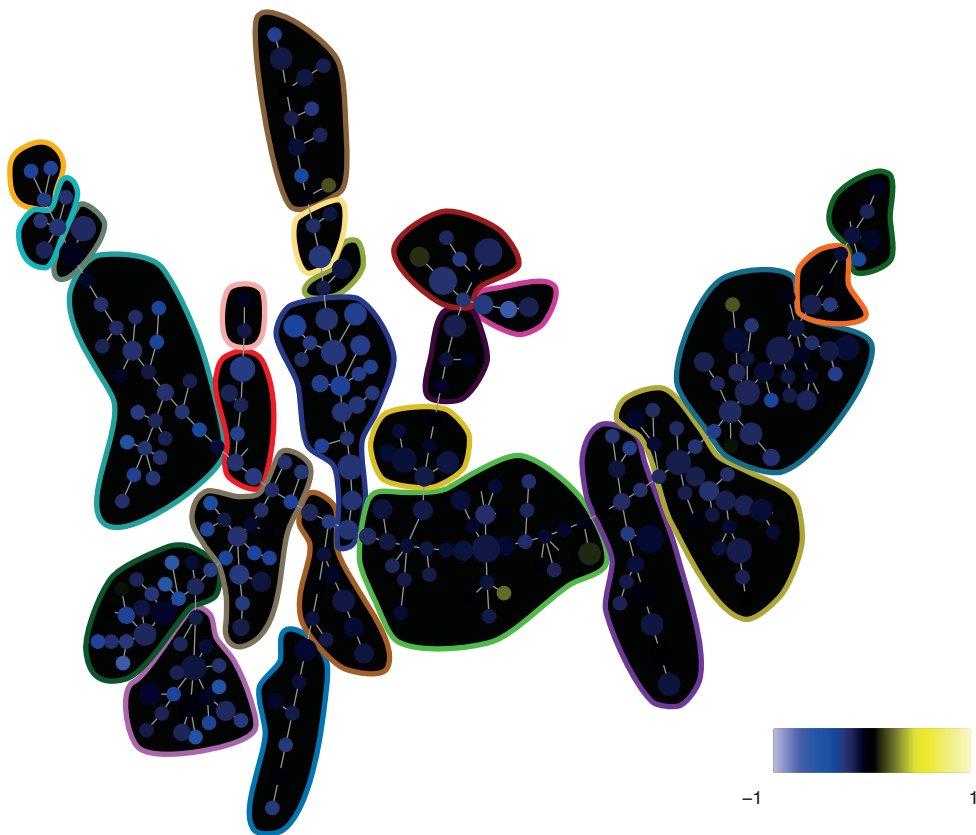


Figure S9C

174-pSrcFK ---- JAKi+GCSF vs Ref Ratio

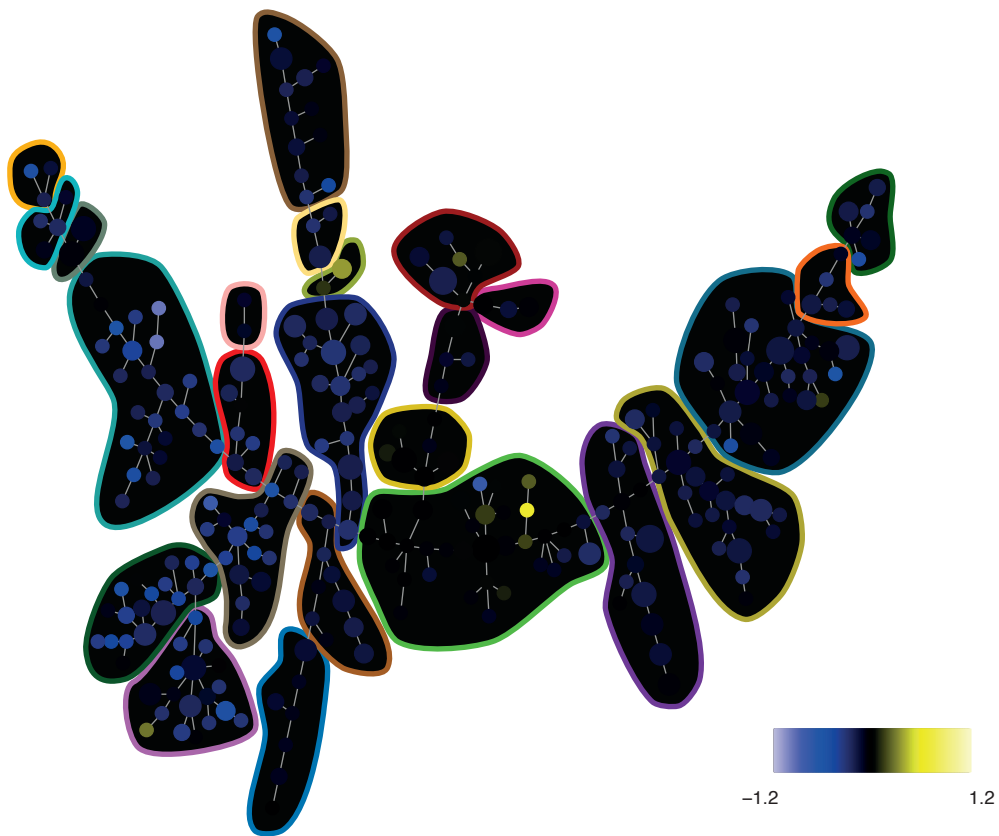


Figure S9C

174-pSrcFK ---- JAKi+Unstim vs Ref Ratio

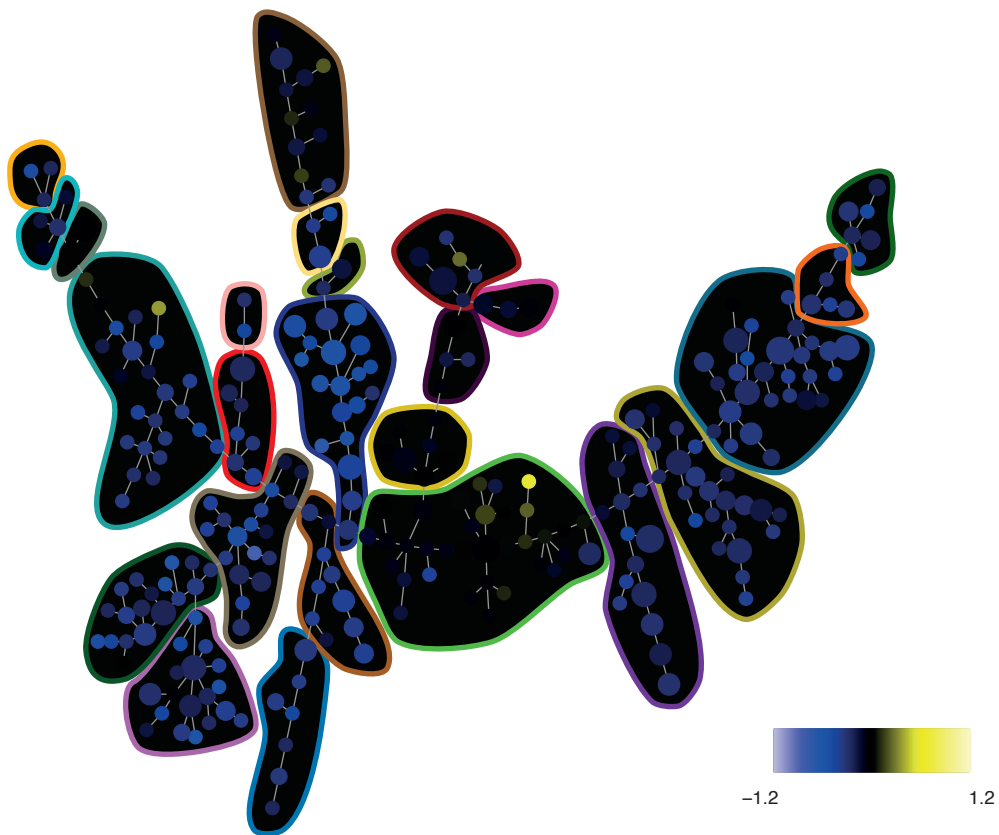


Figure S9C

175-pCrkL ---- JAKi+GCSF vs Ref Ratio

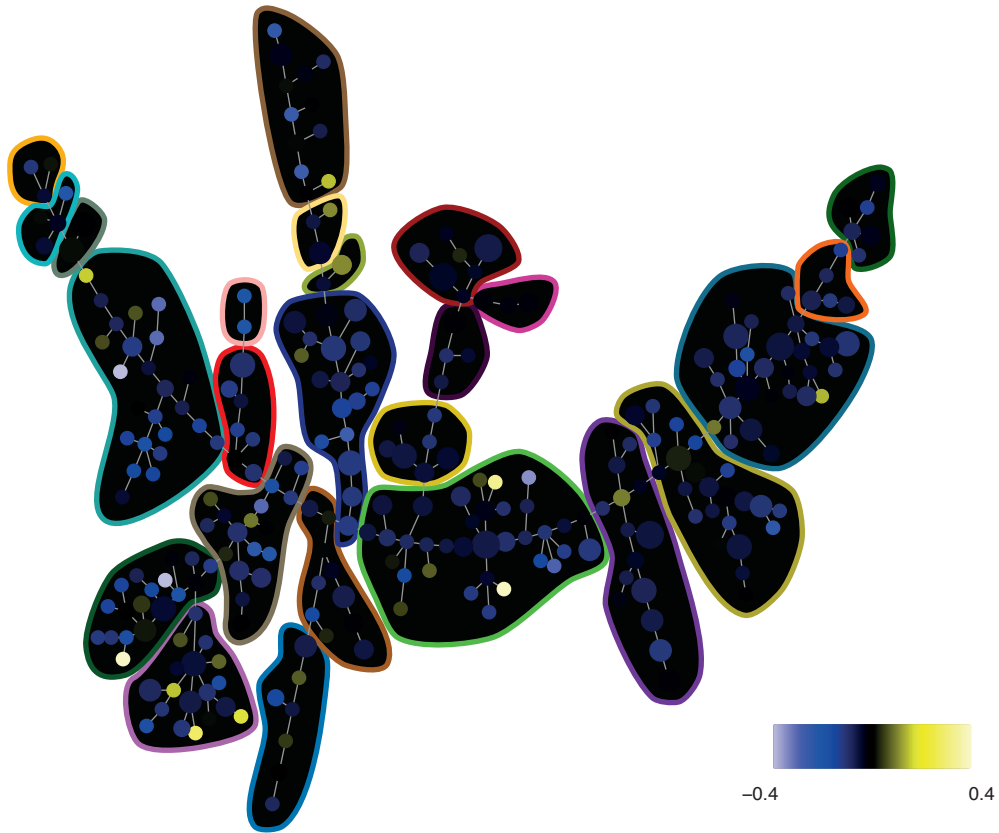


Figure S9C

175-pCrkL ---- JAKi+Unstim vs Ref Ratio

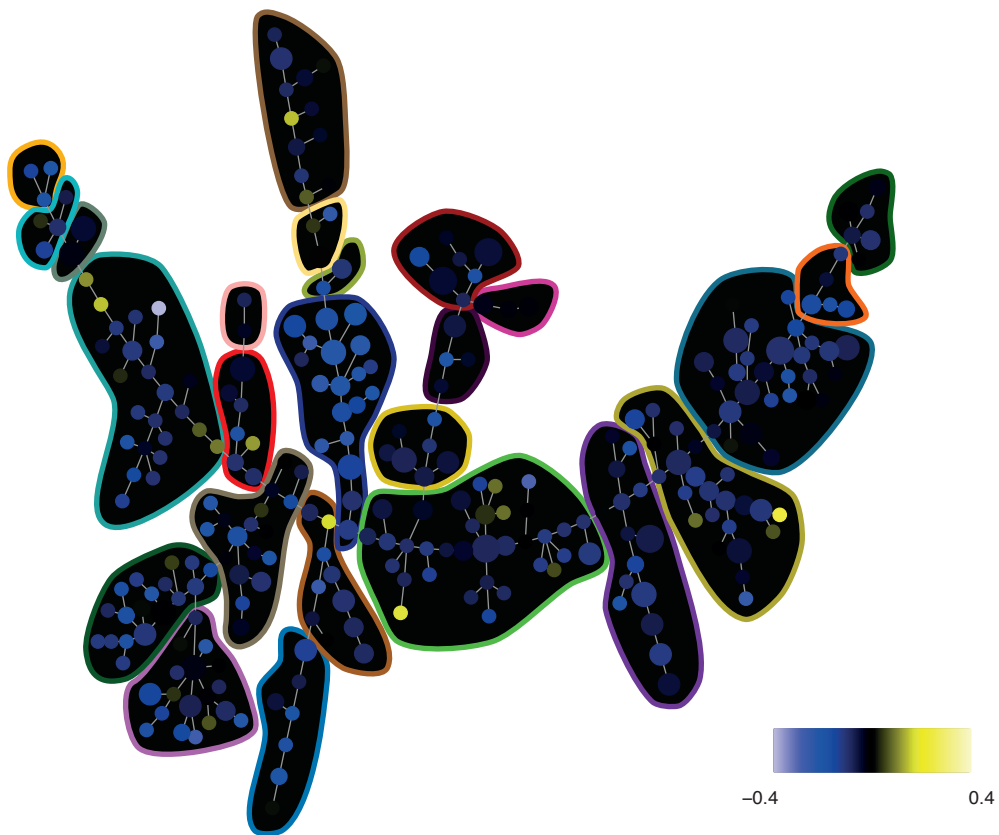


Figure S9C

176-pCREB ---- JAKi+GCSF vs Ref Ratio

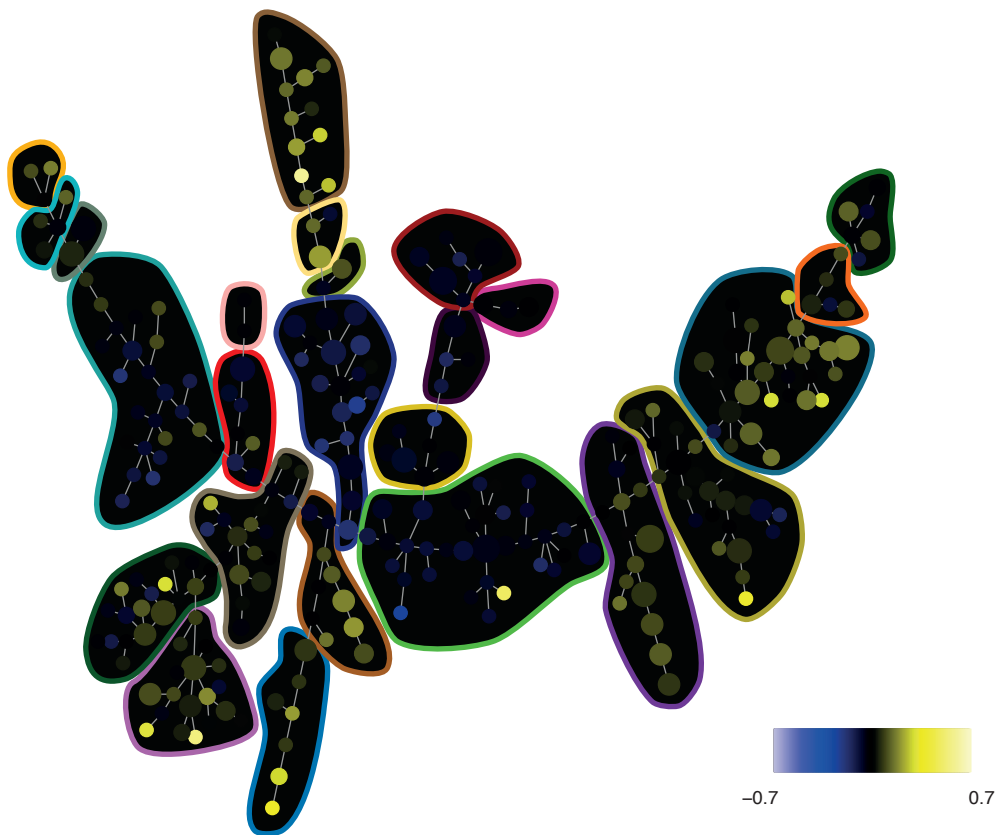


Figure S9C

176-pCREB ---- JAKi+Unstim vs Ref Ratio

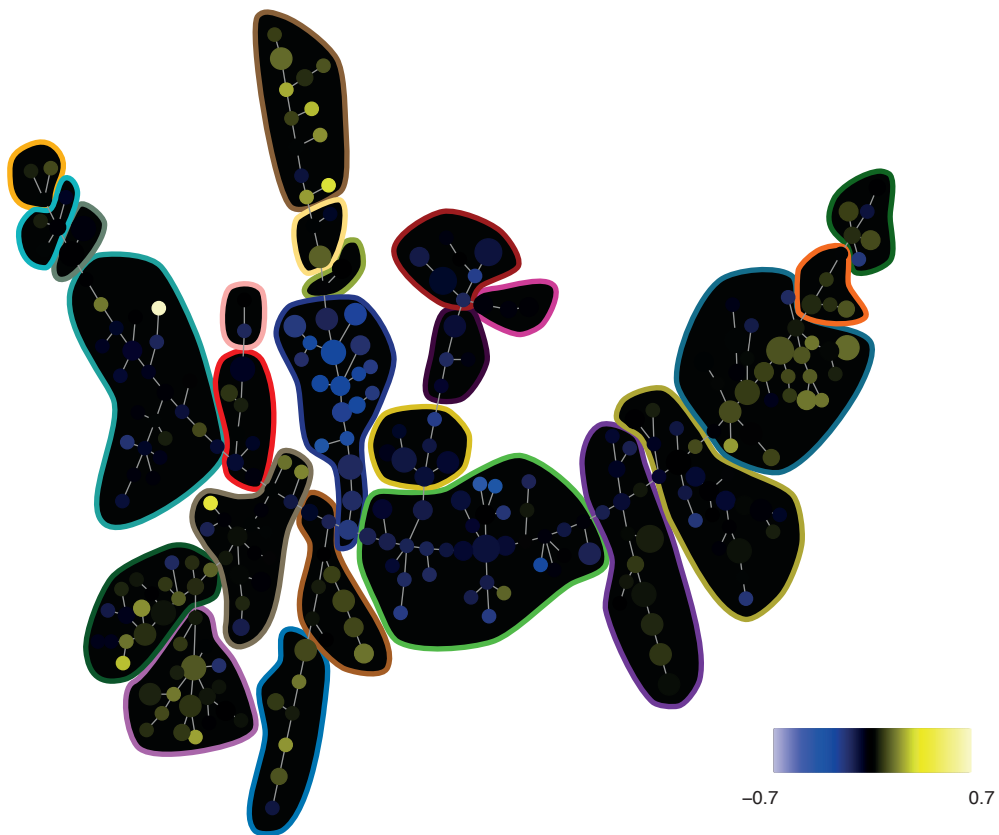


Figure S9D

141-pPLCgamma2 ---- U0126+PMAiono vs Ref Ratio

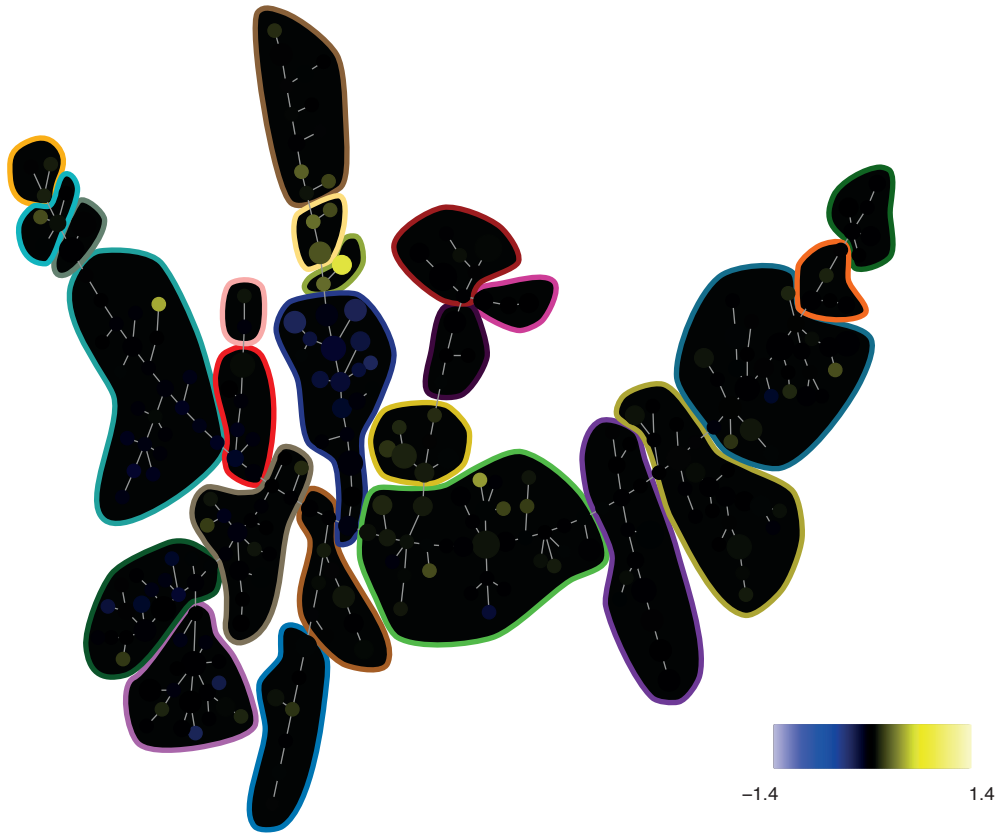


Figure S9D

141-pPLCgamma2 --- U0126+Unstim vs Ref Ratio

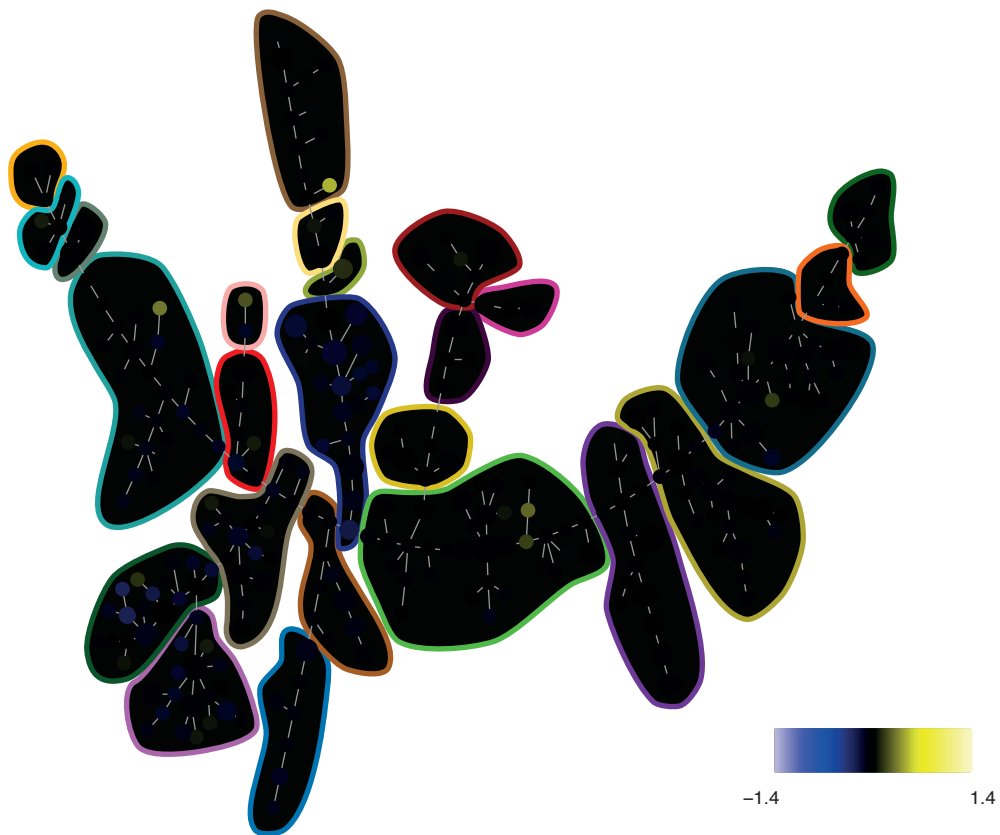


Figure S9D

150-pSTAT5 --- U0126+PMAiono vs Ref Ratio

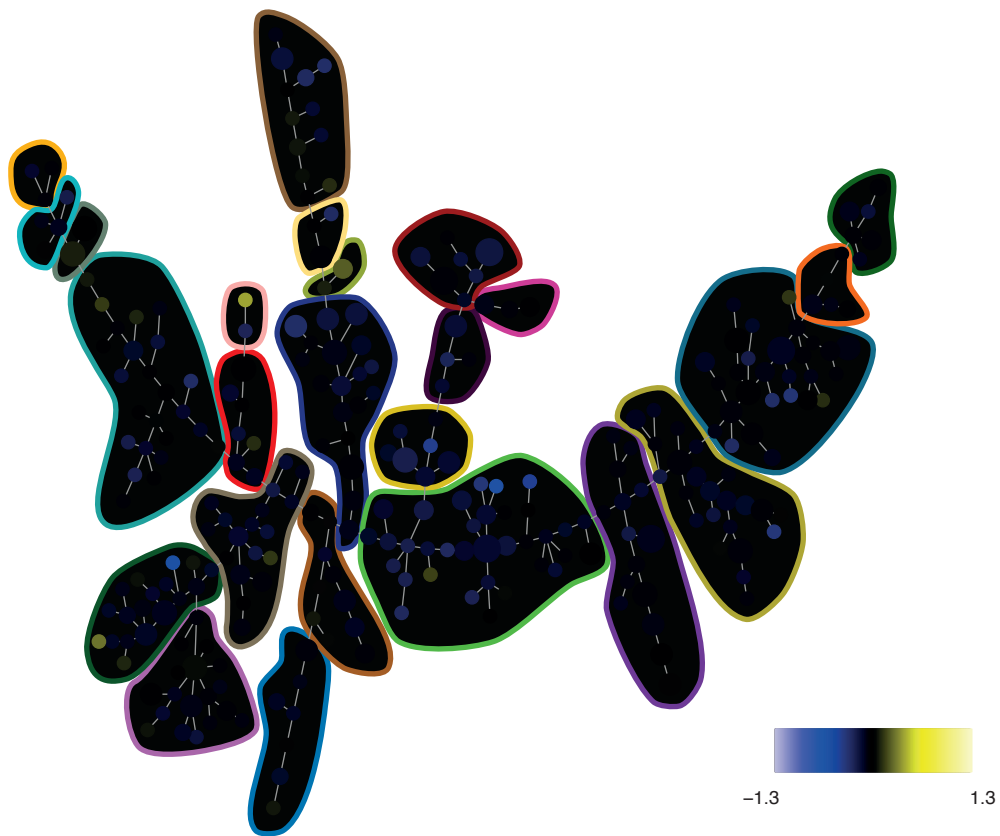


Figure S9D

150-pSTAT5 ---- U0126+Unstim vs Ref Ratio

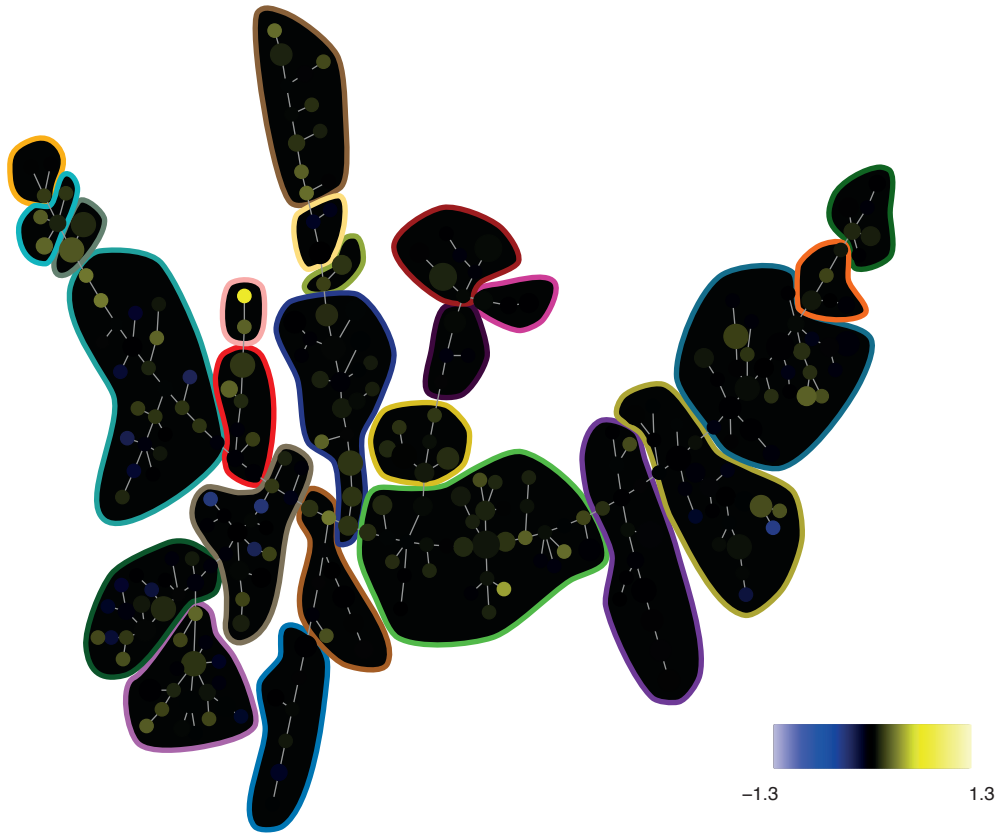


Figure S9D

151-pERK1/2 ---- U0126+PMAiono vs Ref Ratio

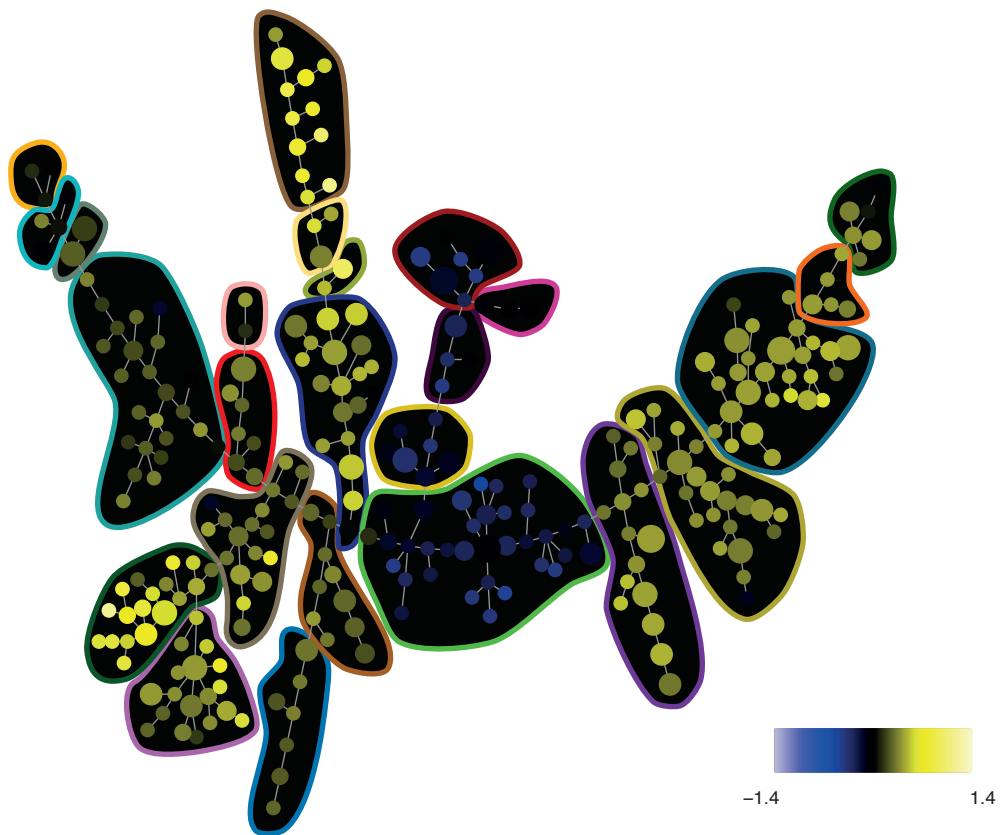


Figure S9D

151-pERK1/2 --- U0126+Unstim vs Ref Ratio

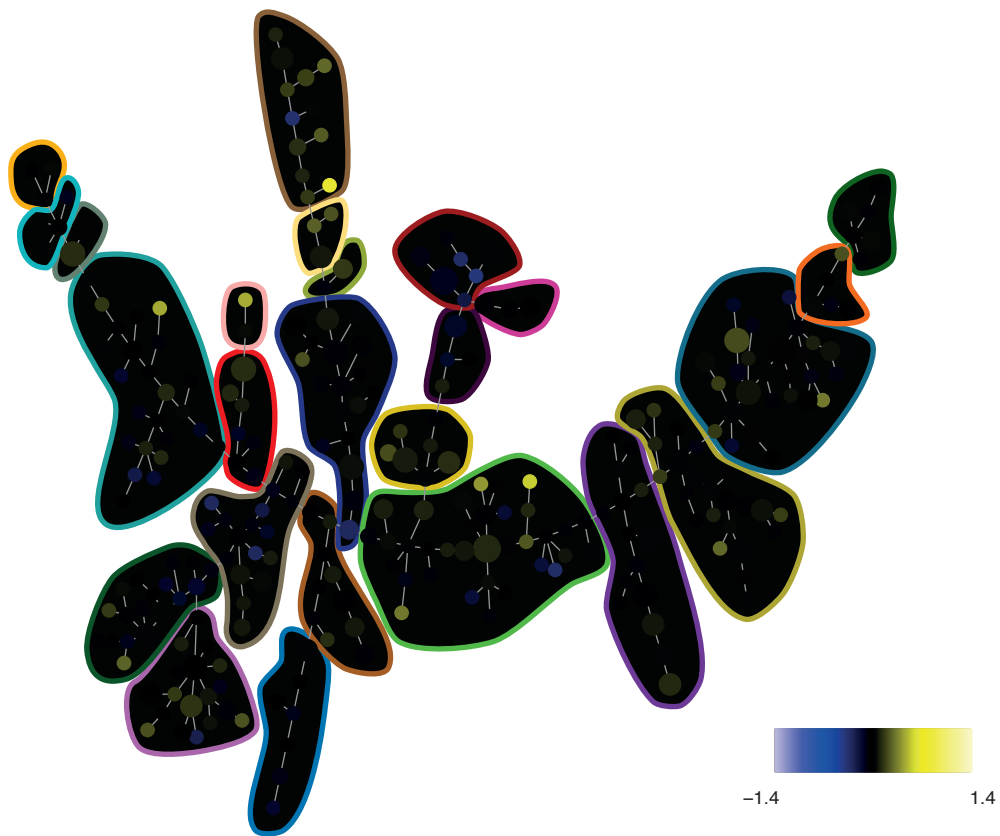


Figure S9D

152-Ki67 ---- U0126+PMAiono vs Ref Ratio

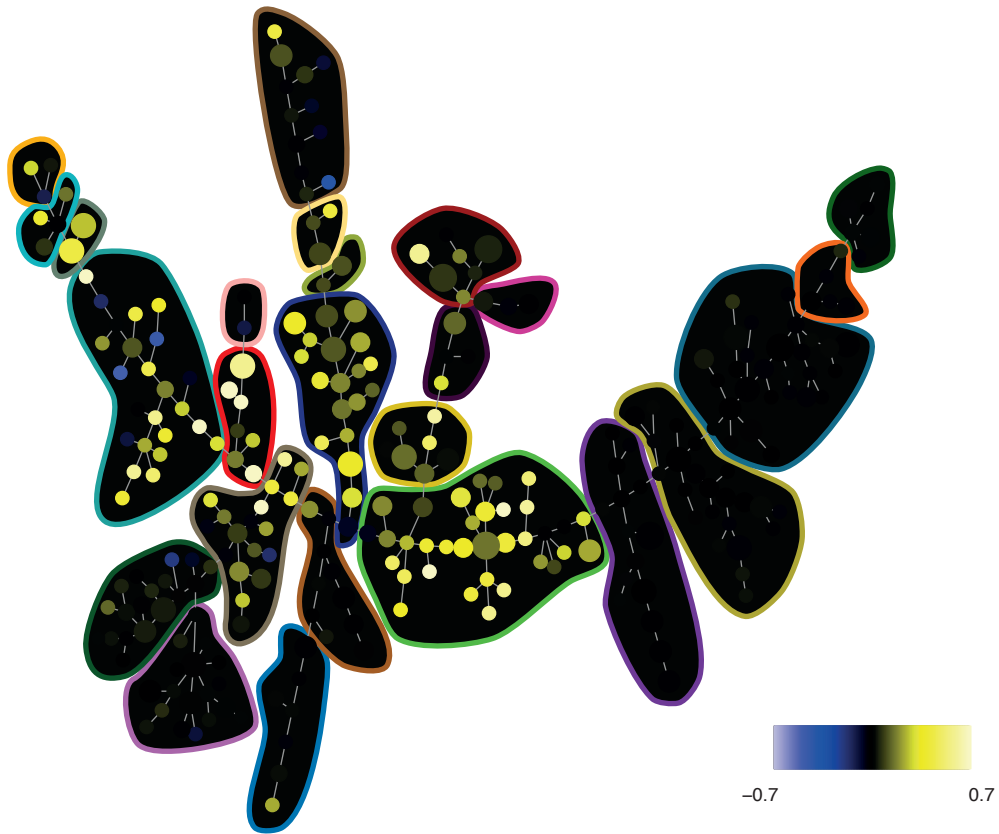


Figure S9D

152-Ki67 ---- U0126+Unstim vs Ref Ratio

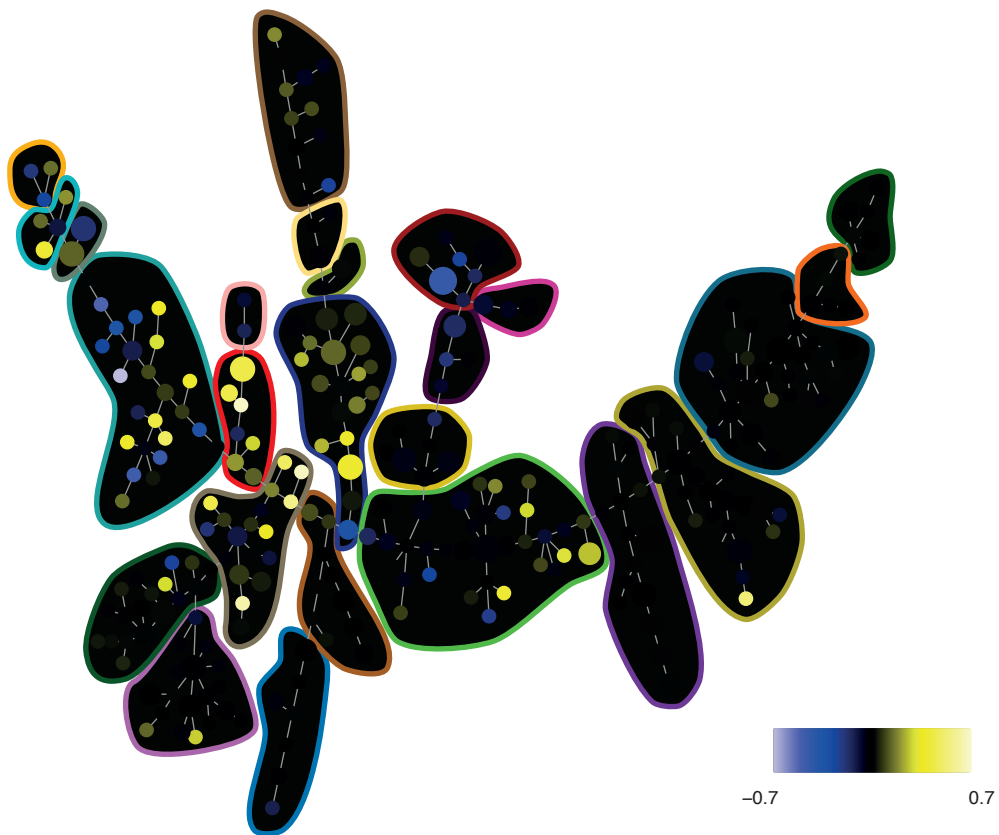


Figure S9D

153-pMAPKAPK2 ---- U0126+PMAiono vs Ref Ratio



Figure S9D

153-pMAPKAPK2 ---- U0126+Unstim vs Ref Ratio

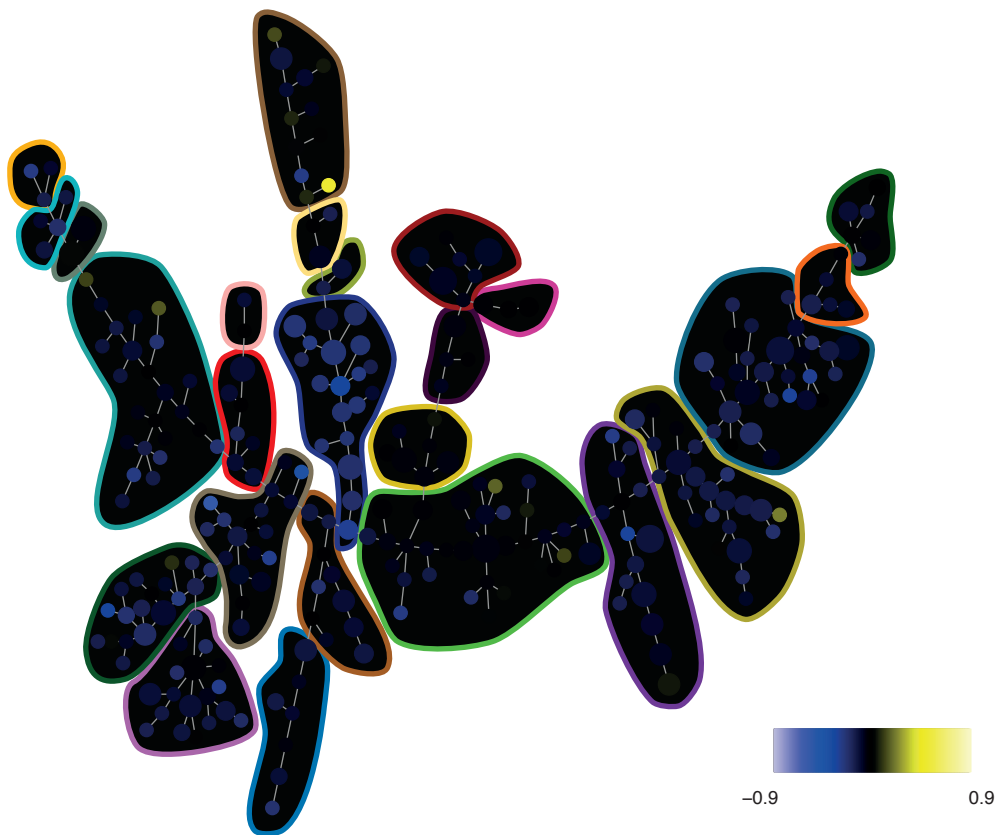


Figure S9D

154-pSHP2 --- U0126+PMAiono vs Ref Ratio

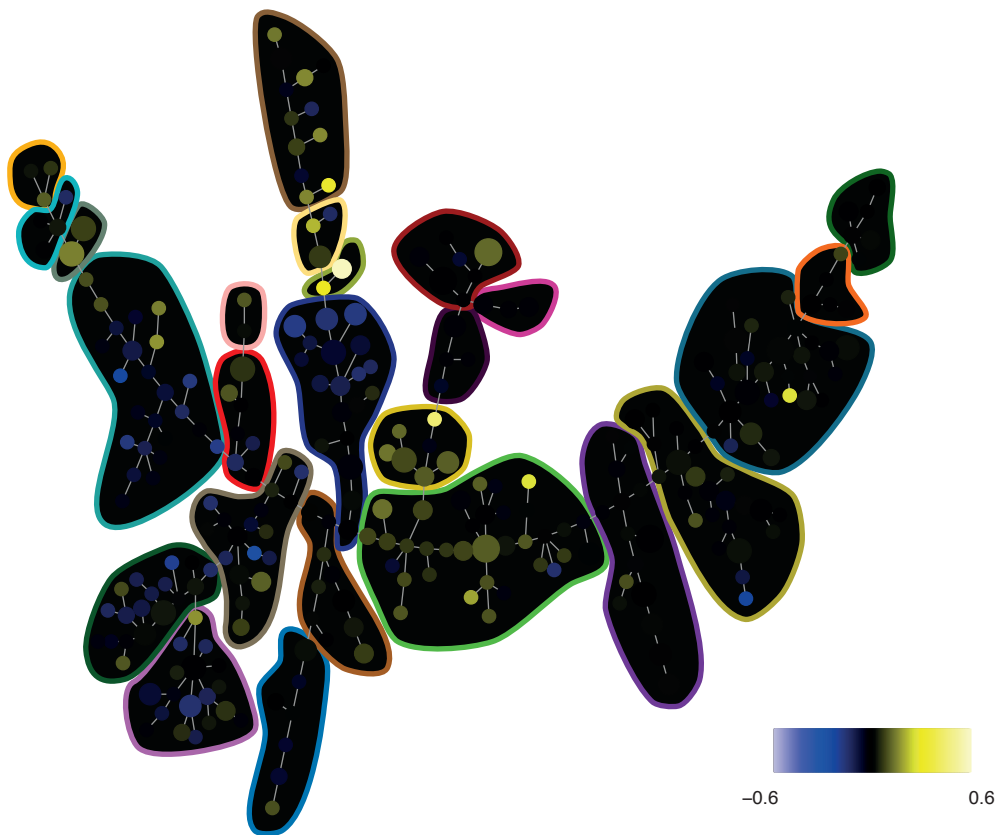


Figure S9D

154-pSHP2 ---- U0126+Unstim vs Ref Ratio

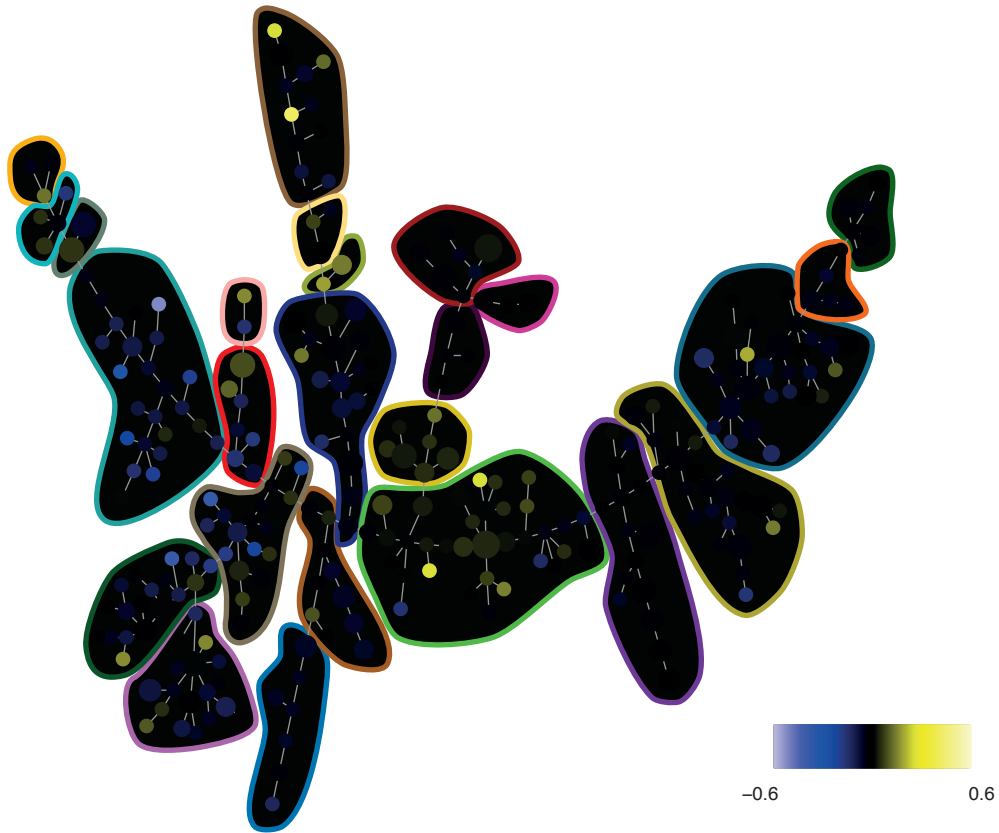


Figure S9D

156-pZAP70/Syk ---- U0126+PMAiono vs Ref Ratio

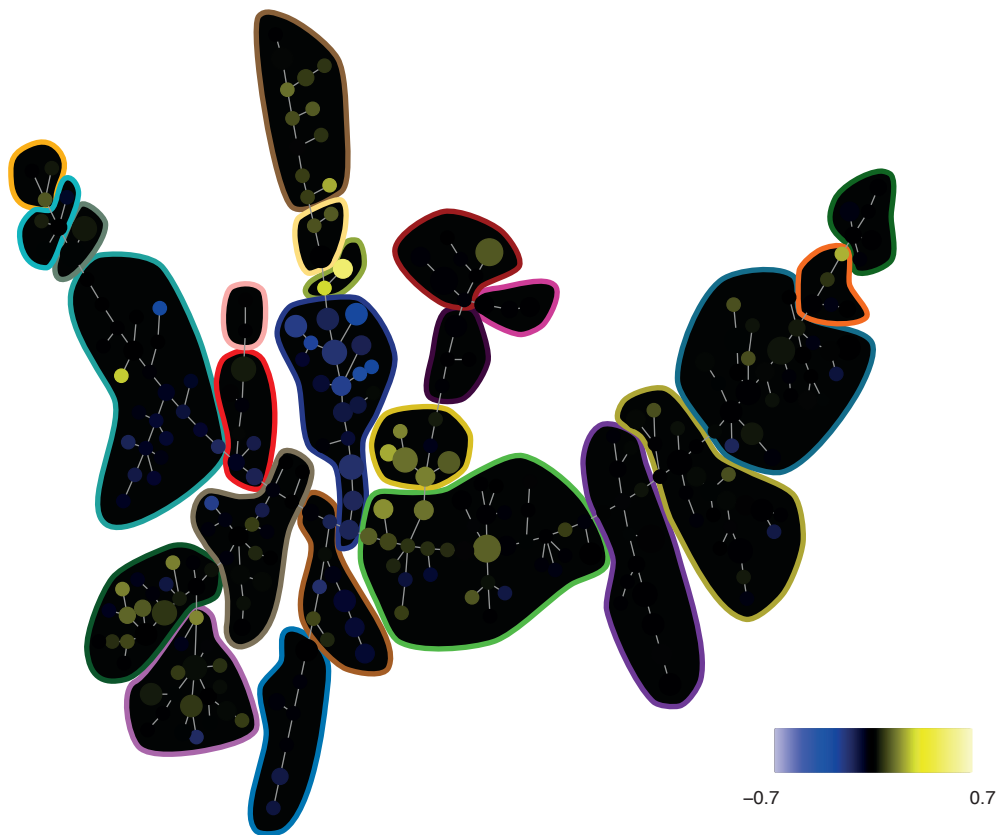


Figure S9D

156-pZAP70/Syk ---- U0126+Unstim vs Ref Ratio

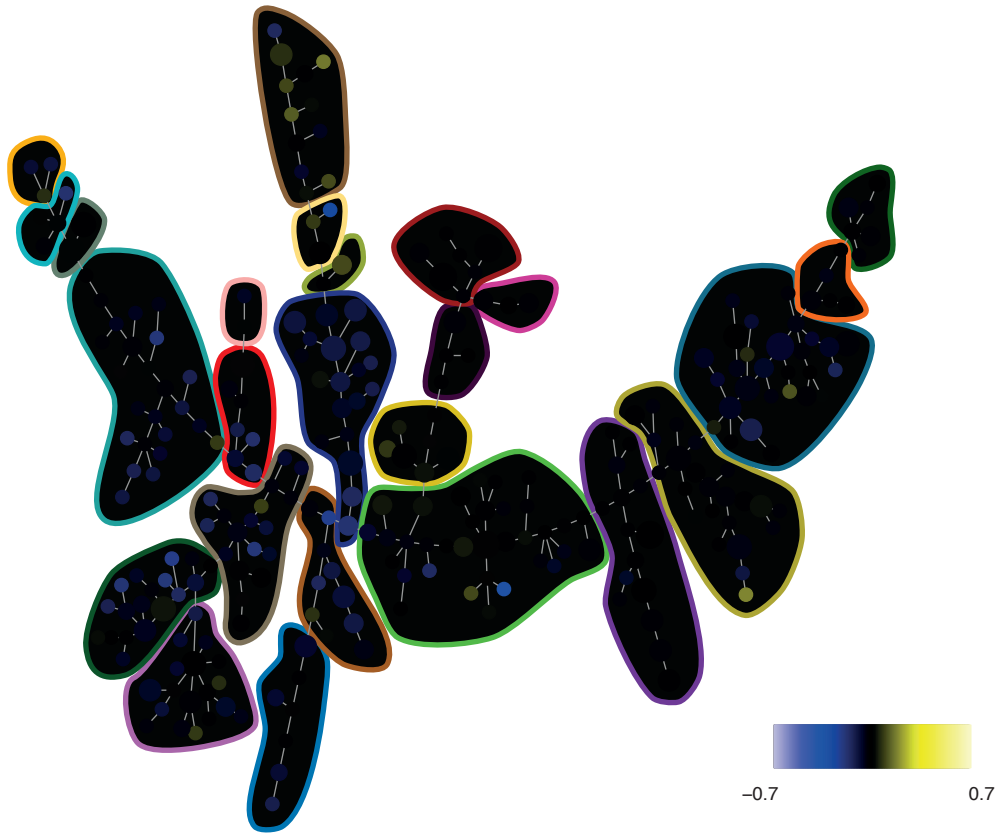


Figure S9D

159-pSTAT3 --- U0126+PMAiono vs Ref Ratio

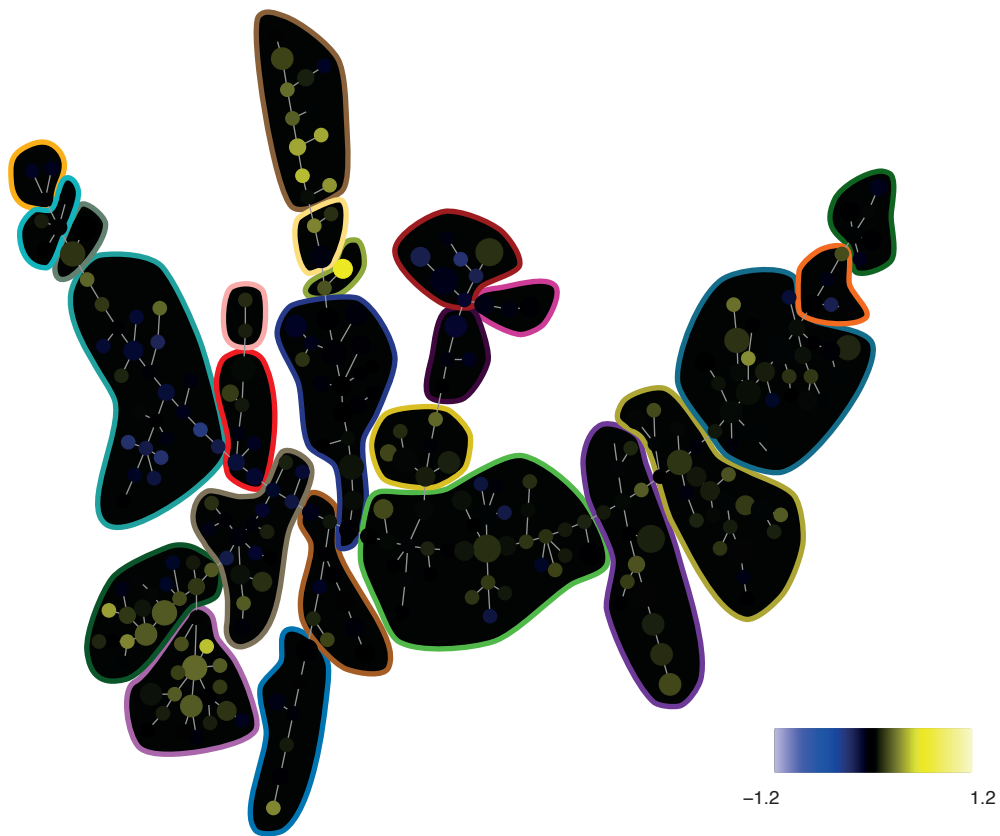


Figure S9D

159-pSTAT3 ---- U0126+Unstim vs Ref Ratio

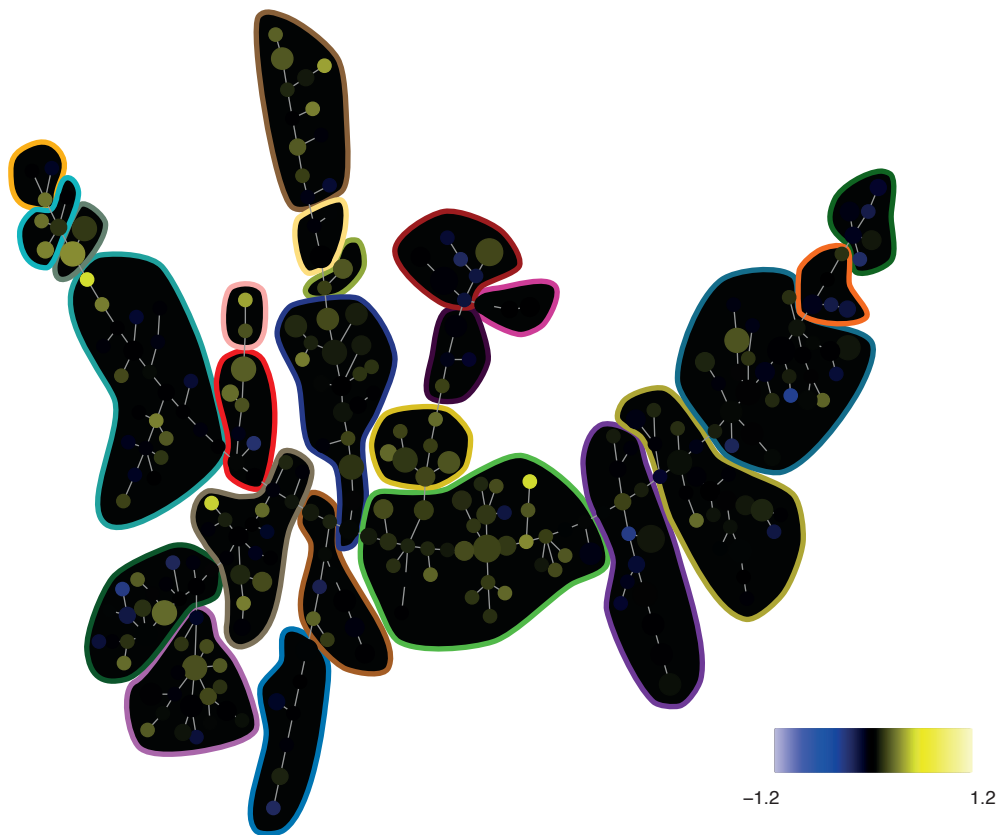


Figure S9D

164-pSLP-76 ---- U0126+PMAiono vs Ref Ratio

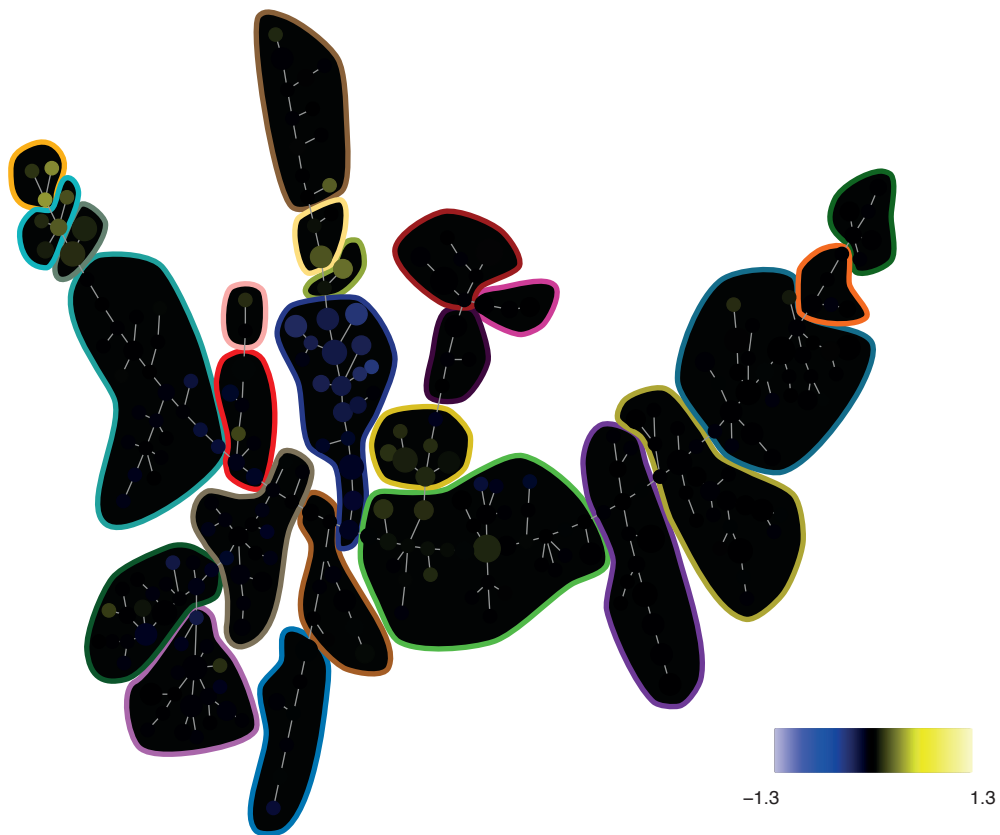


Figure S9D

164-pSLP-76 --- U0126+Unstim vs Ref Ratio

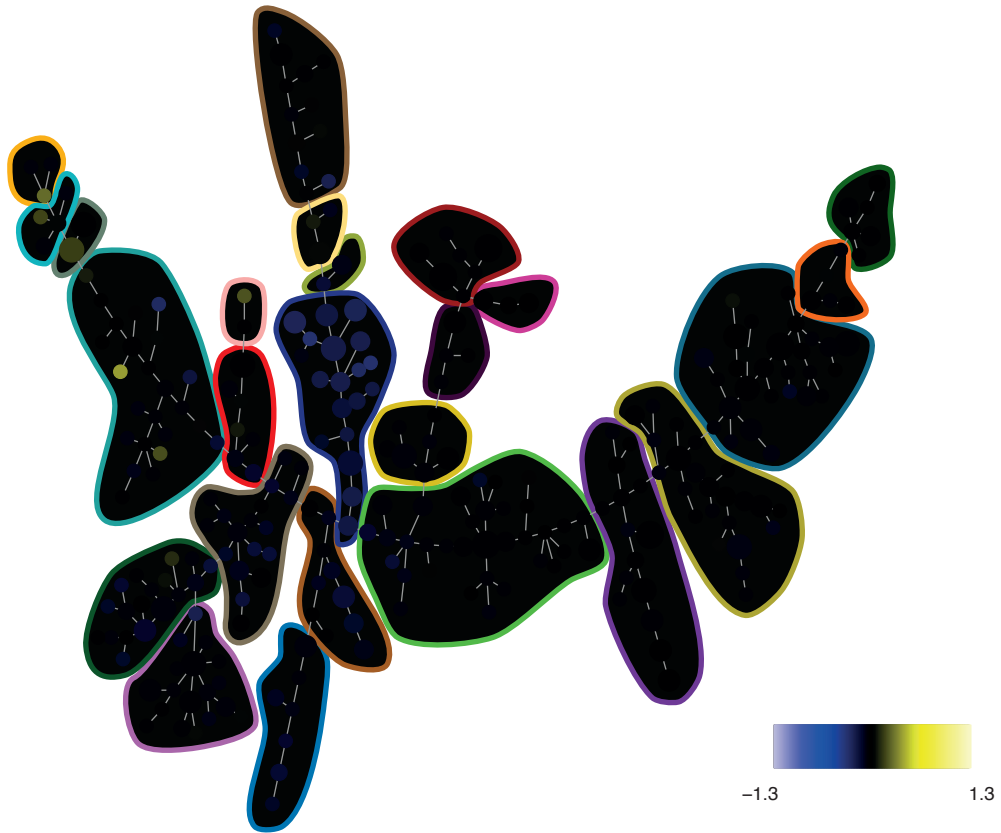


Figure S9D

165-pNFkB ---- U0126+PMAiono vs Ref Ratio



Figure S9D

165-pNFkB ---- U0126+Unstim vs Ref Ratio

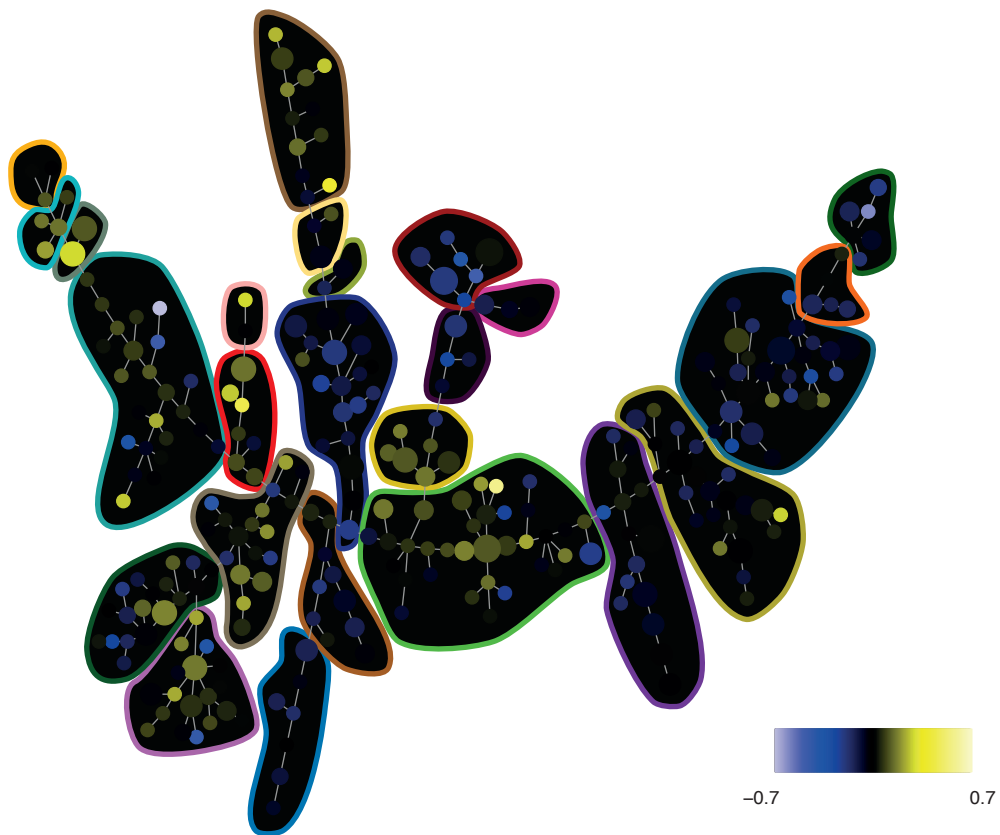


Figure S9D

166-IkBaIpha --- U0126+PMAiono vs Ref Ratio

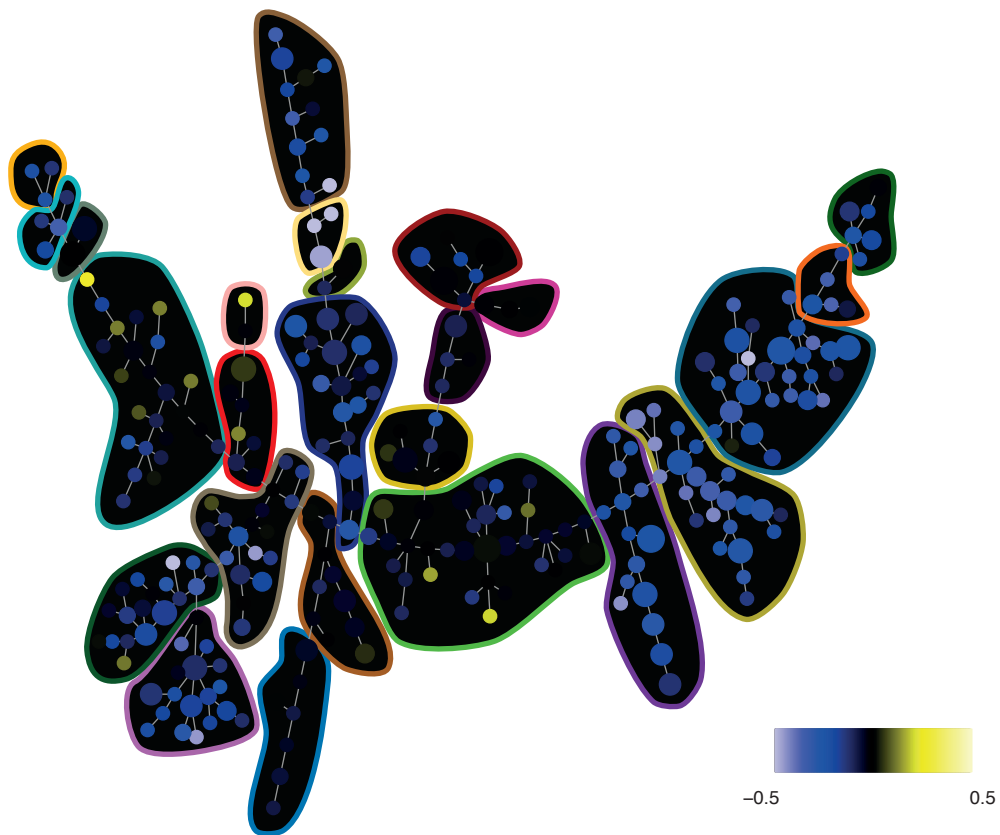


Figure S9D

166-IkBalpha ---- U0126+Unstim vs Ref Ratio

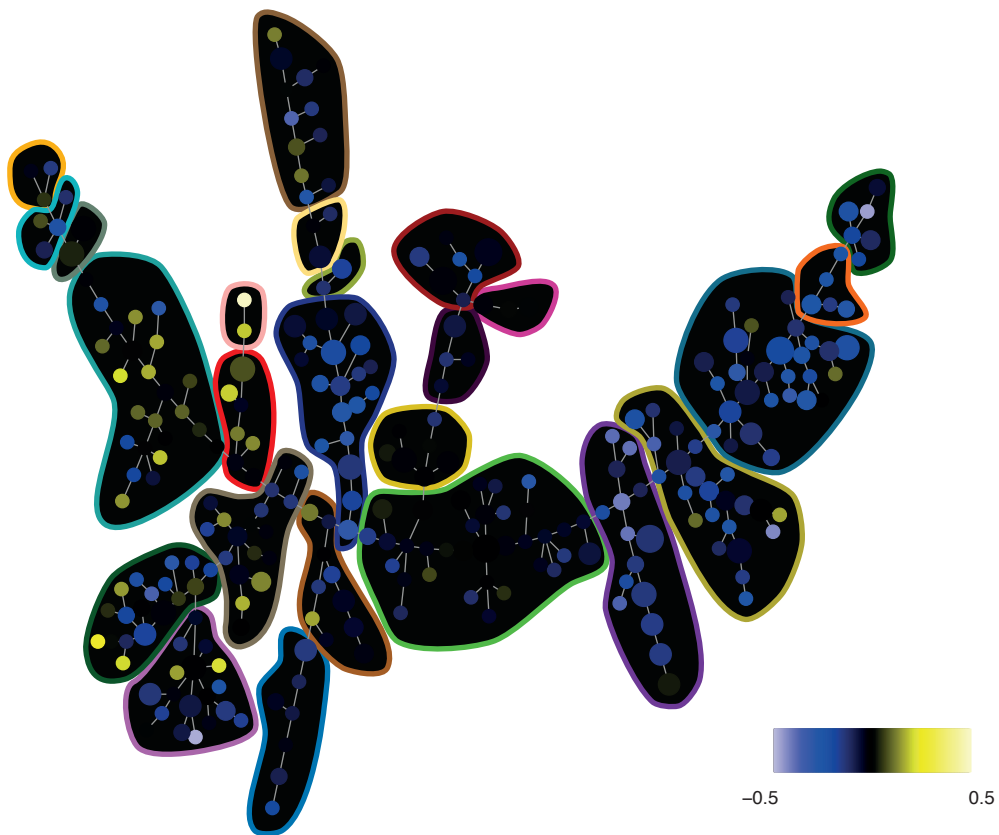


Figure S9D

168-pH3 ---- U0126+PMAiono vs Ref Ratio

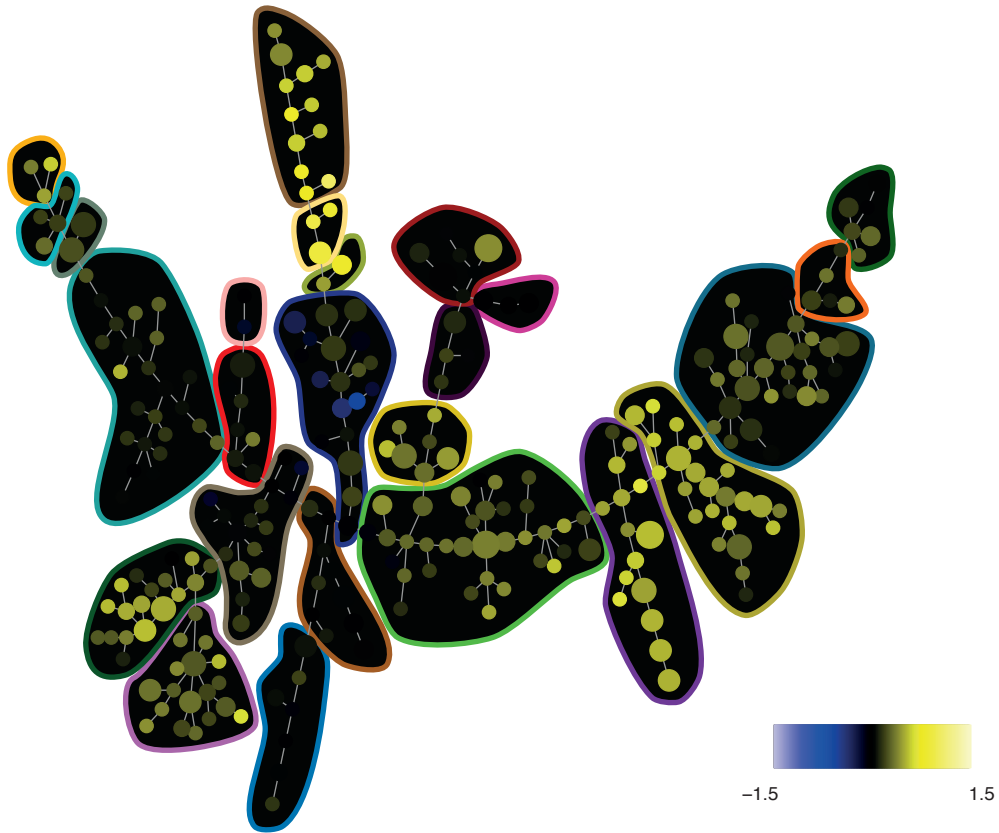


Figure S9D

168-pH3 --- U0126+Unstim vs Ref Ratio

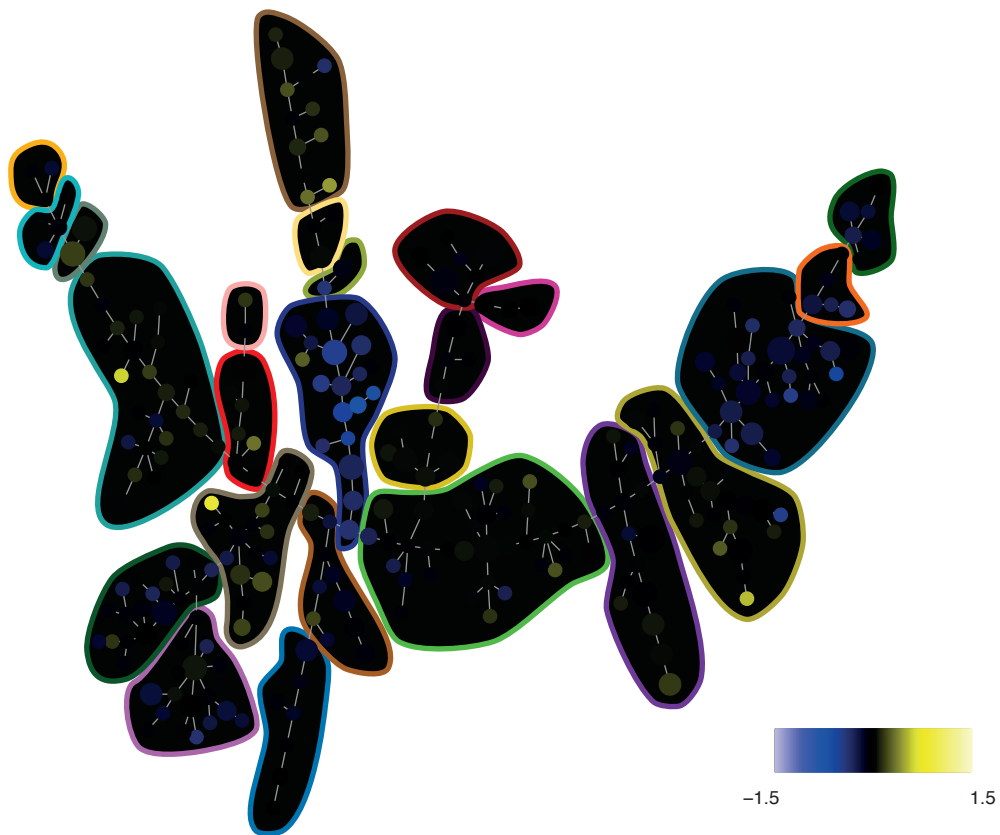


Figure S9D

169-pP38 — U0126+PMAiono vs Ref Ratio



Figure S9D

169-pP38 ---- U0126+Unstim vs Ref Ratio

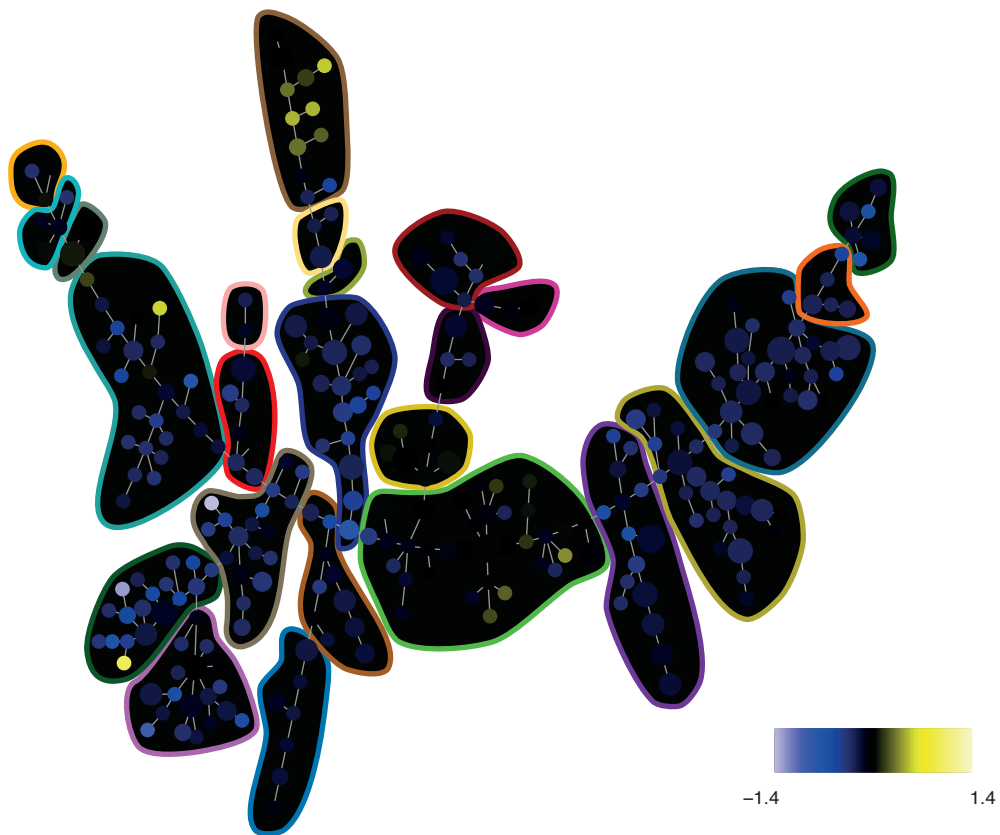


Figure S9D

171-pBtk/Itk ---- U0126+PMAiono vs Ref Ratio

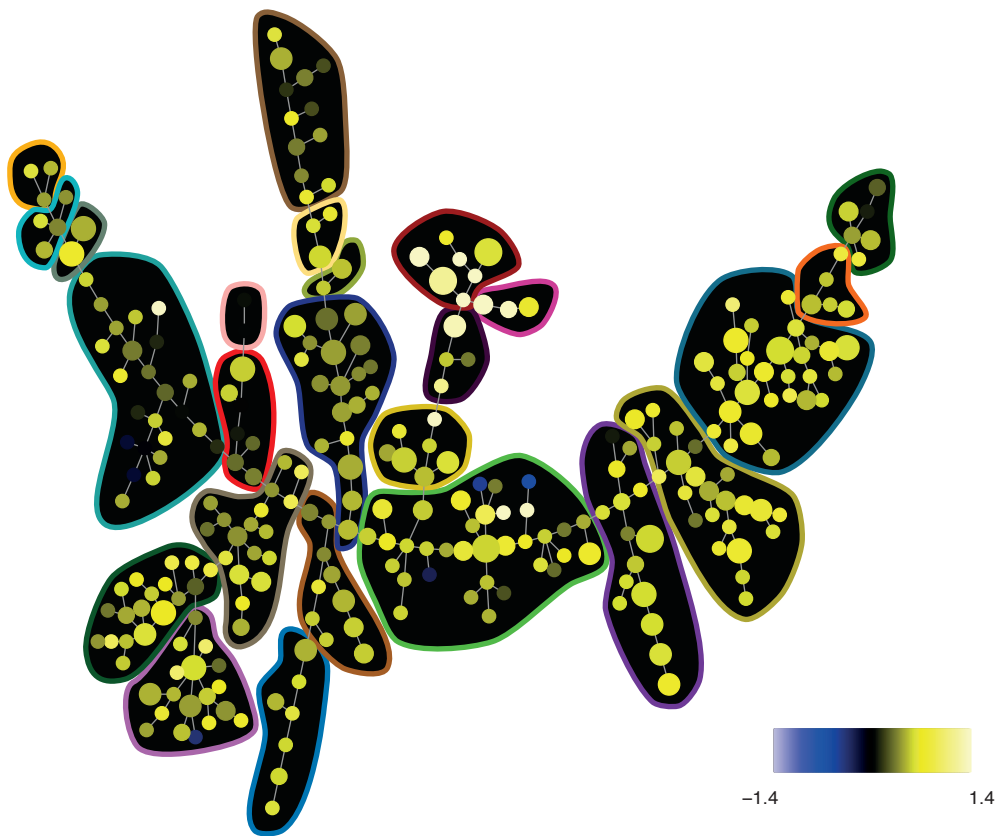


Figure S9D

171-pBtk/Itk ---- U0126+Unstim vs Ref Ratio

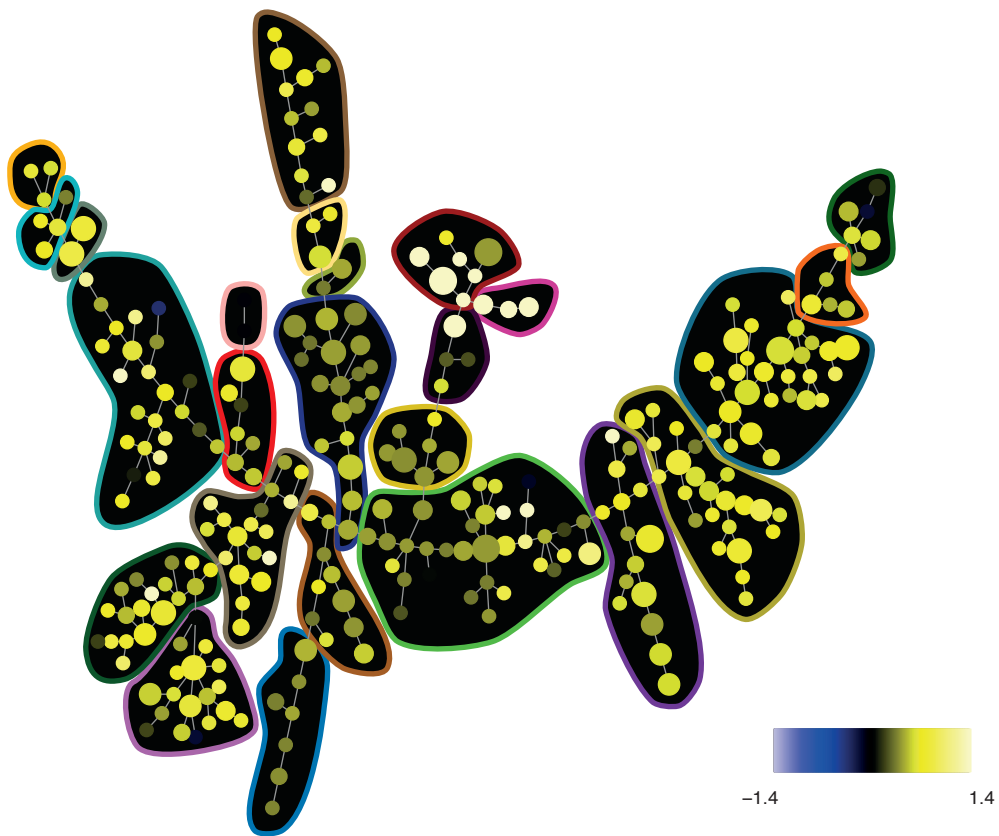


Figure S9D

172-pS6 ---- U0126+PMAiono vs Ref Ratio

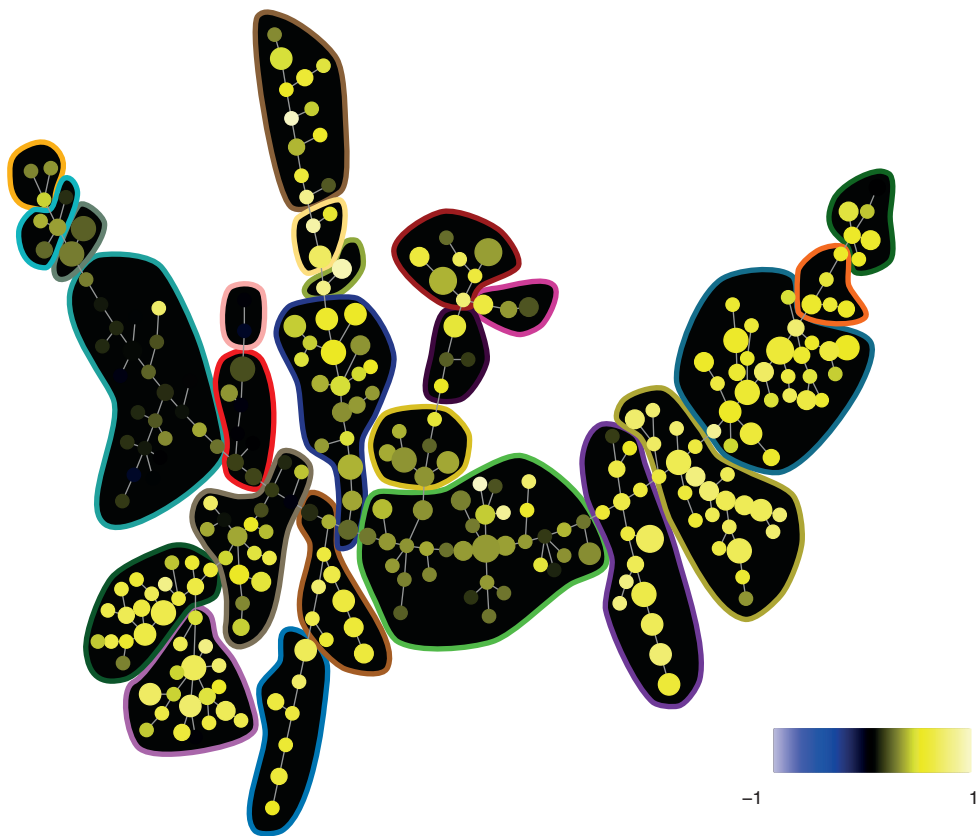


Figure S9D

172-pS6 --- U0126+Unstim vs Ref Ratio

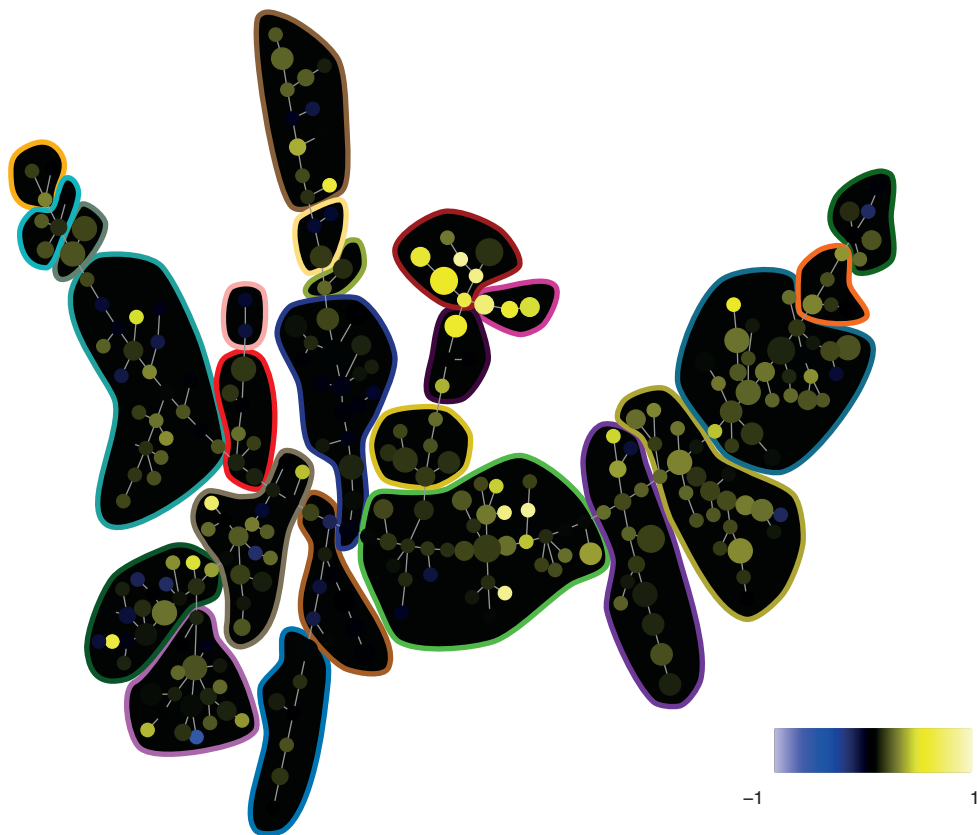


Figure S9D

174-pSrcFK ---- U0126+PMAiono vs Ref Ratio

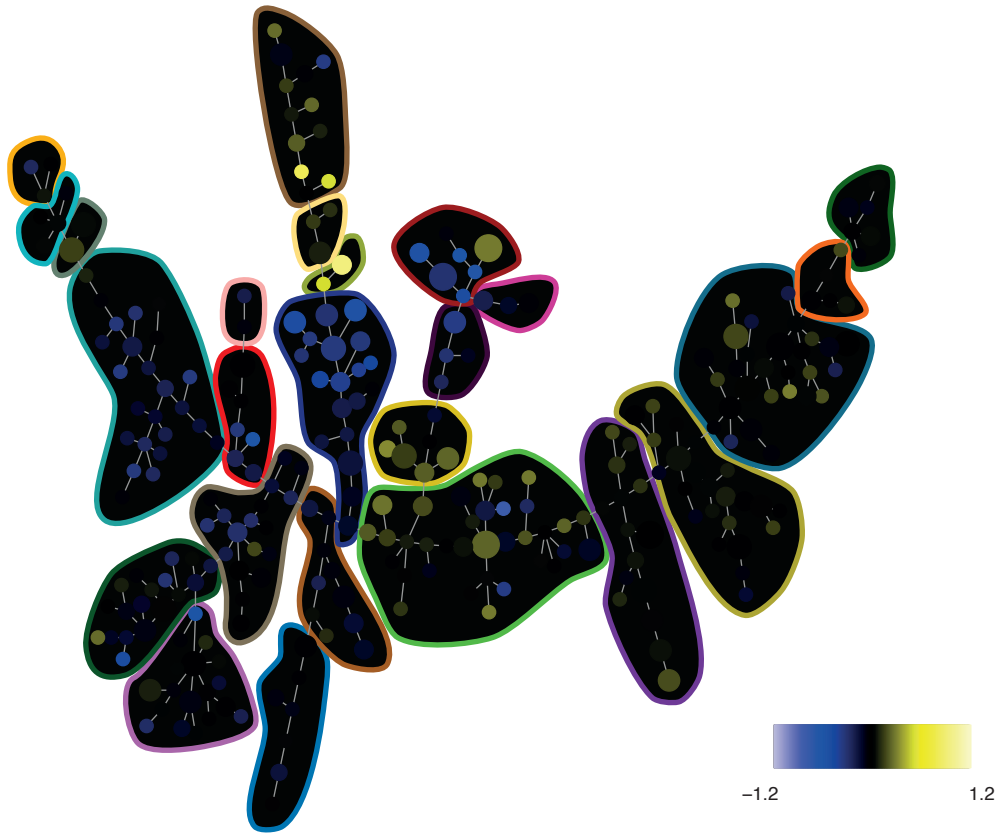


Figure S9D

174-pSrcFK ---- U0126+Unstim vs Ref Ratio

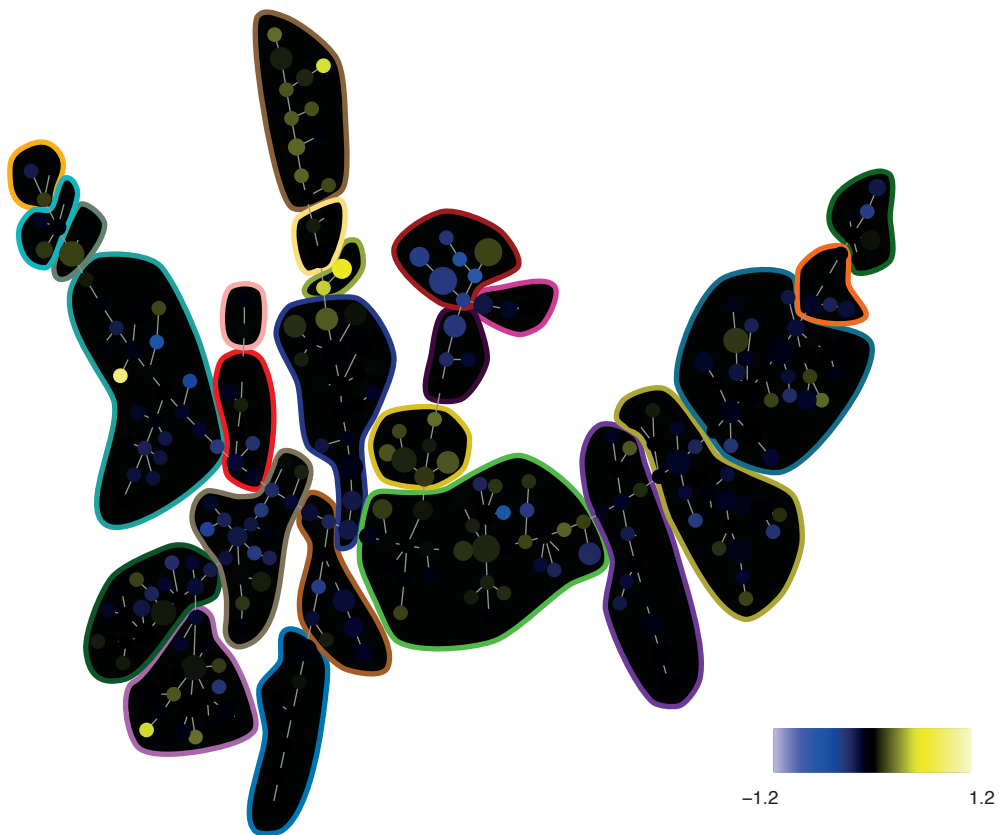


Figure S9D

175-pCrkL --- U0126+PMAiono vs Ref Ratio

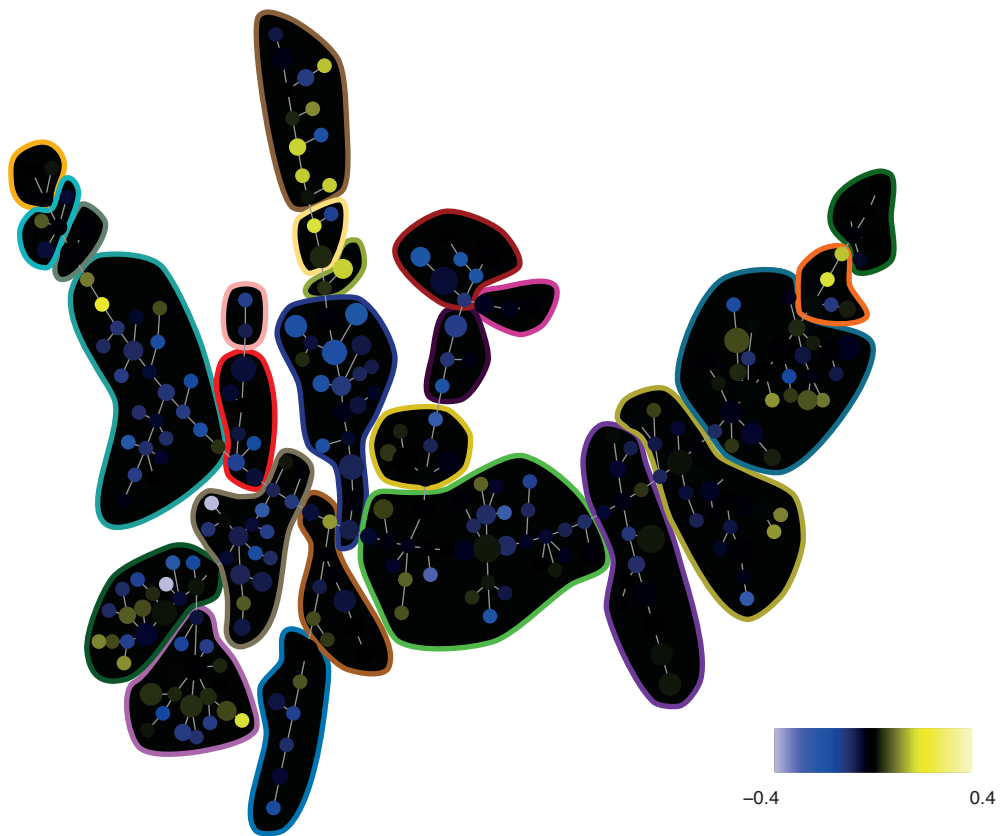


Figure S9D

175-pCrkL ---- U0126+Unstim vs Ref Ratio

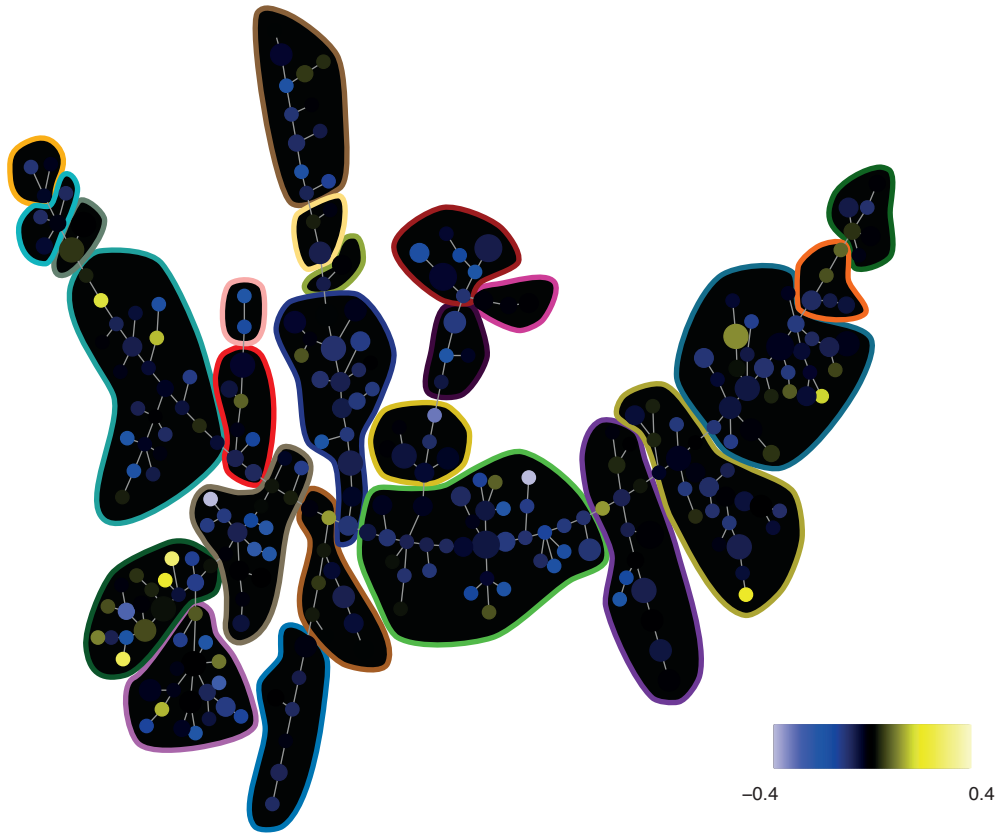


Figure S9D

176-pCREB ---- U0126+PMAiono vs Ref Ratio

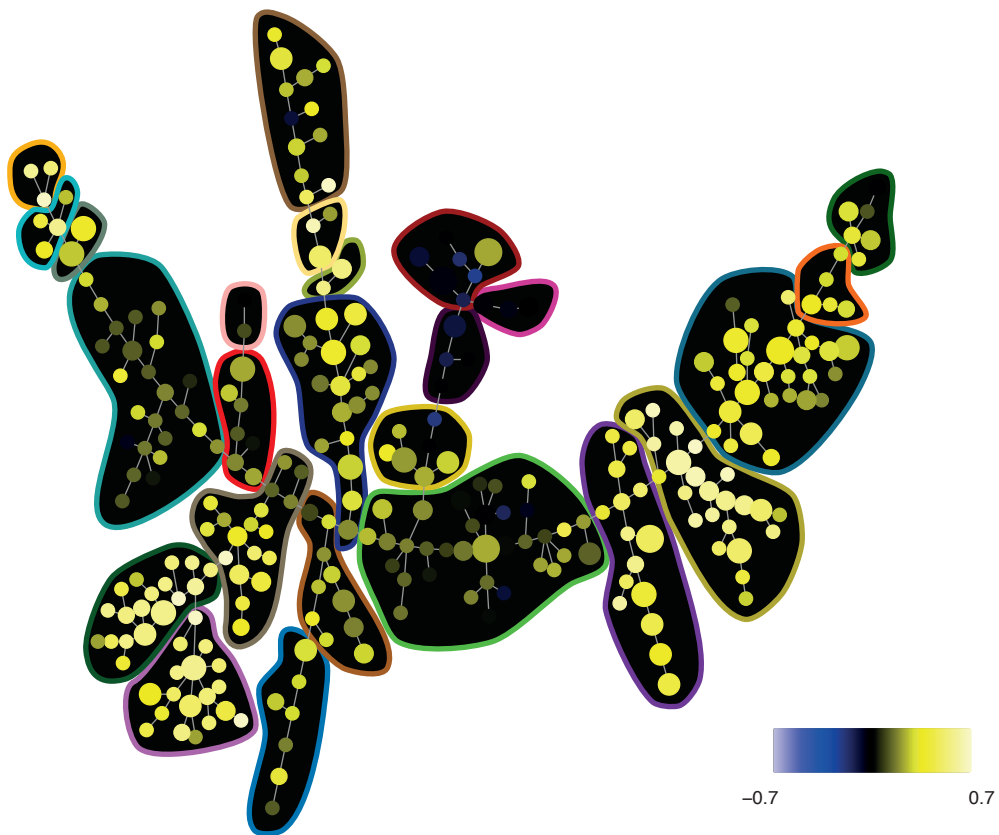


Figure S9D

176-pCREB ---- U0126+Unstim vs Ref Ratio

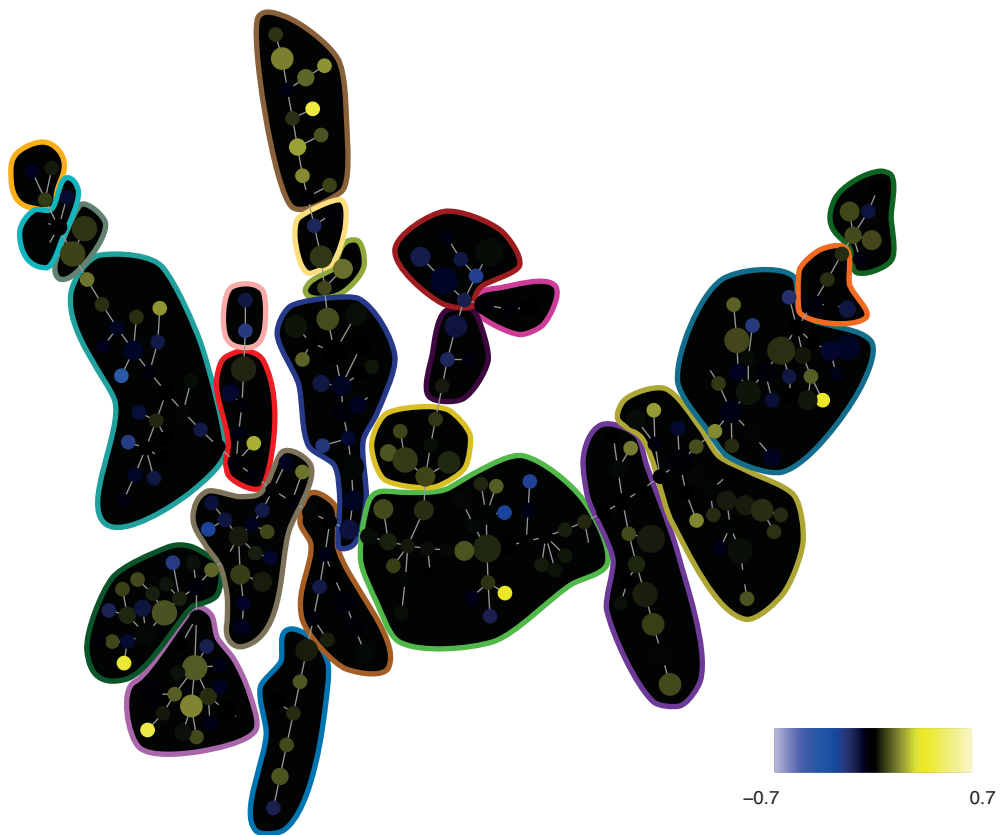


Figure S9E

110 114-CD3

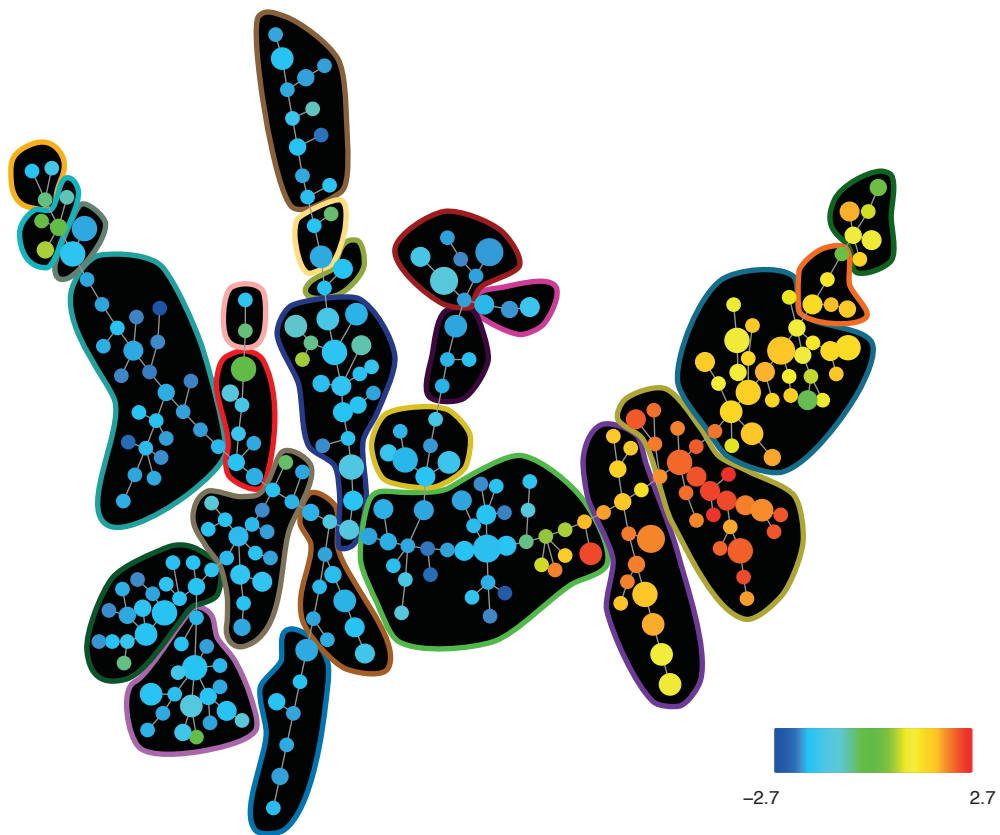


Figure S9E

115-CD45

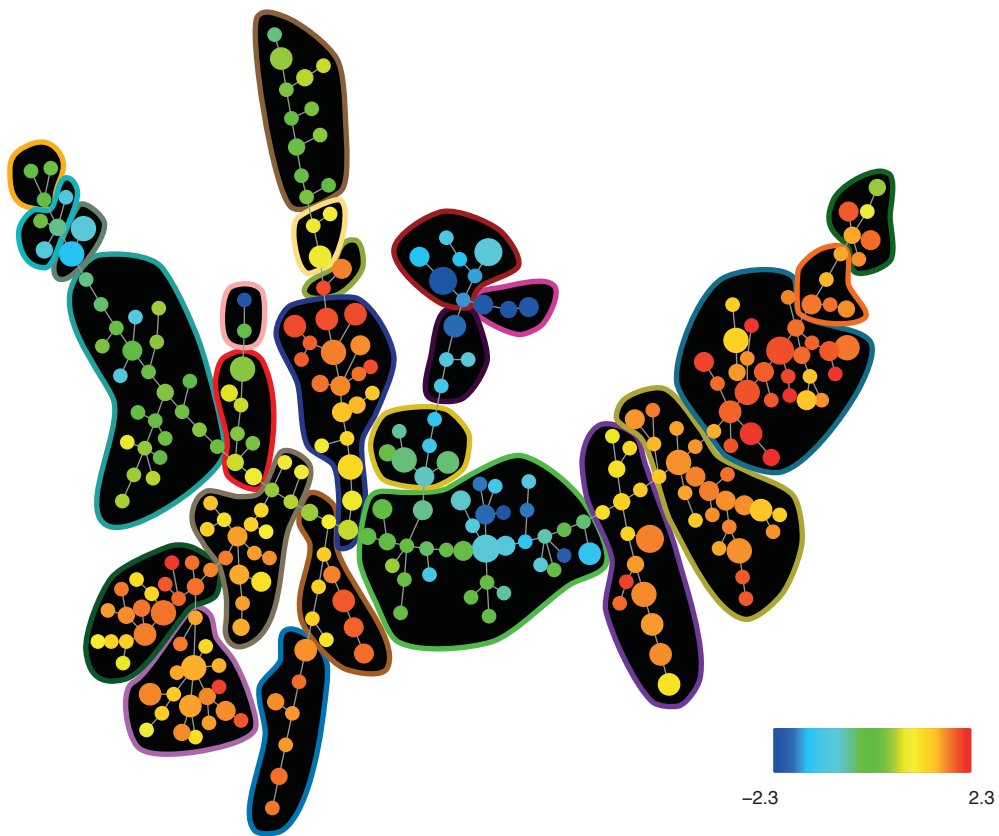


Figure S9E

139-CD45RA

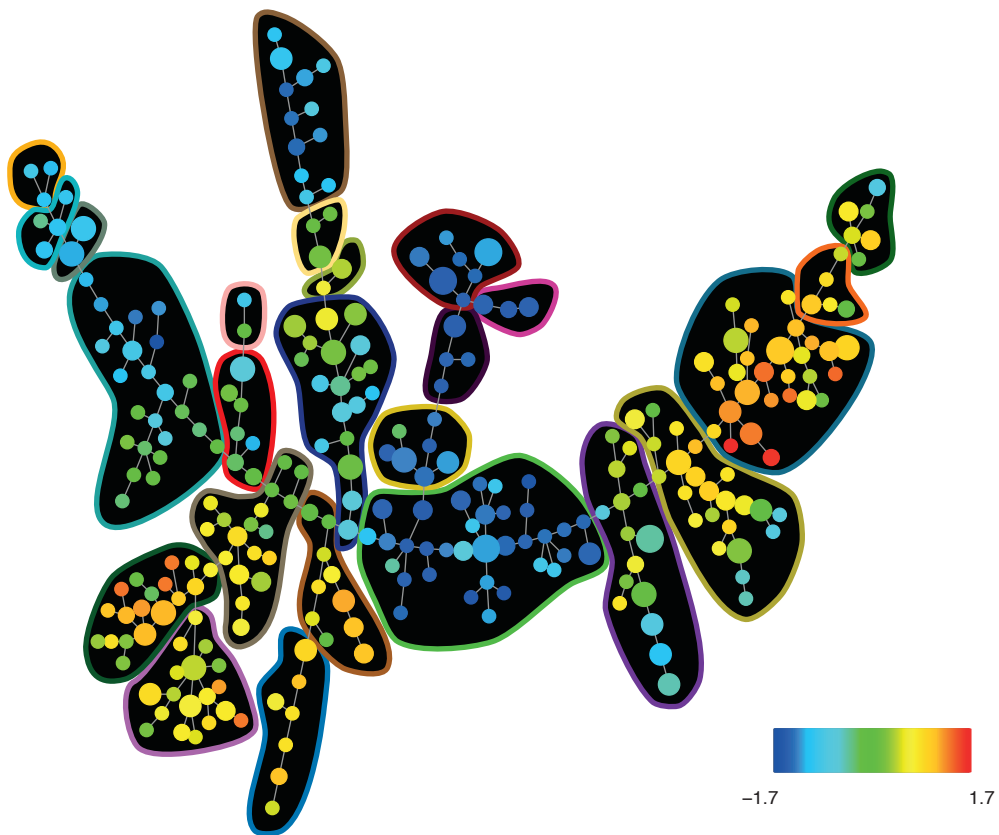


Figure S9E

142-CD19

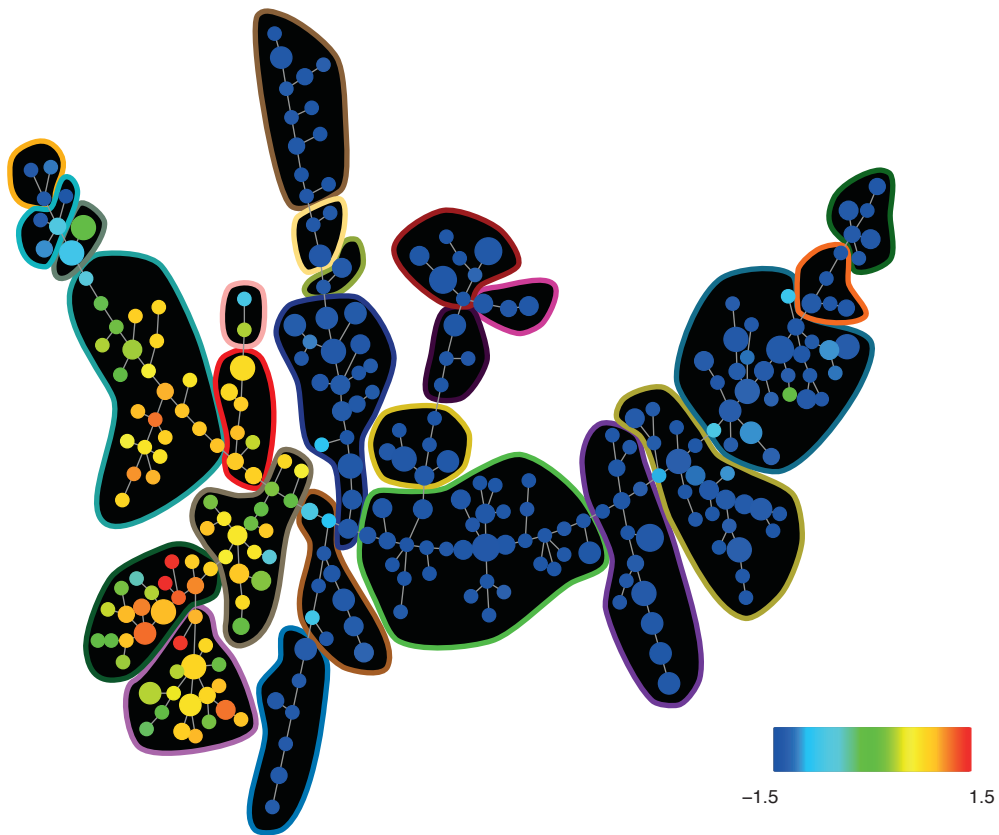


Figure S9E

144-CD11b

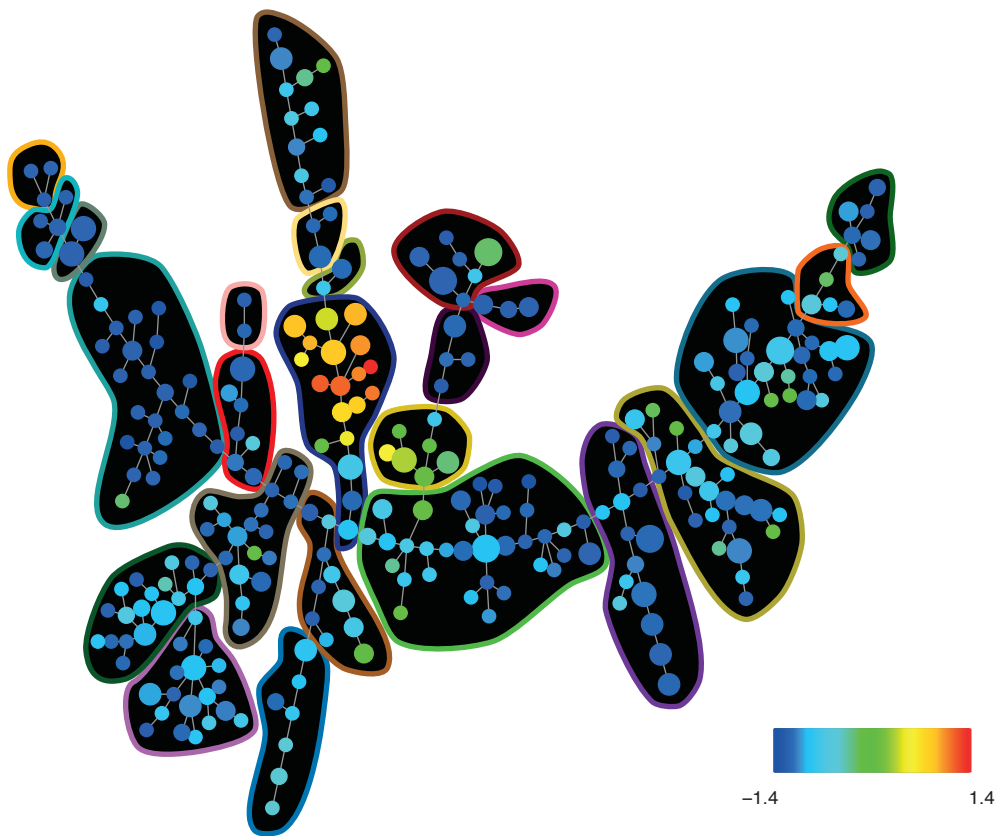


Figure S9E

145-CD4

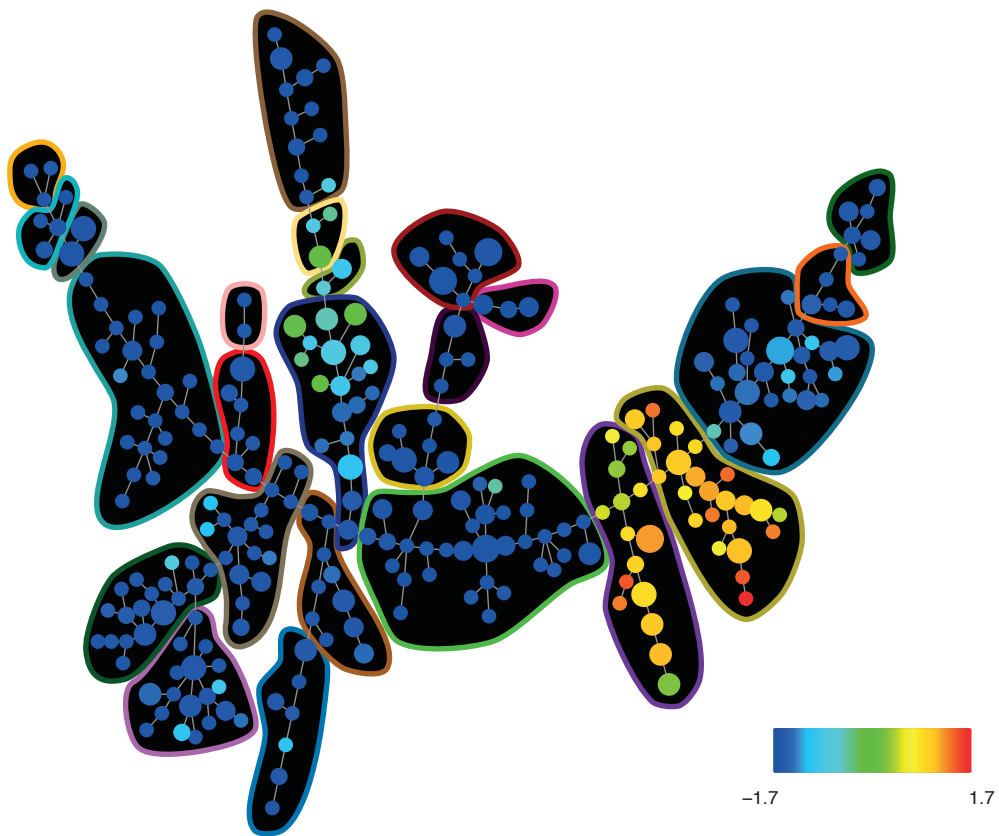


Figure S9E

146-CD8

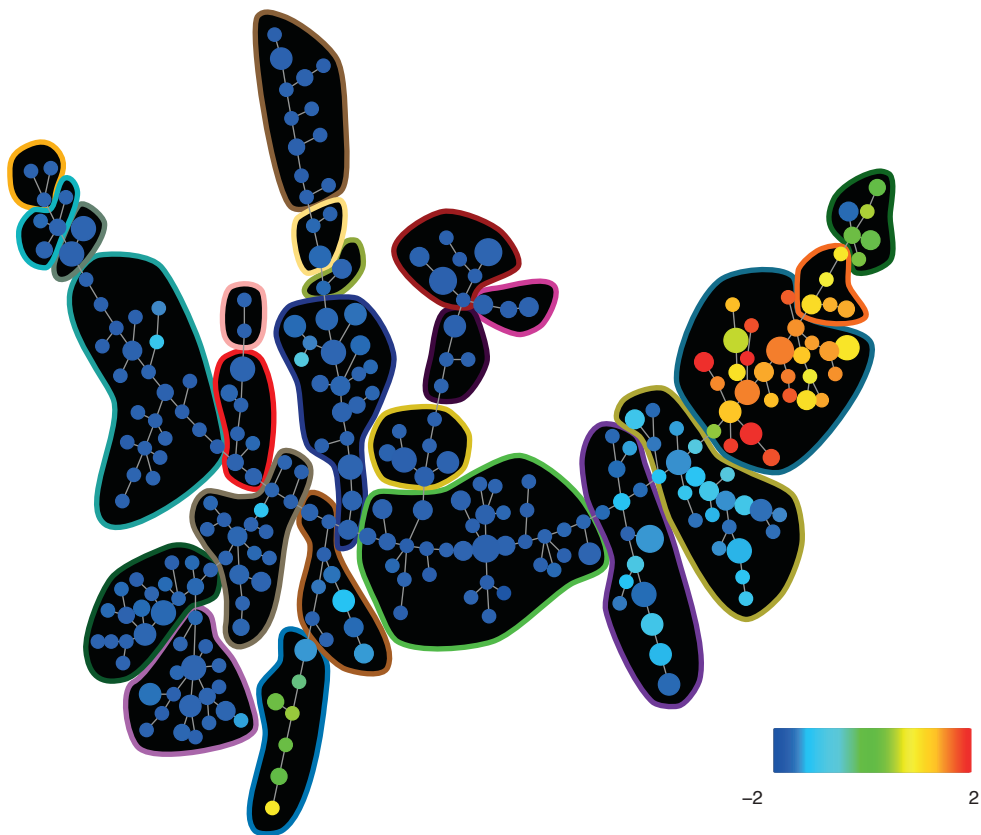


Figure S9E

147-CD20

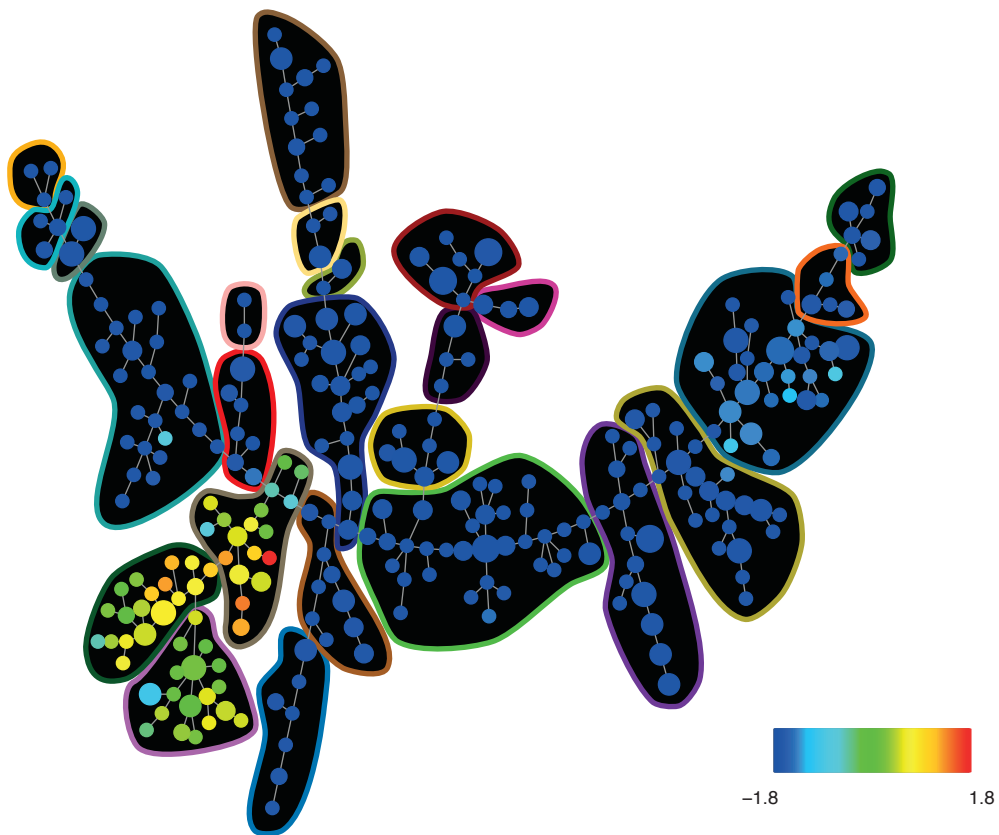


Figure S9E

148-CD34

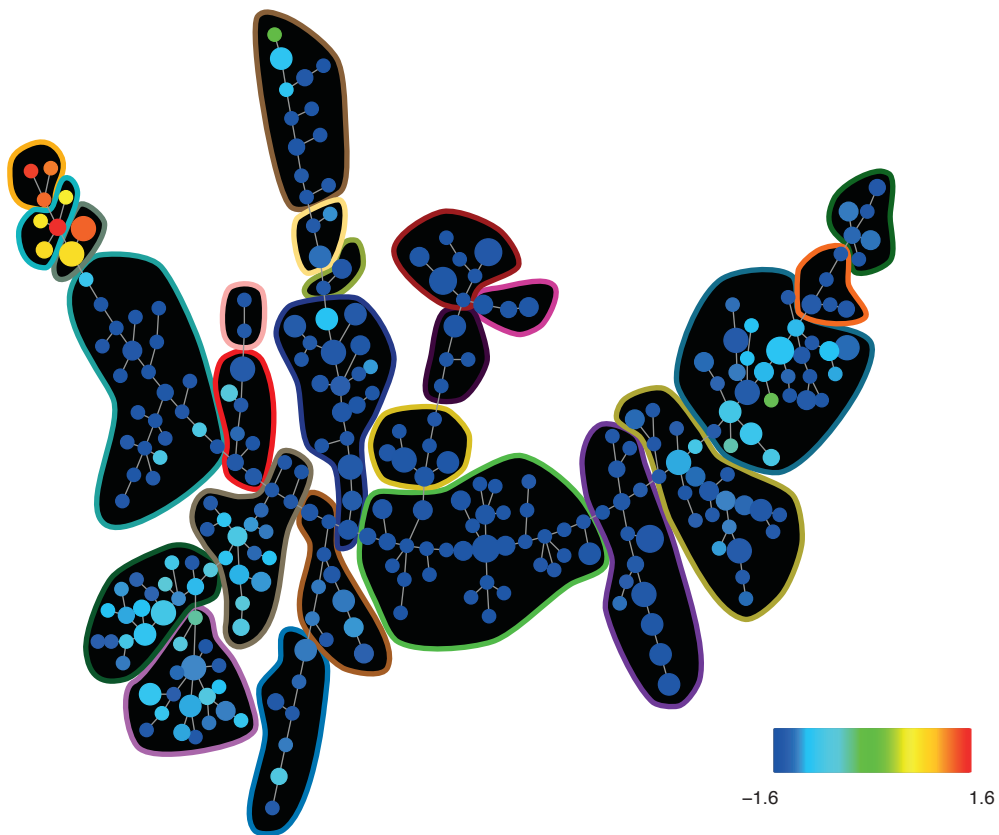


Figure S9E

158-CD33

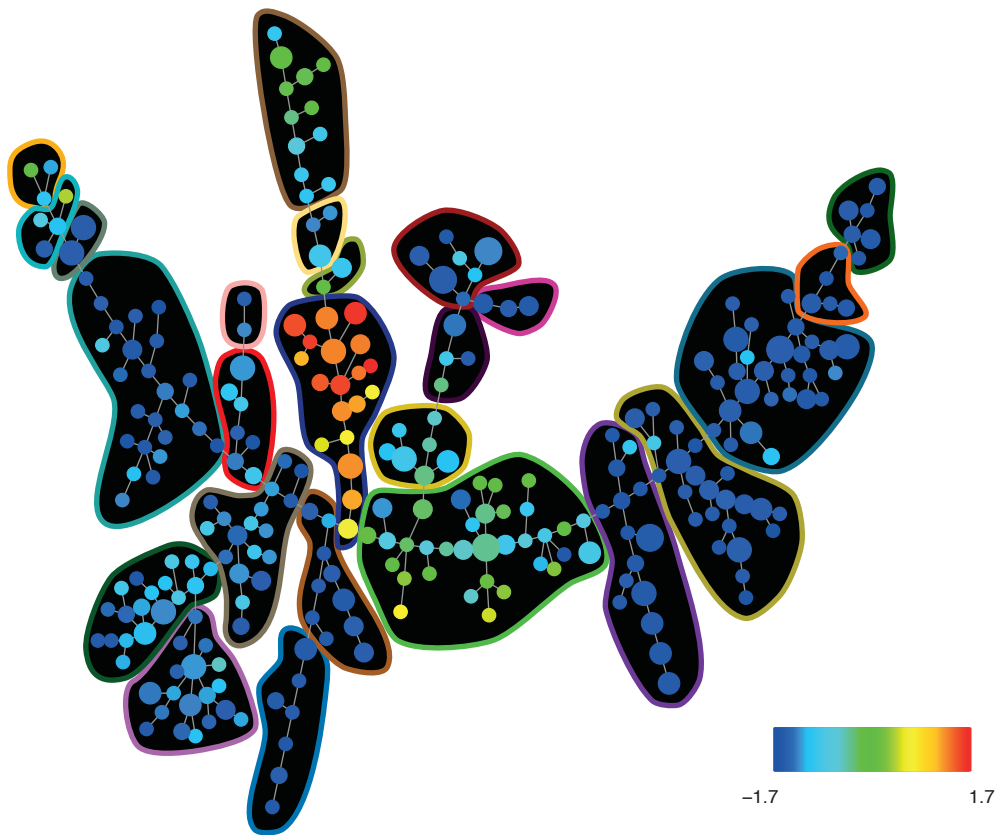


Figure S9E

160-CD123

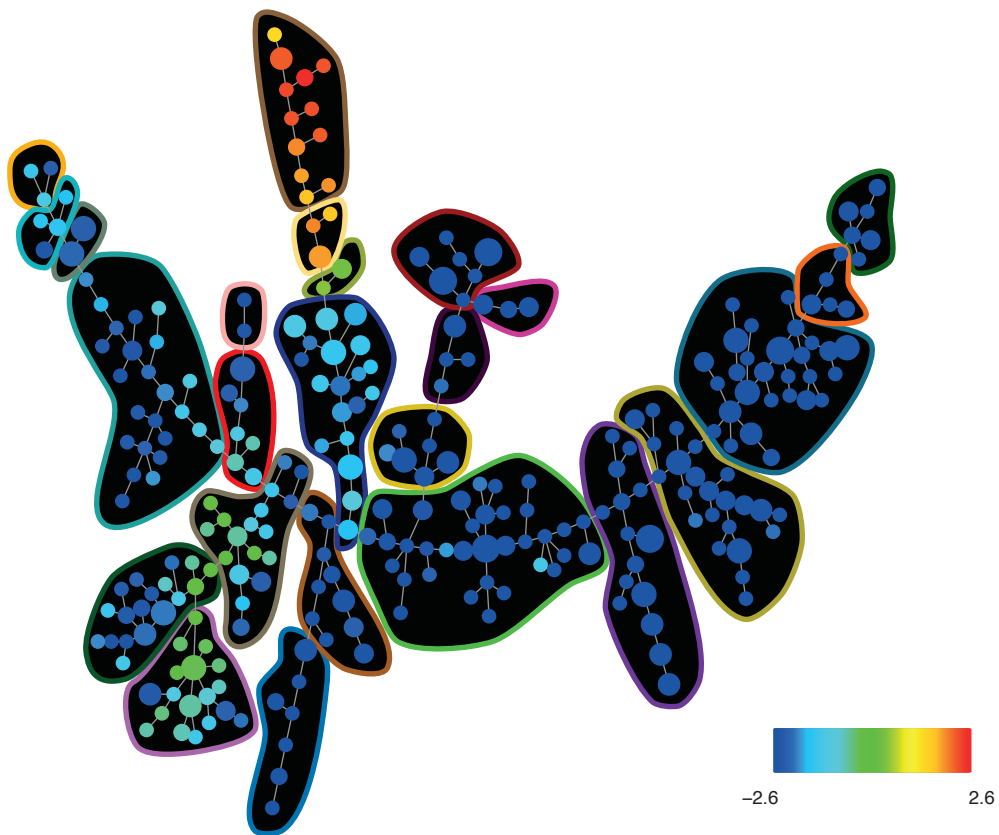


Figure S9E

167-CD38

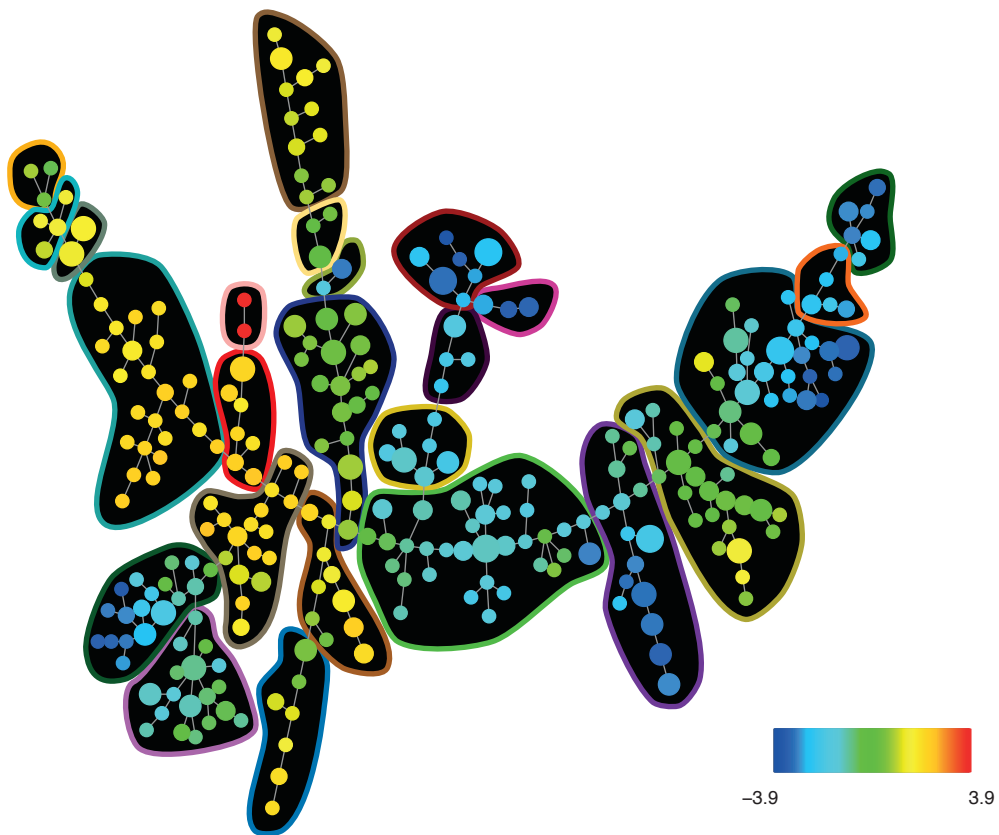


Figure S9E

170-CD90

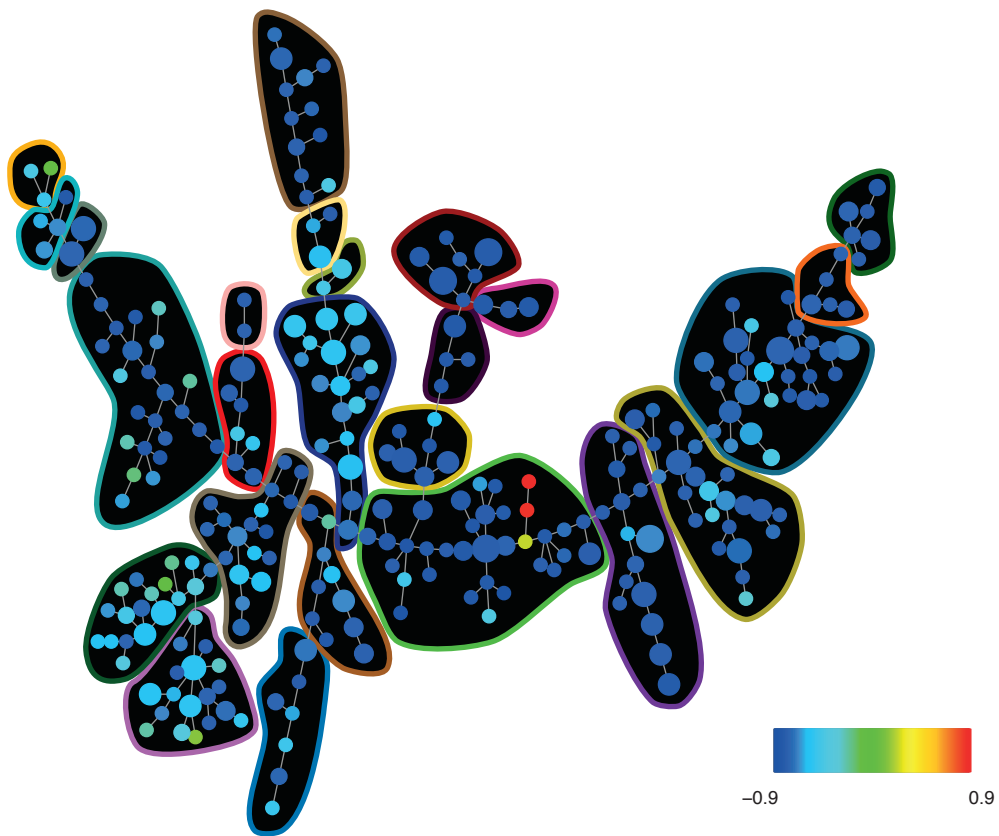


Figure S9E

191-DNA

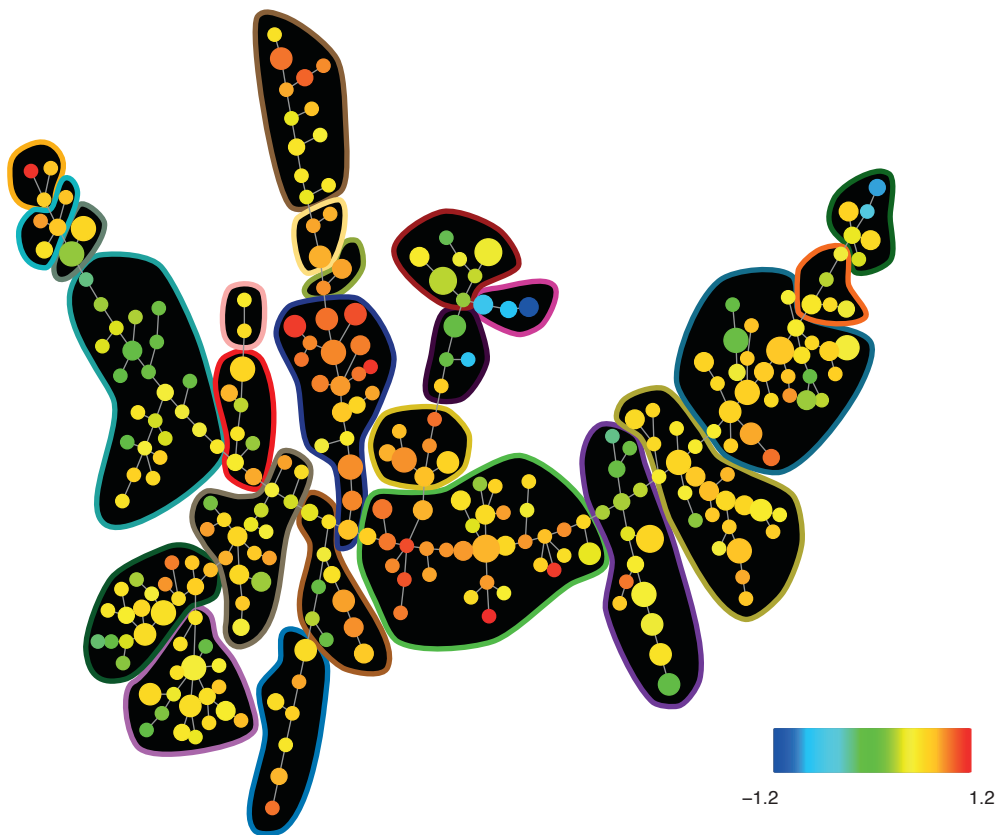
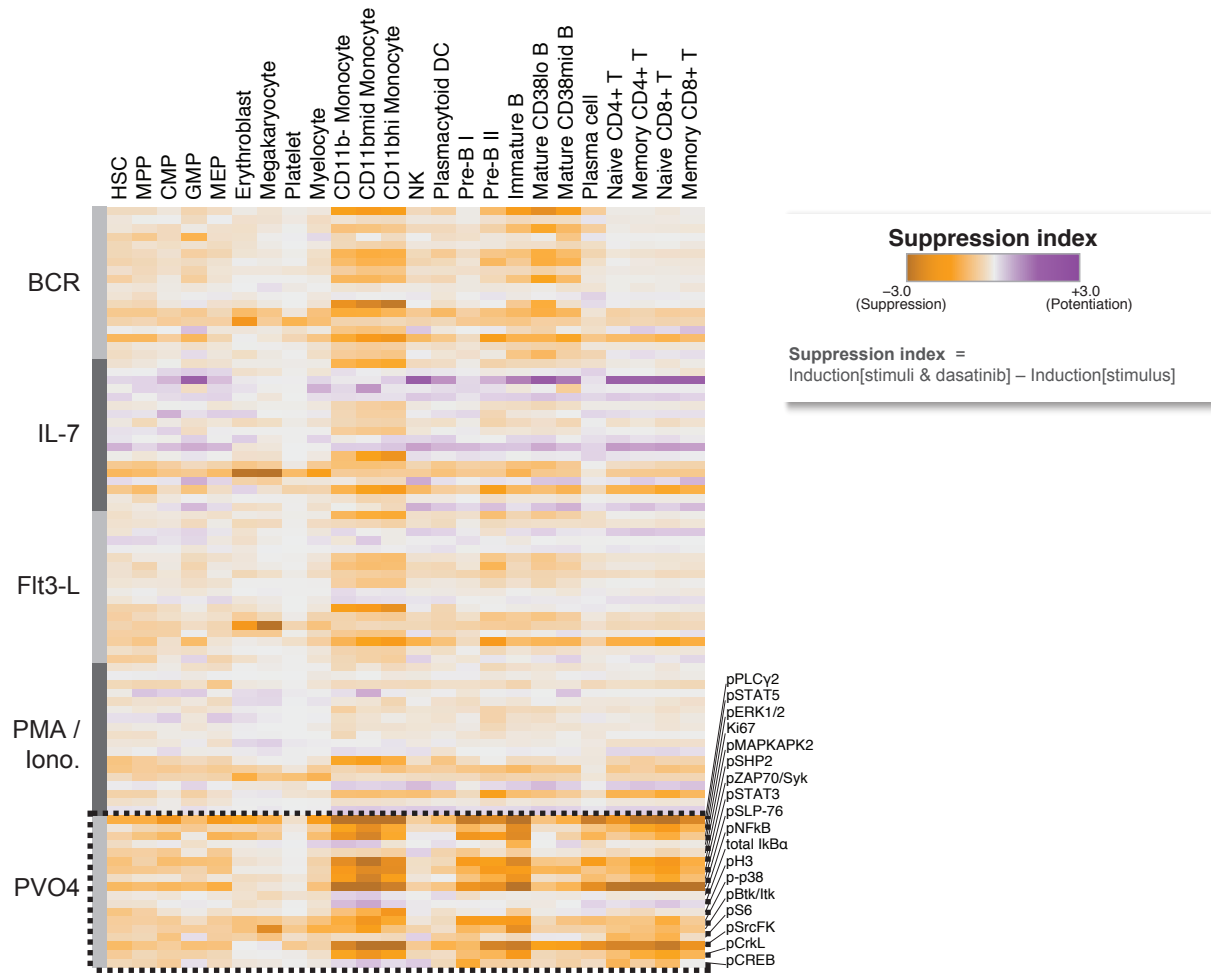


Figure S10

A



B

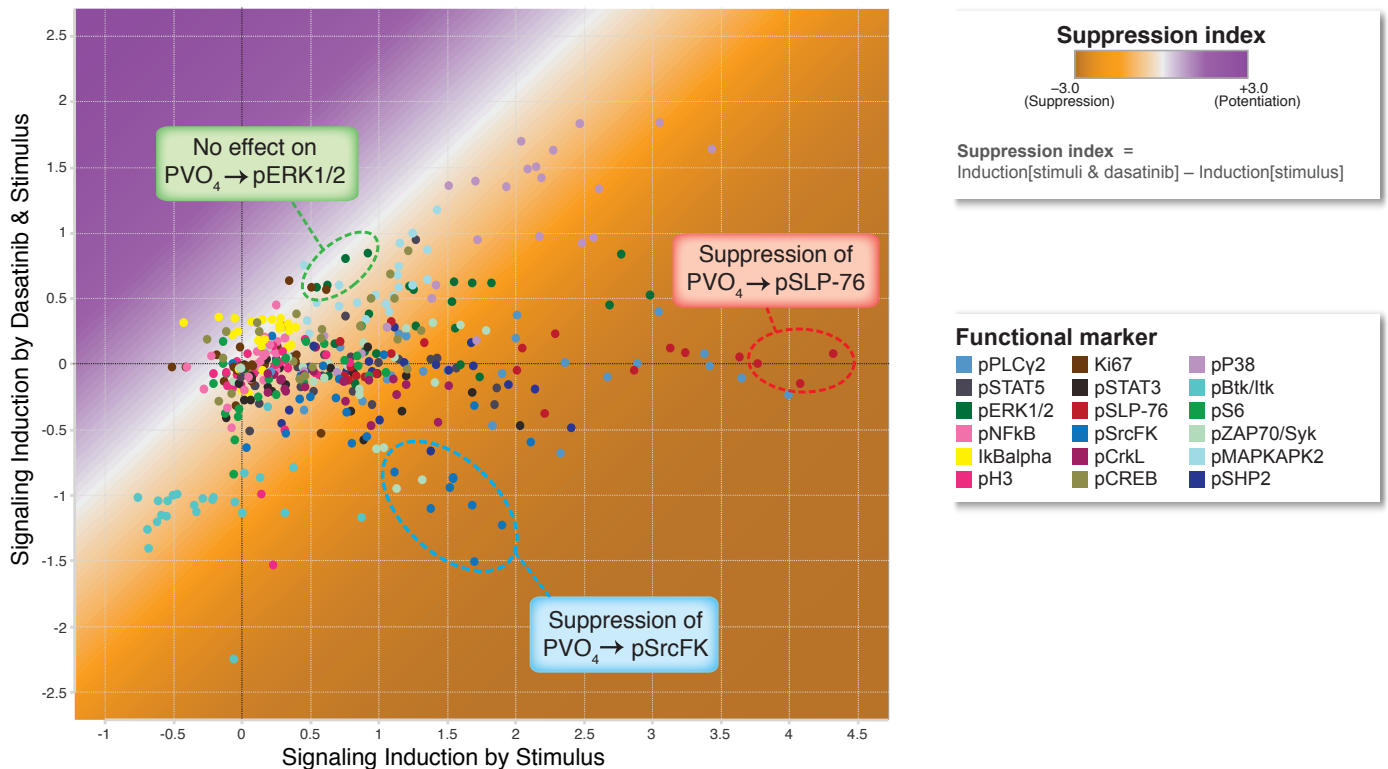


Figure S11

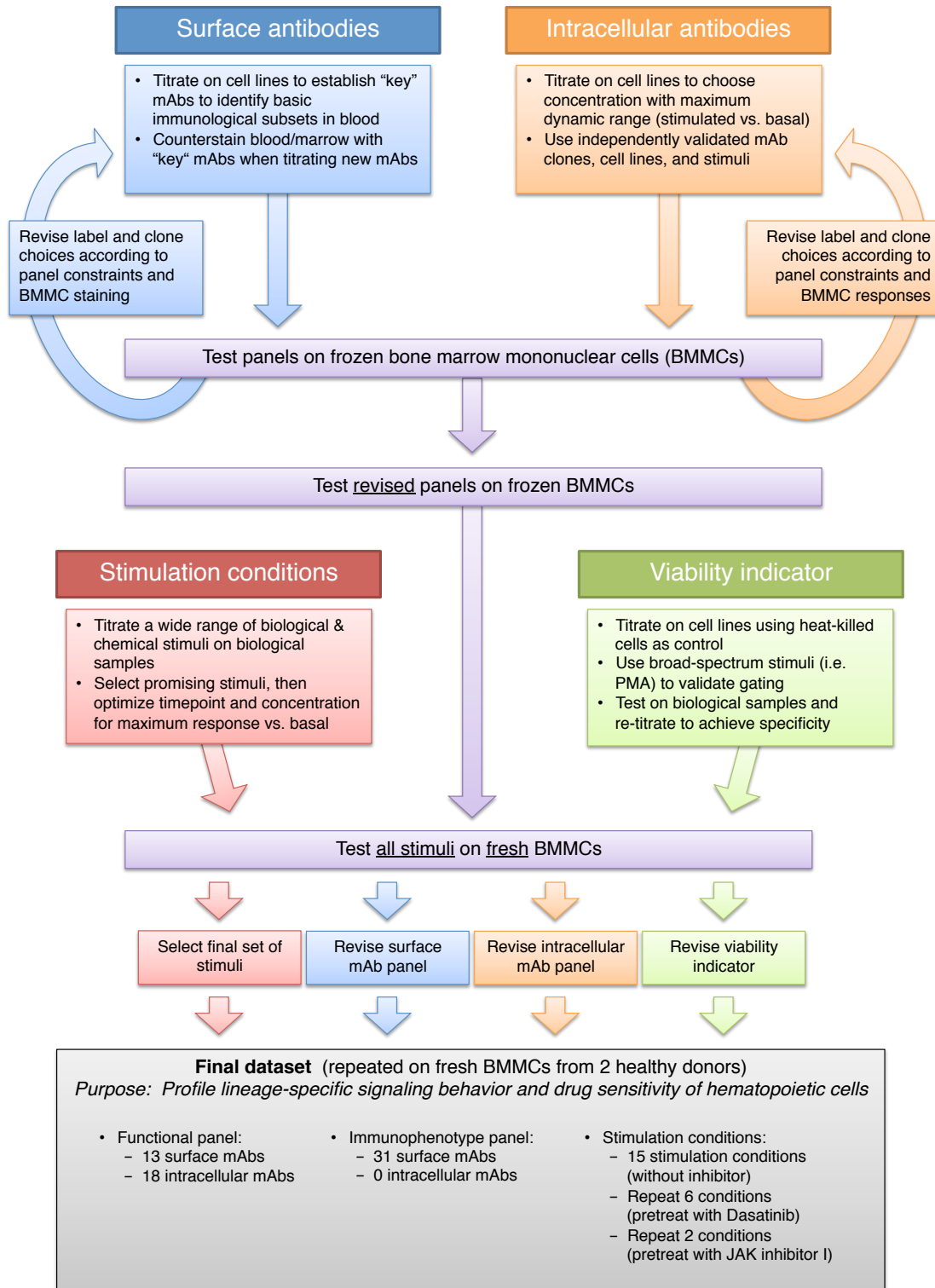


Table S1: Frequency of cell populations gated for comparison of fluorescence and mass cytometry signaling analysis of healthy PBMC samples (n=2)

		Gate #	Frequency of Single Cell Gate	
			Fluorescence	Mass Cytometry
PBMC A (Fig. S2)	CD33 Monocytes	1	13.5	11.4
	CD33- Lymphocytes		80.3	79.9
	CD20+ B Cells	2	18.8	18.3
	CD33-CD20- Lymphocytes		80.5	76.2
	NKT Cells	7	0.8	4.2
	CD56mid NK Cells	8	1.7	5.6
	CD56hi NK cells	9	0.1	0.6
	CD3+ T Cells		81.0	77.5
	CD8+CD45RA+ Tcells	5	14.4	17.3
	CD8+CD45RA- T Cells	6	11.4	15.4
	CD4+CD45RA+ Tcells	3	22.4	28.6
	CD4+CD45RA- T Cells	4	28.4	36.4
	PBMC B (Fig. 1)	CD33 Monocytes	1	38.8
CD33- Lymphocytes			49.7	57.1
CD20+ B Cells		2	18.5	18.4
CD33-CD20- Lymphocytes			80.4	79.2
NKT Cells		7	0.6	2.7
CD56mid NK Cells		8	14.0	19.9
CD56hi NK cells		9	1.3	2.0
CD3+ T Cells			61.1	59.3
CD8+CD45RA+ Tcells		5	14.3	12.5
CD8+CD45RA- T Cells		6	21.9	26.1
CD4+CD45RA+ Tcells		3	18.4	17.7
CD4+CD45RA- T Cells		4	37.4	39.8

Table S2: Evidence for manual annotations of node groups on SPADE tree.

Group name	Reference	Evidence for	Evidence against
HSC	1	<ul style="list-style-type: none"> Lin- CD45lo CD34+ CD38+ CD45RA- CD90- Ki67+ 	
MPP	1	<ul style="list-style-type: none"> Lin- CD45lo CD34+ CD38+ CD45RA- CD90- Ki67+ 	Some CD19+ contamination
Pro-B	2	<ul style="list-style-type: none"> CD34+, CD38++ Clusters near Pre-B I cells 	
Pre-B I	2	<ul style="list-style-type: none"> CD45lo CD34+ CD38+ CD19+ CD20- 	Upsampled tree shows CD10-
Pre-B II	2	<ul style="list-style-type: none"> CD45mid CD34het CD38+ CD19+ CD123- CD10+ 	Some CD34+ contamination
Immature B	2	<ul style="list-style-type: none"> CD45hi CD34- CD38+ CD19+ CD20+ CD123mid CD10+ IgM+ 	
Mature B	2	<ul style="list-style-type: none"> CD45hi CD34- CD38- CD19+ CD20+ CD123- CD10- IgMhet 	
IL3Ra+ mature B	2	<ul style="list-style-type: none"> CD45hi CD34- CD38- CD19+ CD20+ CD123+ CD10- IgMhet 	
Plasma cell	3	<ul style="list-style-type: none"> CD45lo CD19+ CD20- CD38+++ 	
NK	4	<ul style="list-style-type: none"> Directly observed as CD45hi CD45RA+ CD38+ CD3- CD19- Upsampled tree shows CD56+ CD7+ CD161+ CD16+. 	
NKT	4	<ul style="list-style-type: none"> CD3+ CD4- CD8- Upsampled tree shows CD161+. 	
Memory CD4 T	9	<ul style="list-style-type: none"> CD45hi CD3+ CD19- CD33- CD4+ CD8- CD45RA- 	
Naive CD4 T	9	<ul style="list-style-type: none"> CD45hi CD3+ CD19- CD33- CD4+ CD8- CD45RA+ 	
Memory CD8 T	9	<ul style="list-style-type: none"> CD45hi CD3+ CD19- CD33- CD8+ CD4- CD45RA- 	
Naive CD8 T	9	<ul style="list-style-type: none"> CD45hi CD3+ CD19- CD33- CD8+ CD4- CD45RA+ 	
CMP	1	<ul style="list-style-type: none"> Lin- CD34+ CD38+ CD45RA- CD123- 	
Monoblast	5	<ul style="list-style-type: none"> CD45mid CD4lo CD11b- CD34- CD38+ CD33+ CD123lo CD14mid CD15mid CD16- CD13lo/mid CD117lo/- HLADR++ 	Lacks CD34
Monocyte	2	<ul style="list-style-type: none"> CD33+ CD14+ CD11b+ HLADR+ 	
Pro-monocyte	5	<ul style="list-style-type: none"> CD45mid/+ CD4mid CD11b- CD34- CD38mid CD33+ CD123lo CD14lo CD15lo/- CD16lo/- CD3mid CD117het HLADR++ 	
Pre-DC	6	<ul style="list-style-type: none"> CD45mid/+ CD45RA+ CD4+ CD11b- CD34- CD38mid CD33lo CD123lo CD14- CD15mid CD16- CD13- CD117mid HLADR- 	
GMP	1	<ul style="list-style-type: none"> CD45mid CD11b- CD34+ CD38+ CD45RA+ CD33mid CD123+ CD14- CD15- CD16- CD13+ CD117++ HLADR- Flt3L and TPO responsive 	
Plasmacytoid DC	7	<ul style="list-style-type: none"> CD38mid CD33mid CD11blo CD123++ 	Upsampled tree shows HLADR-
Myelocyte	2	<ul style="list-style-type: none"> CD15++ CD13- CD14lo CD16lo CD123lo CD33mid CD11bmid HLADR- 	
Promyelocyte	2	<ul style="list-style-type: none"> CD38mid, CD45mid, CD11b-, CD33mid Upsampled tree shows CD117mid, CD15mid, CD16-, CD13lo. 	Pro-myelocytes should be CD13+ according to Reference 2

CD38mid CD3-platelet	8	<ul style="list-style-type: none"> • CD38mid CD3- DNAl_o CD45lo • Upsampled tree shows some nodes are CD61+ • Nearly all nodes are basally pBtk high and all respond to TPO on Ki67, pBtk, and pS6 	
CD38- CD3-platelet	8	<ul style="list-style-type: none"> • CD38- CD3- DNAl_o CD45lo • A few nodes are basally pBtk high, but all respond to TPO on Ki67, pSrc, and pS6 	Upsampled tree shows no nodes are CD61+
CD38mid CD3mid platelet	8	<ul style="list-style-type: none"> • CD38mid CD3mid DNAl_o CD45lo • Upsampled tree shows some nodes are CD61+ • All nodes respond to TPO by upregulating Ki67 and downregulating pBtk 	Upsampled tree shows no nodes are CD61+
Erythroblast	2, 5	<ul style="list-style-type: none"> • DNAmid CD45lo CD38mid • Upsampled tree shows CD235het, CD117mid • Pro-erythroblasts should be CD117+ CD235- according to Reference 2 • These nodes generally respond to SCF on pSyk/Zap70 more than any other CD45lo cell type. 	
Erythrocyte	2	<ul style="list-style-type: none"> • DNAl_o CD45- CD38- • Upsampled tree shows CD235++, CD117lo • Erythrocytes should be CD117- CD235+ according to Reference 2 • These nodes don't respond much to SCF 	

References for Supplemental Table 2:

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8. Crosby and Poole. Interaction of Bruton's tyrosine kinase and protein kinase Ctheta in platelets. Cross-talk between tyrosine and serine/threonine kinases. *J Biol Chem* (2002) vol. 277 (12) pp. 9958-65
9. Seder and Ahmed. Similarities and differences in CD4+ and CD8+ effector and memory T cell generation. *Nat Immunol* (2003) vol. 4 (9) pp. 835-42

Table S3: Significant perturbation-induced signaling responses in healthy bone marrow (one-sample *t*-test, *P* < 0.05 after Bonferroni correction)

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni <i>P</i> < 0.05)
--	BCR	168-pH3	CD11b- Monocytes	1.692E-06	7.310E-04	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	169-pP38	CD11bmid Monocytes	5.699E-06	2.462E-03	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	151-pERK1/2	Plasma cell	6.336E-06	2.737E-03	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	168-pH3	CD11bmid Monocytes	1.075E-05	4.645E-03	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	141-pPLCgamma2	Immature B	1.132E-05	4.892E-03	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	176-pCREB	Mature CD38lo B	1.344E-05	5.805E-03	9.884E-06	4.270E-03	Up	Both
--	BCR	168-pH3	CD11bhi Monocytes	1.849E-05	7.986E-03	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	168-pH3	Mature CD38lo B	2.900E-05	1.253E-02	4.368E-05	1.887E-02	Up	Both
--	BCR	141-pPLCgamma2	Mature CD38mid B	3.136E-05	1.355E-02	1.072E-04	4.630E-02	Up	Both
--	BCR	141-pPLCgamma2	Mature CD38lo B	6.738E-05	2.911E-02	1.815E-06	7.841E-04	Up	Both
--	BCR	176-pCREB	Mature CD38mid B	6.822E-05	2.947E-02	2.053E-05	8.868E-03	Up	Both
--	BCR	164-pSLP-76	Mature CD38lo B	7.248E-05	3.131E-02	5.071E-06	2.191E-03	Up	Both
--	BCR	164-pSLP-76	Immature B	7.616E-05	3.290E-02	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	159-pSTAT3	Immature B	1.078E-04	4.656E-02	n.s.	n.s.	Up	Marrow 1 Only
--	BCR	156-pZAP70/Syk	Immature B	n.s.	n.s.	1.210E-05	5.228E-03	Up	Marrow 2 Only
--	BCR	156-pZAP70/Syk	Mature CD38lo B	n.s.	n.s.	3.440E-05	1.486E-02	Up	Marrow 2 Only
--	BCR	156-pZAP70/Syk	Pre-B I	n.s.	n.s.	5.413E-05	2.338E-02	Up	Marrow 2 Only
--	BCR	151-pERK1/2	HSC	n.s.	n.s.	6.131E-05	2.649E-02	Down	Marrow 2 Only
--	BCR	151-pERK1/2	Mature CD38lo B	n.s.	n.s.	7.461E-05	3.223E-02	Up	Marrow 2 Only
--	FIt3L	168-pH3	CD11b- Monocytes	6.431E-06	2.778E-03	n.s.	n.s.	Up	Marrow 1 Only
--	FIt3L	176-pCREB	Plasmacytoid DC	3.973E-05	1.717E-02	n.s.	n.s.	Up	Marrow 1 Only
--	FIt3L	152-Ki67	Plasma cell	n.s.	n.s.	2.290E-06	9.892E-04	Up	Marrow 2 Only
--	FIt3L	176-pCREB	MPP	n.s.	n.s.	6.636E-06	2.867E-03	Up	Marrow 2 Only
--	FIt3L	176-pCREB	HSC	n.s.	n.s.	1.763E-05	7.618E-03	Up	Marrow 2 Only
--	FIt3L	151-pERK1/2	HSC	n.s.	n.s.	1.841E-05	7.955E-03	Up	Marrow 2 Only
--	FIt3L	176-pCREB	CMP	n.s.	n.s.	4.204E-05	1.816E-02	Up	Marrow 2 Only
--	GCSF	159-pSTAT3	HSC	2.145E-08	9.265E-06	2.796E-05	1.208E-02	Up	Both
--	GCSF	169-pP38	CD11bmid Monocytes	1.192E-06	5.147E-04	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	159-pSTAT3	CD11bhi Monocytes	3.222E-06	1.392E-03	3.479E-07	1.503E-04	Up	Both
--	GCSF	159-pSTAT3	CD11bmid Monocytes	4.077E-06	1.761E-03	1.700E-05	7.342E-03	Up	Both
--	GCSF	159-pSTAT3	Immature B	5.152E-06	2.226E-03	2.962E-06	1.280E-03	Up	Both
--	GCSF	159-pSTAT3	CD11b- Monocytes	9.124E-06	3.942E-03	3.785E-05	1.635E-02	Up	Both
--	GCSF	169-pP38	CD11bhi Monocytes	1.274E-05	5.502E-03	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	159-pSTAT3	MPP	2.169E-05	9.368E-03	5.384E-06	2.326E-03	Up	Both
--	GCSF	141-pPLCgamma2	Platelet	2.741E-05	1.184E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	168-pH3	CD11b- Monocytes	3.388E-05	1.463E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	169-pP38	CD11b- Monocytes	4.201E-05	1.815E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	176-pCREB	HSC	4.383E-05	1.893E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	174-pSrcFK	CD11bhi Monocytes	8.398E-05	3.628E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	175-pCrkL	Platelet	9.149E-05	3.953E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	174-pSrcFK	CD11bmid Monocytes	9.229E-05	3.987E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	150-pSTAT5	MPP	9.839E-05	4.250E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GCSF	159-pSTAT3	Myelocyte	n.s.	n.s.	8.998E-07	3.887E-04	Up	Marrow 2 Only
--	GCSF	159-pSTAT3	Megakaryocyte	n.s.	n.s.	3.067E-06	1.325E-03	Up	Marrow 2 Only
--	GCSF	150-pSTAT5	HSC	n.s.	n.s.	3.941E-05	1.703E-02	Up	Marrow 2 Only
--	GCSF	168-pH3	Immature B	n.s.	n.s.	7.642E-05	3.301E-02	Up	Marrow 2 Only
--	GMCSF	150-pSTAT5	CD11bmid Monocytes	3.400E-06	1.469E-03	1.437E-05	6.210E-03	Up	Both
--	GMCSF	150-pSTAT5	CD11bhi Monocytes	5.564E-06	2.404E-03	2.182E-05	9.426E-03	Up	Both
--	GMCSF	150-pSTAT5	CD11b- Monocytes	6.452E-06	2.787E-03	2.764E-05	1.194E-02	Up	Both
--	GMCSF	150-pSTAT5	Plasmacytoid DC	8.801E-06	3.802E-03	5.661E-05	2.445E-02	Up	Both
--	GMCSF	150-pSTAT5	MEP	1.038E-05	4.485E-03	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	176-pCREB	Plasmacytoid DC	1.226E-05	5.295E-03	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	168-pH3	CD11b- Monocytes	1.358E-05	5.867E-03	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	150-pSTAT5	HSC	1.360E-05	5.875E-03	6.819E-05	2.946E-02	Up	Both
--	GMCSF	150-pSTAT5	MPP	2.341E-05	1.011E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	168-pH3	Plasmacytoid DC	2.724E-05	1.177E-02	2.073E-05	8.957E-03	Up	Both
--	GMCSF	169-pP38	CD11bmid Monocytes	5.265E-05	2.274E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	169-pP38	CD11bhi Monocytes	5.365E-05	2.318E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	171-pBtk/Itk	Mature CD38lo B	6.431E-05	2.778E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	168-pH3	CD11bhi Monocytes	6.527E-05	2.820E-02	n.s.	n.s.	Up	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	GMCSF	159-pSTAT3	HSC	6.673E-05	2.883E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	171-pBtk/Itk	HSC	9.202E-05	3.975E-02	n.s.	n.s.	Up	Marrow 1 Only
--	GMCSF	168-pH3	Immature B	n.s.	n.s.	8.760E-06	3.784E-03	Up	Marrow 2 Only
--	GMCSF	168-pH3	Myelocyte	n.s.	n.s.	2.526E-05	1.091E-02	Up	Marrow 2 Only
--	GMCSF	152-Ki67	Plasma cell	n.s.	n.s.	4.128E-05	1.783E-02	Down	Marrow 2 Only
--	GMCSF	169-pP38	Megakaryocyte	n.s.	n.s.	5.396E-05	2.331E-02	Up	Marrow 2 Only
--	GMCSF	168-pH3	Megakaryocyte	n.s.	n.s.	8.316E-05	3.592E-02	Up	Marrow 2 Only
--	IFNad	159-pSTAT3	HSC	6.771E-08	2.925E-05	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Immature B	1.048E-07	4.527E-05	5.171E-06	2.234E-03	Up	Both
--	IFNad	159-pSTAT3	Plasma cell	2.060E-06	8.897E-04	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Naïve CD4+ T	3.833E-06	1.656E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	MEP	5.990E-06	2.588E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Naïve CD8+ T	7.130E-06	3.080E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	CD11bhi Monocytes	7.224E-06	3.121E-03	2.705E-06	1.169E-03	Up	Both
--	IFNad	159-pSTAT3	Mature CD4+ T	8.840E-06	3.819E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Pre-B I	1.151E-05	4.971E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	CD11bmid Monocytes	1.235E-05	5.334E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Mature CD8+ T	1.585E-05	6.847E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	CD11b- Monocytes	1.710E-05	7.389E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	NK	1.784E-05	7.706E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Naïve CD8+ T	1.884E-05	8.138E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	MPP	2.047E-05	8.843E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Mature CD4+ T	2.134E-05	9.217E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Naïve CD4+ T	2.139E-05	9.239E-03	7.314E-05	3.160E-02	Up	Both
--	IFNad	159-pSTAT3	Plasmacytoid DC	2.511E-05	1.085E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Mature CD8+ T	3.568E-05	1.542E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Mature CD38mid B	3.757E-05	1.623E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	174-pSrcFK	CD11bmid Monocytes	3.888E-05	1.680E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	174-pSrcFK	CD11bhi Monocytes	4.042E-05	1.746E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	169-pP38	CD11bmid Monocytes	4.084E-05	1.764E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Pre-B II	4.147E-05	1.791E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	174-pSrcFK	CD11b- Monocytes	4.191E-05	1.810E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	HSC	4.262E-05	1.841E-02	9.153E-05	3.954E-02	Up	Both
--	IFNad	159-pSTAT3	MPP	4.635E-05	2.002E-02	3.724E-05	1.609E-02	Up	Both
--	IFNad	159-pSTAT3	CMP	5.230E-05	2.259E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Mature CD38lo B	5.586E-05	2.413E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	Mature CD38lo B	5.806E-05	2.508E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	150-pSTAT5	CMP	5.980E-05	2.583E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	MEP	6.270E-05	2.709E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	174-pSrcFK	Pre-B II	7.249E-05	3.132E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	166-IkBalp	MEP	9.622E-05	4.157E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IFNad	159-pSTAT3	Myelocyte	n.s.	n.s.	5.755E-06	2.486E-03	Up	Marrow 2 Only
--	IFNad	159-pSTAT3	Megakaryocyte	n.s.	n.s.	9.913E-06	4.282E-03	Up	Marrow 2 Only
--	IFNad	152-Ki67	Plasma cell	n.s.	n.s.	8.560E-05	3.698E-02	Down	Marrow 2 Only
--	IL3	150-pSTAT5	Plasmacytoid DC	5.519E-06	2.384E-03	5.155E-05	2.227E-02	Up	Both
--	IL3	176-pCREB	Plasmacytoid DC	9.437E-06	4.077E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	150-pSTAT5	MEP	1.203E-05	5.196E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	169-pP38	CD11bmid Monocytes	1.409E-05	6.085E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	174-pSrcFK	CD11bmid Monocytes	1.826E-05	7.886E-03	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	159-pSTAT3	Immature B	2.392E-05	1.033E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	174-pSrcFK	CD11b- Monocytes	3.071E-05	1.327E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	159-pSTAT3	HSC	3.281E-05	1.417E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	168-pH3	Plasmacytoid DC	3.955E-05	1.709E-02	6.516E-06	2.815E-03	Up	Both
--	IL3	174-pSrcFK	CD11bhi Monocytes	4.314E-05	1.864E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	172-pS6	Plasmacytoid DC	6.594E-05	2.848E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	174-pSrcFK	Plasmacytoid DC	7.904E-05	3.415E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	159-pSTAT3	Plasmacytoid DC	8.049E-05	3.477E-02	n.s.	n.s.	Up	Marrow 1 Only
--	IL3	150-pSTAT5	CD11bmid Monocytes	n.s.	n.s.	2.847E-05	1.230E-02	Up	Marrow 2 Only
--	IL3	150-pSTAT5	CD11b- Monocytes	n.s.	n.s.	2.998E-05	1.295E-02	Up	Marrow 2 Only
--	IL3	150-pSTAT5	HSC	n.s.	n.s.	8.769E-05	3.788E-02	Up	Marrow 2 Only
--	IL7	150-pSTAT5	Naïve CD4+ T	2.308E-06	9.970E-04	2.796E-05	1.208E-02	Up	Both
--	IL7	150-pSTAT5	Naïve CD8+ T	3.347E-06	1.446E-03	3.046E-05	1.316E-02	Up	Both
--	IL7	150-pSTAT5	Mature CD4+ T	7.826E-06	3.381E-03	1.458E-05	6.297E-03	Up	Both
--	IL7	150-pSTAT5	Mature CD8+ T	9.972E-06	4.308E-03	3.868E-05	1.671E-02	Up	Both
--	LPS	169-pP38	CD11bmid Monocytes	1.454E-07	6.281E-05	n.s.	n.s.	Up	Marrow 1 Only
--	LPS	166-IkBalp	CD11bhi Monocytes	3.171E-07	1.370E-04	n.s.	n.s.	Down	Marrow 1 Only
--	LPS	169-pP38	CD11bhi Monocytes	1.318E-06	5.693E-04	n.s.	n.s.	Up	Marrow 1 Only
--	LPS	166-IkBalp	CD11bmid Monocytes	1.323E-06	5.715E-04	n.s.	n.s.	Down	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	LPS	169-pP38	CD11b- Monocytes	7.408E-06	3.200E-03	n.s.	n.s.	Up	Marrow 1 Only
--	LPS	166-IkBalp	CD11b- Monocytes	1.254E-05	5.418E-03	n.s.	n.s.	Down	Marrow 1 Only
--	LPS	168-pH3	CD11b- Monocytes	1.652E-05	7.139E-03	n.s.	n.s.	Up	Marrow 1 Only
--	LPS	166-IkBalp	MEP	5.279E-05	2.281E-02	n.s.	n.s.	Down	Marrow 1 Only
--	LPS	168-pH3	CD11bmid Monocytes	9.318E-05	4.026E-02	n.s.	n.s.	Up	Marrow 1 Only
--	LPS	153-pMAPKAPK2	CD11bmid Monocytes	n.s.	n.s.	2.561E-05	1.106E-02	Up	Marrow 2 Only
--	LPS	153-pMAPKAPK2	CD11bhi Monocytes	n.s.	n.s.	4.456E-05	1.925E-02	Up	Marrow 2 Only
--	LPS	153-pMAPKAPK2	CD11b- Monocytes	n.s.	n.s.	1.003E-04	4.331E-02	Up	Marrow 2 Only
--	PMAiono	176-pCREB	Naïve CD4+ T	1.146E-07	4.952E-05	1.873E-06	8.092E-04	Up	Both
--	PMAiono	151-pERK1/2	Plasma cell	1.497E-07	6.468E-05	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	Mature CD4+ T	5.610E-07	2.423E-04	5.481E-05	2.368E-02	Up	Both
--	PMAiono	168-pH3	CD11b- Monocytes	6.731E-07	2.908E-04	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	Naïve CD8+ T	7.120E-07	3.076E-04	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	168-pH3	Naïve CD4+ T	1.399E-06	6.046E-04	1.132E-06	4.890E-04	Up	Both
--	PMAiono	174-pSrcFK	CD11bhi Monocytes	1.935E-06	8.359E-04	2.727E-05	1.178E-02	Down	Both
--	PMAiono	172-pS6	Naïve CD4+ T	1.953E-06	8.439E-04	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	168-pH3	Plasmacytoid DC	1.968E-06	8.502E-04	3.073E-07	1.328E-04	Up	Both
--	PMAiono	165-pNFkB	Naïve CD8+ T	4.226E-06	1.826E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	168-pH3	CD11bmid Monocytes	4.299E-06	1.857E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	169-pP38	CD11bmid Monocytes	4.400E-06	1.901E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	Pre-B I	4.818E-06	2.081E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	165-pNFkB	Naïve CD4+ T	5.104E-06	2.205E-03	4.986E-05	2.154E-02	Up	Both
--	PMAiono	168-pH3	Mature CD4+ T	7.999E-06	3.456E-03	2.127E-07	9.189E-05	Up	Both
--	PMAiono	168-pH3	Mature CD38lo B	8.514E-06	3.678E-03	1.752E-06	7.569E-04	Up	Both
--	PMAiono	172-pS6	Plasmacytoid DC	9.519E-06	4.112E-03	6.476E-05	2.798E-02	Up	Both
--	PMAiono	172-pS6	Pre-B II	1.047E-05	4.523E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	168-pH3	CD11bhi Monocytes	1.103E-05	4.764E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	169-pP38	CD11bhi Monocytes	1.263E-05	5.458E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	176-pCREB	Plasmacytoid DC	1.268E-05	5.477E-03	6.021E-05	2.601E-02	Up	Both
--	PMAiono	168-pH3	Immature B	1.320E-05	5.701E-03	1.334E-07	5.761E-05	Up	Both
--	PMAiono	174-pSrcFK	CD11bmid Monocytes	1.444E-05	6.240E-03	n.s.	n.s.	Down	Marrow 1 Only
--	PMAiono	176-pCREB	Pre-B I	1.527E-05	6.596E-03	1.117E-06	4.828E-04	Up	Both
--	PMAiono	168-pH3	Naïve CD8+ T	1.744E-05	7.535E-03	1.065E-05	4.599E-03	Up	Both
--	PMAiono	159-pSTAT3	Immature B	1.754E-05	7.575E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	151-pERK1/2	CD11b- Monocytes	1.800E-05	7.778E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	169-pP38	Mature CD8+ T	2.028E-05	8.760E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	176-pCREB	Mature CD38lo B	2.131E-05	9.207E-03	4.630E-06	2.000E-03	Up	Both
--	PMAiono	172-pS6	CD11b- Monocytes	2.385E-05	1.030E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	176-pCREB	Naïve CD8+ T	2.534E-05	1.095E-02	1.998E-05	8.632E-03	Up	Both
--	PMAiono	151-pERK1/2	HSC	2.761E-05	1.193E-02	4.767E-08	2.060E-05	Up	Both
--	PMAiono	169-pP38	Mature CD4+ T	2.874E-05	1.242E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	Immature B	3.057E-05	1.320E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	168-pH3	HSC	3.146E-05	1.359E-02	6.630E-06	2.864E-03	Up	Both
--	PMAiono	172-pS6	GMP	3.195E-05	1.380E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	151-pERK1/2	CD11bmid Monocytes	3.472E-05	1.500E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	CD11bmid Monocytes	3.494E-05	1.509E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	151-pERK1/2	Immature B	3.629E-05	1.568E-02	6.763E-05	2.922E-02	Up	Both
--	PMAiono	168-pH3	MPP	3.892E-05	1.681E-02	1.161E-05	5.017E-03	Up	Both
--	PMAiono	169-pP38	HSC	4.274E-05	1.846E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	Mature CD8+ T	4.475E-05	1.933E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	172-pS6	HSC	4.974E-05	2.149E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	151-pERK1/2	CD11bhi Monocytes	5.029E-05	2.172E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	176-pCREB	Mature CD38mid B	5.254E-05	2.270E-02	4.807E-06	2.077E-03	Up	Both
--	PMAiono	172-pS6	Mature CD38lo B	5.596E-05	2.418E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	151-pERK1/2	MEP	8.178E-05	3.533E-02	2.752E-07	1.189E-04	Up	Both
--	PMAiono	153-pMAPKAPK2	Naïve CD4+ T	8.230E-05	3.555E-02	2.142E-05	9.253E-03	Up	Both
--	PMAiono	172-pS6	MEP	8.475E-05	3.661E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	176-pCREB	HSC	8.490E-05	3.668E-02	1.257E-05	5.429E-03	Up	Both
--	PMAiono	151-pERK1/2	Naïve CD4+ T	8.743E-05	3.777E-02	4.076E-08	1.761E-05	Up	Both
--	PMAiono	176-pCREB	Pre-B II	9.205E-05	3.977E-02	6.702E-06	2.895E-03	Up	Both
--	PMAiono	169-pP38	Naïve CD8+ T	9.776E-05	4.223E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	153-pMAPKAPK2	Naïve CD8+ T	1.005E-04	4.340E-02	1.696E-05	7.328E-03	Up	Both
--	PMAiono	166-IkBalp	CD11bhi Monocytes	1.119E-04	4.836E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PMAiono	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	1.035E-08	4.470E-06	Up	Marrow 2 Only
--	PMAiono	151-pERK1/2	Mature CD38lo B	n.s.	n.s.	8.653E-08	3.738E-05	Up	Marrow 2 Only
--	PMAiono	151-pERK1/2	Naïve CD8+ T	n.s.	n.s.	3.374E-07	1.457E-04	Up	Marrow 2 Only
--	PMAiono	151-pERK1/2	Mature CD8+ T	n.s.	n.s.	8.333E-07	3.600E-04	Up	Marrow 2 Only
--	PMAiono	176-pCREB	CMP	n.s.	n.s.	1.213E-06	5.241E-04	Up	Marrow 2 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	PMAi0	151-pERK1/2	MPP	n.s.	n.s.	2.087E-06	9.015E-04	Up	Marrow 2 Only
--	PMAi0	176-pCREB	MPP	n.s.	n.s.	2.639E-06	1.140E-03	Up	Marrow 2 Only
--	PMAi0	151-pERK1/2	CMP	n.s.	n.s.	2.969E-06	1.283E-03	Up	Marrow 2 Only
--	PMAi0	151-pERK1/2	NK	n.s.	n.s.	2.996E-06	1.294E-03	Up	Marrow 2 Only
--	PMAi0	151-pERK1/2	Mature CD38mid B	n.s.	n.s.	3.107E-06	1.342E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	GMP	n.s.	n.s.	3.757E-06	1.623E-03	Up	Marrow 2 Only
--	PMAi0	151-pERK1/2	Pre-B II	n.s.	n.s.	4.605E-06	1.989E-03	Up	Marrow 2 Only
--	PMAi0	151-pERK1/2	GMP	n.s.	n.s.	4.846E-06	2.094E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Mature CD4+ T	n.s.	n.s.	5.543E-06	2.394E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Mature CD8+ T	n.s.	n.s.	6.162E-06	2.662E-03	Up	Marrow 2 Only
--	PMAi0	176-pCREB	Mature CD4+ T	n.s.	n.s.	6.494E-06	2.806E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Immature B	n.s.	n.s.	7.814E-06	3.376E-03	Up	Marrow 2 Only
--	PMAi0	156-pZAP70/Syk	Immature B	n.s.	n.s.	8.498E-06	3.671E-03	Up	Marrow 2 Only
--	PMAi0	176-pCREB	NK	n.s.	n.s.	8.620E-06	3.724E-03	Up	Marrow 2 Only
--	PMAi0	168-pH3	Myelocyte	n.s.	n.s.	9.188E-06	3.969E-03	Up	Marrow 2 Only
--	PMAi0	156-pZAP70/Syk	Pre-B I	n.s.	n.s.	1.064E-05	4.597E-03	Up	Marrow 2 Only
--	PMAi0	172-pS6	Plasma cell	n.s.	n.s.	1.180E-05	5.098E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Mature CD38lo B	n.s.	n.s.	1.253E-05	5.412E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Pre-B II	n.s.	n.s.	1.373E-05	5.932E-03	Up	Marrow 2 Only
--	PMAi0	141-pPLCgamma2	MPP	n.s.	n.s.	1.373E-05	5.932E-03	Up	Marrow 2 Only
--	PMAi0	168-pH3	Mature CD8+ T	n.s.	n.s.	1.471E-05	6.355E-03	Up	Marrow 2 Only
--	PMAi0	141-pPLCgamma2	MEP	n.s.	n.s.	1.561E-05	6.743E-03	Up	Marrow 2 Only
--	PMAi0	156-pZAP70/Syk	Naïve CD4+ T	n.s.	n.s.	1.815E-05	7.839E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Pre-B I	n.s.	n.s.	1.836E-05	7.930E-03	Up	Marrow 2 Only
--	PMAi0	176-pCREB	GMP	n.s.	n.s.	1.994E-05	8.612E-03	Up	Marrow 2 Only
--	PMAi0	165-pNFkB	Mature CD4+ T	n.s.	n.s.	2.244E-05	9.696E-03	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	MEP	n.s.	n.s.	2.309E-05	9.974E-03	Up	Marrow 2 Only
--	PMAi0	176-pCREB	MEP	n.s.	n.s.	2.944E-05	1.272E-02	Up	Marrow 2 Only
--	PMAi0	151-pERK1/2	Pre-B I	n.s.	n.s.	3.005E-05	1.298E-02	Up	Marrow 2 Only
--	PMAi0	165-pNFkB	Plasmacytoid DC	n.s.	n.s.	3.139E-05	1.356E-02	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Plasmacytoid DC	n.s.	n.s.	3.376E-05	1.459E-02	Up	Marrow 2 Only
--	PMAi0	168-pH3	MEP	n.s.	n.s.	3.730E-05	1.612E-02	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	NK	n.s.	n.s.	3.809E-05	1.646E-02	Up	Marrow 2 Only
--	PMAi0	141-pPLCgamma2	Pre-B I	n.s.	n.s.	4.106E-05	1.774E-02	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	HSC	n.s.	n.s.	4.125E-05	1.782E-02	Up	Marrow 2 Only
--	PMAi0	141-pPLCgamma2	Plasmacytoid DC	n.s.	n.s.	4.217E-05	1.822E-02	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	Mature CD38mid B	n.s.	n.s.	4.244E-05	1.833E-02	Up	Marrow 2 Only
--	PMAi0	176-pCREB	Mature CD8+ T	n.s.	n.s.	4.245E-05	1.834E-02	Up	Marrow 2 Only
--	PMAi0	152-Ki67	Plasma cell	n.s.	n.s.	4.810E-05	2.078E-02	Up	Marrow 2 Only
--	PMAi0	168-pH3	CMP	n.s.	n.s.	5.591E-05	2.415E-02	Up	Marrow 2 Only
--	PMAi0	168-pH3	NK	n.s.	n.s.	7.292E-05	3.150E-02	Up	Marrow 2 Only
--	PMAi0	156-pZAP70/Syk	Mature CD4+ T	n.s.	n.s.	8.141E-05	3.517E-02	Up	Marrow 2 Only
--	PMAi0	172-pS6	MPP	n.s.	n.s.	9.625E-05	4.158E-02	Up	Marrow 2 Only
--	PMAi0	153-pMAPKAPK2	CD11bmid Monocytes	n.s.	n.s.	1.027E-04	4.436E-02	Up	Marrow 2 Only
--	PMAi0	152-Ki67	CD11bhi Monocytes	n.s.	n.s.	1.027E-04	4.438E-02	Up	Marrow 2 Only
--	PMAi0	176-pCREB	Immature B	n.s.	n.s.	1.101E-04	4.758E-02	Up	Marrow 2 Only
--	PMAi0	168-pH3	GMP	n.s.	n.s.	1.110E-04	4.797E-02	Up	Marrow 2 Only
--	PMAi0	156-pZAP70/Syk	MPP	n.s.	n.s.	1.141E-04	4.928E-02	Up	Marrow 2 Only
--	PVO4	169-pP38	CD11bmid Monocytes	3.162E-09	1.366E-06	5.029E-05	2.172E-02	Up	Both
--	PVO4	159-pSTAT3	Immature B	2.703E-08	1.168E-05	2.431E-08	1.050E-05	Up	Both
--	PVO4	164-pSLP-76	Immature B	4.046E-08	1.748E-05	8.025E-13	3.467E-10	Up	Both
--	PVO4	174-pSrcFK	CD11bmid Monocytes	5.887E-08	2.543E-05	9.801E-07	4.234E-04	Up	Both
--	PVO4	151-pERK1/2	Plasma cell	6.167E-08	2.664E-05	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	169-pP38	CD11bhi Monocytes	9.895E-08	4.275E-05	7.292E-05	3.150E-02	Up	Both
--	PVO4	141-pPLCgamma2	Immature B	1.134E-07	4.900E-05	2.709E-09	1.170E-06	Up	Both
--	PVO4	176-pCREB	Naïve CD4+ T	1.214E-07	5.243E-05	3.147E-06	1.360E-03	Up	Both
--	PVO4	174-pSrcFK	CD11b- Monocytes	1.438E-07	6.213E-05	6.895E-06	2.979E-03	Up	Both
--	PVO4	174-pSrcFK	CD11bhi Monocytes	1.542E-07	6.661E-05	2.563E-07	1.107E-04	Up	Both
--	PVO4	169-pP38	CD11b- Monocytes	1.543E-07	6.664E-05	9.719E-05	4.199E-02	Up	Both
--	PVO4	141-pPLCgamma2	Mature CD4+ T	1.784E-07	7.707E-05	2.818E-10	1.217E-07	Up	Both
--	PVO4	164-pSLP-76	Naïve CD4+ T	2.178E-07	9.408E-05	4.722E-10	2.040E-07	Up	Both
--	PVO4	164-pSLP-76	Naïve CD8+ T	2.428E-07	1.049E-04	1.812E-10	7.827E-08	Up	Both
--	PVO4	141-pPLCgamma2	Mature CD8+ T	2.441E-07	1.055E-04	1.071E-09	4.626E-07	Up	Both
--	PVO4	164-pSLP-76	Mature CD4+ T	3.434E-07	1.483E-04	4.516E-11	1.951E-08	Up	Both
--	PVO4	141-pPLCgamma2	Naïve CD8+ T	3.762E-07	1.625E-04	1.791E-07	7.738E-05	Up	Both
--	PVO4	164-pSLP-76	Plasma cell	4.887E-07	2.111E-04	8.924E-05	3.855E-02	Up	Both
--	PVO4	164-pSLP-76	CD11bmid Monocytes	5.981E-07	2.584E-04	2.260E-08	9.762E-06	Up	Both
--	PVO4	164-pSLP-76	Mature CD8+ T	6.696E-07	2.893E-04	2.110E-10	9.115E-08	Up	Both

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	PVO4	164-pSLP-76	CD11b- Monocytes	6.742E-07	2.912E-04	3.772E-08	1.629E-05	Up	Both
--	PVO4	159-pSTAT3	CD11bmid Monocytes	6.884E-07	2.974E-04	1.467E-06	6.335E-04	Up	Both
--	PVO4	174-pSrcFK	Pre-B II	7.402E-07	3.197E-04	5.139E-06	2.220E-03	Up	Both
--	PVO4	154-pSHP2	Immature B	8.661E-07	3.741E-04	9.168E-09	3.961E-06	Up	Both
--	PVO4	164-pSLP-76	Pre-B I	9.722E-07	4.200E-04	3.711E-05	1.603E-02	Up	Both
--	PVO4	141-pPLCgamma2	CD11b- Monocytes	1.157E-06	4.998E-04	1.953E-08	8.436E-06	Up	Both
--	PVO4	141-pPLCgamma2	Plasma cell	1.167E-06	5.043E-04	2.685E-07	1.160E-04	Up	Both
--	PVO4	175-pCrkL	Immature B	1.305E-06	5.638E-04	6.213E-08	2.684E-05	Up	Both
--	PVO4	169-pP38	Mature CD8+ T	1.466E-06	6.335E-04	7.564E-05	3.268E-02	Up	Both
--	PVO4	141-pPLCgamma2	Platelet	1.518E-06	6.559E-04	4.331E-06	1.871E-03	Up	Both
--	PVO4	141-pPLCgamma2	Pre-B I	1.593E-06	6.882E-04	1.707E-09	7.373E-07	Up	Both
--	PVO4	141-pPLCgamma2	CD11bmid Monocytes	2.126E-06	9.184E-04	3.644E-08	1.574E-05	Up	Both
--	PVO4	150-pSTAT5	CD11bmid Monocytes	2.224E-06	9.608E-04	5.946E-06	2.569E-03	Up	Both
--	PVO4	141-pPLCgamma2	Naïve CD4+ T	2.626E-06	1.135E-03	1.490E-07	6.438E-05	Up	Both
--	PVO4	164-pSLP-76	Myelocyte	2.648E-06	1.144E-03	3.499E-11	1.512E-08	Up	Both
--	PVO4	169-pP38	Mature CD4+ T	2.784E-06	1.203E-03	3.612E-05	1.561E-02	Up	Both
--	PVO4	175-pCrkL	CD11bmid Monocytes	3.069E-06	1.326E-03	3.864E-06	1.669E-03	Up	Both
--	PVO4	174-pSrcFK	Naïve CD8+ T	3.079E-06	1.330E-03	2.323E-05	1.004E-02	Up	Both
--	PVO4	169-pP38	Pre-B I	3.506E-06	1.514E-03	2.962E-05	1.280E-02	Up	Both
--	PVO4	154-pSHP2	CD11bmid Monocytes	3.724E-06	1.609E-03	8.827E-07	3.813E-04	Up	Both
--	PVO4	169-pP38	MEP	3.781E-06	1.634E-03	2.851E-05	1.232E-02	Up	Both
--	PVO4	172-pS6	Naïve CD8+ T	3.845E-06	1.661E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	151-pERK1/2	CD11b- Monocytes	3.854E-06	1.665E-03	6.794E-05	2.935E-02	Up	Both
--	PVO4	169-pP38	Naïve CD8+ T	3.965E-06	1.713E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	164-pSLP-76	Pre-B II	4.576E-06	1.977E-03	5.183E-07	2.239E-04	Up	Both
--	PVO4	141-pPLCgamma2	CMP	4.956E-06	2.141E-03	3.623E-09	1.565E-06	Up	Both
--	PVO4	174-pSrcFK	Mature CD4+ T	5.492E-06	2.373E-03	9.698E-06	4.190E-03	Up	Both
--	PVO4	151-pERK1/2	Immature B	5.593E-06	2.416E-03	5.000E-07	2.160E-04	Up	Both
--	PVO4	151-pERK1/2	CD11bmid Monocytes	5.701E-06	2.463E-03	4.519E-05	1.952E-02	Up	Both
--	PVO4	154-pSHP2	Pre-B I	5.785E-06	2.499E-03	1.965E-06	8.487E-04	Up	Both
--	PVO4	141-pPLCgamma2	Myelocyte	5.867E-06	2.535E-03	3.794E-11	1.639E-08	Up	Both
--	PVO4	150-pSTAT5	Naïve CD8+ T	5.997E-06	2.591E-03	6.373E-05	2.753E-02	Up	Both
--	PVO4	154-pSHP2	CD11b- Monocytes	6.063E-06	2.619E-03	6.402E-07	2.766E-04	Up	Both
--	PVO4	174-pSrcFK	Immature B	6.079E-06	2.626E-03	1.471E-06	6.354E-04	Up	Both
--	PVO4	164-pSLP-76	CD11bhi Monocytes	6.501E-06	2.809E-03	4.259E-06	1.840E-03	Up	Both
--	PVO4	169-pP38	HSC	6.638E-06	2.868E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	172-pS6	Mature CD4+ T	6.923E-06	2.991E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	175-pCrkL	Pre-B I	7.929E-06	3.425E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	159-pSTAT3	CD11b- Monocytes	7.989E-06	3.451E-03	5.035E-06	2.175E-03	Up	Both
--	PVO4	169-pP38	CMP	8.134E-06	3.514E-03	1.469E-05	6.345E-03	Up	Both
--	PVO4	176-pCREB	Pre-B I	8.312E-06	3.591E-03	7.987E-06	3.450E-03	Up	Both
--	PVO4	174-pSrcFK	Naïve CD4+ T	8.596E-06	3.714E-03	9.634E-06	4.162E-03	Up	Both
--	PVO4	156-pZAP70/Syk	Naïve CD8+ T	8.794E-06	3.799E-03	4.722E-06	2.040E-03	Up	Both
--	PVO4	175-pCrkL	Naïve CD8+ T	9.261E-06	4.001E-03	1.443E-05	6.232E-03	Up	Both
--	PVO4	150-pSTAT5	CD11b- Monocytes	1.108E-05	4.785E-03	9.093E-06	3.928E-03	Up	Both
--	PVO4	175-pCrkL	Pre-B II	1.267E-05	5.473E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	176-pCREB	HSC	1.457E-05	6.296E-03	1.252E-05	5.410E-03	Up	Both
--	PVO4	175-pCrkL	CD11b- Monocytes	1.562E-05	6.749E-03	1.084E-05	4.685E-03	Up	Both
--	PVO4	141-pPLCgamma2	MPP	1.757E-05	7.590E-03	3.354E-08	1.449E-05	Up	Both
--	PVO4	169-pP38	MPP	1.773E-05	7.660E-03	5.082E-05	2.195E-02	Up	Both
--	PVO4	141-pPLCgamma2	MEP	1.868E-05	8.068E-03	3.541E-09	1.530E-06	Up	Both
--	PVO4	154-pSHP2	Naïve CD8+ T	1.934E-05	8.355E-03	4.097E-06	1.770E-03	Up	Both
--	PVO4	176-pCREB	Naïve CD8+ T	1.996E-05	8.621E-03	3.574E-05	1.544E-02	Up	Both
--	PVO4	169-pP38	Naïve CD4+ T	2.016E-05	8.708E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	159-pSTAT3	CD11bhi Monocytes	2.021E-05	8.730E-03	1.112E-06	4.805E-04	Up	Both
--	PVO4	176-pCREB	Plasmacytoid DC	2.024E-05	8.742E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	171-pBtk/Itk	Mature CD38lo B	2.064E-05	8.918E-03	n.s.	n.s.	Down	Marrow 1 Only
--	PVO4	169-pP38	Pre-B II	2.081E-05	8.988E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	169-pP38	NK	2.109E-05	9.113E-03	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	174-pSrcFK	Mature CD8+ T	2.116E-05	9.139E-03	3.883E-05	1.677E-02	Up	Both
--	PVO4	141-pPLCgamma2	Erythroblast	2.192E-05	9.471E-03	6.549E-08	2.829E-05	Up	Both
--	PVO4	175-pCrkL	Mature CD4+ T	2.211E-05	9.551E-03	8.297E-05	3.584E-02	Up	Both
--	PVO4	164-pSLP-76	Plasmacytoid DC	2.231E-05	9.639E-03	1.796E-05	7.758E-03	Up	Both
--	PVO4	175-pCrkL	CD11bhi Monocytes	2.342E-05	1.012E-02	2.612E-05	1.128E-02	Up	Both
--	PVO4	154-pSHP2	Plasma cell	2.370E-05	1.024E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	156-pZAP70/Syk	Mature CD4+ T	2.406E-05	1.039E-02	1.852E-08	7.999E-06	Up	Both
--	PVO4	175-pCrkL	Mature CD8+ T	2.499E-05	1.080E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	159-pSTAT3	Plasma cell	2.513E-05	1.085E-02	n.s.	n.s.	Up	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	PVO4	172-pS6	Pre-B I	2.653E-05	1.146E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	141-pPLCGamma2	CD11bhi Monocytes	2.674E-05	1.155E-02	4.535E-06	1.959E-03	Up	Both
--	PVO4	156-pZAP70/Syk	Mature CD8+ T	2.768E-05	1.196E-02	2.241E-07	9.681E-05	Up	Both
--	PVO4	159-pSTAT3	Pre-B II	2.779E-05	1.200E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	150-pSTAT5	Mature CD8+ T	2.813E-05	1.215E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	156-pZAP70/Syk	Immature B	2.901E-05	1.253E-02	4.693E-09	2.027E-06	Up	Both
--	PVO4	171-pBtk/Itk	HSC	2.945E-05	1.272E-02	n.s.	n.s.	Down	Marrow 1 Only
--	PVO4	156-pZAP70/Syk	Naïve CD4+ T	3.021E-05	1.305E-02	4.420E-08	1.910E-05	Up	Both
--	PVO4	150-pSTAT5	Naïve CD4+ T	3.102E-05	1.340E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	175-pCrkL	Naïve CD4+ T	3.124E-05	1.350E-02	1.132E-04	4.888E-02	Up	Both
--	PVO4	172-pS6	Naïve CD4+ T	3.247E-05	1.403E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	164-pSLP-76	HSC	3.349E-05	1.447E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	174-pSrcFK	Mature CD38lo B	3.412E-05	1.474E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	153-pMAPKAPK2	Plasma cell	3.441E-05	1.487E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	169-pP38	Plasma cell	3.453E-05	1.492E-02	9.889E-05	4.272E-02	Up	Both
--	PVO4	141-pPLCGamma2	Pre-B II	3.560E-05	1.538E-02	4.256E-06	1.839E-03	Up	Both
--	PVO4	150-pSTAT5	Plasmacytoid DC	3.620E-05	1.564E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	174-pSrcFK	Plasmacytoid DC	3.679E-05	1.589E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	141-pPLCGamma2	GMP	3.927E-05	1.696E-02	3.727E-05	1.610E-02	Up	Both
--	PVO4	154-pSHP2	Mature CD4+ T	4.046E-05	1.748E-02	5.866E-08	2.534E-05	Up	Both
--	PVO4	150-pSTAT5	Mature CD4+ T	4.223E-05	1.825E-02	5.675E-05	2.452E-02	Up	Both
--	PVO4	154-pSHP2	CD11bhi Monocytes	4.244E-05	1.833E-02	1.681E-05	7.264E-03	Up	Both
--	PVO4	156-pZAP70/Syk	CD11bmid Monocytes	4.343E-05	1.876E-02	2.121E-06	9.162E-04	Up	Both
--	PVO4	164-pSLP-76	Mature CD38mid B	4.507E-05	1.947E-02	8.637E-05	3.731E-02	Up	Both
--	PVO4	154-pSHP2	Mature CD8+ T	4.776E-05	2.063E-02	1.561E-07	6.746E-05	Up	Both
--	PVO4	153-pMAPKAPK2	Mature CD8+ T	4.877E-05	2.107E-02	5.477E-06	2.366E-03	Up	Both
--	PVO4	169-pP38	Plasmacytoid DC	4.928E-05	2.129E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	151-pERK1/2	MEP	5.179E-05	2.237E-02	2.203E-06	9.518E-04	Up	Both
--	PVO4	166-IkBalpa	MEP	5.197E-05	2.245E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	164-pSLP-76	MPP	5.364E-05	2.317E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	150-pSTAT5	Pre-B I	5.516E-05	2.383E-02	1.031E-04	4.453E-02	Up	Both
--	PVO4	174-pSrcFK	Plasma cell	5.613E-05	2.425E-02	9.429E-06	4.073E-03	Up	Both
--	PVO4	176-pCREB	MEP	6.198E-05	2.678E-02	2.175E-05	9.398E-03	Up	Both
--	PVO4	154-pSHP2	Naïve CD4+ T	6.228E-05	2.690E-02	2.723E-06	1.176E-03	Up	Both
--	PVO4	166-IkBalpa	CD11bmid Monocytes	6.554E-05	2.832E-02	n.s.	n.s.	Down	Marrow 1 Only
--	PVO4	174-pSrcFK	Pre-B I	6.555E-05	2.832E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	141-pPLCGamma2	HSC	6.600E-05	2.851E-02	2.550E-07	1.102E-04	Up	Both
--	PVO4	159-pSTAT3	Mature CD4+ T	6.885E-05	2.974E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	172-pS6	MEP	7.401E-05	3.197E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	159-pSTAT3	HSC	7.720E-05	3.335E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	151-pERK1/2	Pre-B I	7.891E-05	3.409E-02	1.067E-04	4.608E-02	Up	Both
--	PVO4	153-pMAPKAPK2	Naïve CD8+ T	8.111E-05	3.504E-02	2.373E-05	1.025E-02	Up	Both
--	PVO4	150-pSTAT5	Immature B	8.145E-05	3.518E-02	2.738E-06	1.183E-03	Up	Both
--	PVO4	159-pSTAT3	Naïve CD8+ T	8.153E-05	3.522E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	153-pMAPKAPK2	Mature CD4+ T	8.308E-05	3.589E-02	5.376E-06	2.322E-03	Up	Both
--	PVO4	151-pERK1/2	Myelocyte	8.862E-05	3.828E-02	2.720E-06	1.175E-03	Up	Both
--	PVO4	141-pPLCGamma2	Mature CD38mid B	9.589E-05	4.143E-02	9.466E-05	4.089E-02	Up	Both
--	PVO4	150-pSTAT5	CD11bhi Monocytes	9.815E-05	4.240E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	141-pPLCGamma2	Megakaryocyte	9.998E-05	4.319E-02	2.289E-07	9.889E-05	Up	Both
--	PVO4	172-pS6	HSC	1.039E-04	4.488E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	154-pSHP2	MEP	1.054E-04	4.554E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	153-pMAPKAPK2	Immature B	1.065E-04	4.601E-02	3.284E-07	1.419E-04	Up	Both
--	PVO4	176-pCREB	MPP	1.079E-04	4.660E-02	2.947E-06	1.273E-03	Up	Both
--	PVO4	176-pCREB	Plasma cell	1.080E-04	4.667E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	165-pNFkB	Pre-B I	1.086E-04	4.691E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	169-pP38	GMP	1.141E-04	4.928E-02	n.s.	n.s.	Up	Marrow 1 Only
--	PVO4	156-pZAP70/Syk	Myelocyte	n.s.	n.s.	9.371E-09	4.048E-06	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	1.292E-07	5.582E-05	Up	Marrow 2 Only
--	PVO4	169-pP38	Myelocyte	n.s.	n.s.	1.349E-07	5.828E-05	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	CD11b- Monocytes	n.s.	n.s.	1.823E-07	7.876E-05	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	Pre-B I	n.s.	n.s.	1.912E-07	8.260E-05	Up	Marrow 2 Only
--	PVO4	141-pPLCGamma2	Plasmacytoid DC	n.s.	n.s.	2.106E-07	9.098E-05	Up	Marrow 2 Only
--	PVO4	169-pP38	Erythroblast	n.s.	n.s.	3.660E-07	1.581E-04	Up	Marrow 2 Only
--	PVO4	141-pPLCGamma2	NK	n.s.	n.s.	4.657E-07	2.012E-04	Up	Marrow 2 Only
--	PVO4	168-pH3	Immature B	n.s.	n.s.	5.145E-07	2.223E-04	Up	Marrow 2 Only
--	PVO4	154-pSHP2	Myelocyte	n.s.	n.s.	7.221E-07	3.119E-04	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	Naïve CD4+ T	n.s.	n.s.	1.243E-06	5.371E-04	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	Erythroblast	n.s.	n.s.	1.333E-06	5.761E-04	Up	Marrow 2 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	PVO4	174-pSrcFK	Myelocyte	n.s.	n.s.	1.638E-06	7.075E-04	Up	Marrow 2 Only
--	PVO4	176-pCREB	CMP	n.s.	n.s.	2.078E-06	8.975E-04	Up	Marrow 2 Only
--	PVO4	159-pSTAT3	Myelocyte	n.s.	n.s.	2.139E-06	9.243E-04	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	Naïve CD8+ T	n.s.	n.s.	2.996E-06	1.294E-03	Up	Marrow 2 Only
--	PVO4	152-Ki67	Plasma cell	n.s.	n.s.	3.190E-06	1.378E-03	Up	Marrow 2 Only
--	PVO4	154-pSHP2	Erythroblast	n.s.	n.s.	3.243E-06	1.401E-03	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	NK	n.s.	n.s.	3.592E-06	1.552E-03	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	CMP	n.s.	n.s.	6.707E-06	2.897E-03	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	MEP	n.s.	n.s.	6.890E-06	2.976E-03	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	Mature CD38lo B	n.s.	n.s.	7.085E-06	3.061E-03	Up	Marrow 2 Only
--	PVO4	152-Ki67	Immature B	n.s.	n.s.	7.122E-06	3.077E-03	Up	Marrow 2 Only
--	PVO4	175-pCrkL	Myelocyte	n.s.	n.s.	7.455E-06	3.220E-03	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	GMP	n.s.	n.s.	7.990E-06	3.452E-03	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	CD11bmid Monocytes	n.s.	n.s.	8.616E-06	3.722E-03	Up	Marrow 2 Only
--	PVO4	168-pH3	Myelocyte	n.s.	n.s.	9.856E-06	4.258E-03	Up	Marrow 2 Only
--	PVO4	154-pSHP2	CMP	n.s.	n.s.	9.963E-06	4.304E-03	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	Pre-B I	n.s.	n.s.	1.076E-05	4.648E-03	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	Megakaryocyte	n.s.	n.s.	1.212E-05	5.234E-03	Up	Marrow 2 Only
--	PVO4	176-pCREB	Mature CD4+ T	n.s.	n.s.	1.358E-05	5.868E-03	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	MPP	n.s.	n.s.	1.512E-05	6.531E-03	Up	Marrow 2 Only
--	PVO4	176-pCREB	Immature B	n.s.	n.s.	1.615E-05	6.975E-03	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	Plasmacytoid DC	n.s.	n.s.	1.617E-05	6.987E-03	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	CD11b- Monocytes	n.s.	n.s.	1.774E-05	7.663E-03	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	CD11bhi Monocytes	n.s.	n.s.	1.850E-05	7.991E-03	Up	Marrow 2 Only
--	PVO4	169-pP38	Immature B	n.s.	n.s.	1.995E-05	8.619E-03	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	Pre-B II	n.s.	n.s.	2.167E-05	9.360E-03	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	Pre-B II	n.s.	n.s.	2.442E-05	1.055E-02	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	CD11bhi Monocytes	n.s.	n.s.	2.471E-05	1.068E-02	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	Mature CD38lo B	n.s.	n.s.	2.546E-05	1.100E-02	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	Platelet	n.s.	n.s.	2.567E-05	1.109E-02	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	Mature CD8+ T	n.s.	n.s.	3.121E-05	1.348E-02	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	Myelocyte	n.s.	n.s.	3.176E-05	1.372E-02	Up	Marrow 2 Only
--	PVO4	151-pERK1/2	Mature CD38lo B	n.s.	n.s.	3.225E-05	1.393E-02	Up	Marrow 2 Only
--	PVO4	150-pSTAT5	Myelocyte	n.s.	n.s.	3.723E-05	1.608E-02	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	MEP	n.s.	n.s.	3.940E-05	1.702E-02	Up	Marrow 2 Only
--	PVO4	168-pH3	HSC	n.s.	n.s.	4.137E-05	1.787E-02	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	Plasma cell	n.s.	n.s.	4.201E-05	1.815E-02	Up	Marrow 2 Only
--	PVO4	168-pH3	MPP	n.s.	n.s.	4.804E-05	2.076E-02	Up	Marrow 2 Only
--	PVO4	141-pPLCgamma2	Mature CD38lo B	n.s.	n.s.	6.473E-05	2.796E-02	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	Naïve CD4+ T	n.s.	n.s.	6.518E-05	2.816E-02	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	CMP	n.s.	n.s.	7.209E-05	3.114E-02	Up	Marrow 2 Only
--	PVO4	168-pH3	Plasmacytoid DC	n.s.	n.s.	7.243E-05	3.129E-02	Up	Marrow 2 Only
--	PVO4	169-pP38	Platelet	n.s.	n.s.	7.901E-05	3.413E-02	Up	Marrow 2 Only
--	PVO4	154-pSHP2	Pre-B II	n.s.	n.s.	8.312E-05	3.591E-02	Up	Marrow 2 Only
--	PVO4	176-pCREB	Mature CD8+ T	n.s.	n.s.	8.805E-05	3.804E-02	Up	Marrow 2 Only
--	PVO4	166-IkBalph	Immature B	n.s.	n.s.	8.950E-05	3.866E-02	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	Pre-B II	n.s.	n.s.	9.050E-05	3.910E-02	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	CMP	n.s.	n.s.	9.233E-05	3.989E-02	Up	Marrow 2 Only
--	PVO4	153-pMAPKAPK2	MPP	n.s.	n.s.	9.519E-05	4.112E-02	Up	Marrow 2 Only
--	PVO4	156-pZAP70/Syk	Mature CD38mid B	n.s.	n.s.	9.588E-05	4.142E-02	Up	Marrow 2 Only
--	PVO4	172-pS6	Plasma cell	n.s.	n.s.	1.065E-04	4.602E-02	Up	Marrow 2 Only
--	PVO4	164-pSLP-76	GMP	n.s.	n.s.	1.111E-04	4.798E-02	Up	Marrow 2 Only
--	SCF	159-pSTAT3	CD11bmid Monocytes	3.809E-06	1.646E-03	7.218E-06	3.118E-03	Up	Both
--	SCF	159-pSTAT3	HSC	4.904E-06	2.119E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	159-pSTAT3	CD11bhi Monocytes	5.638E-06	2.435E-03	1.816E-07	7.846E-05	Up	Both
--	SCF	159-pSTAT3	CD11b- Monocytes	5.831E-06	2.519E-03	1.222E-05	5.279E-03	Up	Both
--	SCF	159-pSTAT3	Plasma cell	8.590E-06	3.711E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	159-pSTAT3	Mature CD4+ T	8.635E-06	3.730E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	159-pSTAT3	NK	1.148E-05	4.960E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	172-pS6	MEP	1.230E-05	5.314E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	159-pSTAT3	Naïve CD4+ T	1.791E-05	7.739E-03	2.592E-05	1.120E-02	Up	Both
--	SCF	159-pSTAT3	Naïve CD8+ T	2.172E-05	9.382E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	174-pSrcFK	Pre-B II	2.211E-05	9.551E-03	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	172-pS6	HSC	2.761E-05	1.193E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	159-pSTAT3	Mature CD8+ T	2.927E-05	1.264E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	171-pBtk/Itk	HSC	3.401E-05	1.469E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	174-pSrcFK	CD11bhi Monocytes	3.703E-05	1.599E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	176-pCREB	MEP	4.010E-05	1.732E-02	n.s.	n.s.	Up	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
--	SCF	159-pSTAT3	Immature B	4.362E-05	1.884E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	169-pP38	CD11bmid Monocytes	4.581E-05	1.979E-02	n.s.	n.s.	Down	Marrow 1 Only
--	SCF	174-pSrcFK	CD11b- Monocytes	5.155E-05	2.227E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	171-pBtk/Itk	Mature CD38lo B	5.362E-05	2.316E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	174-pSrcFK	CD11bmid Monocytes	7.256E-05	3.135E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	172-pS6	Immature B	1.102E-04	4.759E-02	n.s.	n.s.	Up	Marrow 1 Only
--	SCF	168-pH3	HSC	n.s.	n.s.	1.799E-05	7.771E-03	Up	Marrow 2 Only
--	SCF	176-pCREB	MPP	n.s.	n.s.	3.726E-05	1.610E-02	Up	Marrow 2 Only
--	SCF	159-pSTAT3	MPP	n.s.	n.s.	5.407E-05	2.336E-02	Up	Marrow 2 Only
--	SCF	176-pCREB	HSC	n.s.	n.s.	5.587E-05	2.413E-02	Up	Marrow 2 Only
--	TNFa	166-IkBalp	MEP	1.780E-07	7.688E-05	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	166-IkBalp	CD11bhi Monocytes	2.835E-07	1.225E-04	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	168-pH3	CD11b- Monocytes	7.874E-07	3.402E-04	3.278E-05	1.416E-02	Up	Both
--	TNFa	166-IkBalp	CD11bmid Monocytes	9.950E-07	4.298E-04	7.287E-05	3.148E-02	Down	Both
--	TNFa	166-IkBalp	Plasmacytoid DC	3.929E-06	1.697E-03	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	166-IkBalp	CD11b- Monocytes	5.285E-06	2.283E-03	3.239E-05	1.399E-02	Down	Both
--	TNFa	166-IkBalp	GMP	5.668E-06	2.449E-03	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	166-IkBalp	CMP	6.233E-06	2.693E-03	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	169-pP38	CD11bmid Monocytes	1.064E-05	4.597E-03	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	176-pCREB	Plasmacytoid DC	1.242E-05	5.367E-03	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	168-pH3	Plasmacytoid DC	1.846E-05	7.974E-03	9.493E-06	4.101E-03	Up	Both
--	TNFa	176-pCREB	Naïve CD4+ T	1.996E-05	8.622E-03	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	171-pBtk/Itk	Mature CD38lo B	2.033E-05	8.784E-03	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	172-pS6	MEP	2.385E-05	1.030E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	172-pS6	CD11b- Monocytes	2.835E-05	1.225E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	168-pH3	CD11bmid Monocytes	3.091E-05	1.335E-02	7.530E-05	3.253E-02	Up	Both
--	TNFa	168-pH3	CD11bhi Monocytes	5.167E-05	2.232E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	171-pBtk/Itk	HSC	5.297E-05	2.288E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	176-pCREB	MEP	5.567E-05	2.405E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	166-IkBalp	NK	5.635E-05	2.434E-02	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	176-pCREB	Pre-B I	5.987E-05	2.587E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	169-pP38	CD11bhi Monocytes	6.439E-05	2.781E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	174-pSrcFK	CD11b- Monocytes	6.825E-05	2.948E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	172-pS6	HSC	6.940E-05	2.998E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	172-pS6	CD11bmid Monocytes	7.044E-05	3.043E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	166-IkBalp	Pre-B I	7.572E-05	3.271E-02	n.s.	n.s.	Down	Marrow 1 Only
--	TNFa	168-pH3	MEP	7.592E-05	3.280E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	176-pCREB	HSC	8.601E-05	3.716E-02	4.973E-05	2.148E-02	Up	Both
--	TNFa	169-pP38	CD11b- Monocytes	9.802E-05	4.234E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	171-pBtk/Itk	Mature CD8+ T	1.077E-04	4.653E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	174-pSrcFK	CD11bhi Monocytes	1.127E-04	4.869E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TNFa	169-pP38	Megakaryocyte	n.s.	n.s.	5.881E-06	2.541E-03	Up	Marrow 2 Only
--	TNFa	169-pP38	Erythroblast	n.s.	n.s.	6.402E-06	2.766E-03	Up	Marrow 2 Only
--	TNFa	169-pP38	Myelocyte	n.s.	n.s.	9.237E-06	3.990E-03	Up	Marrow 2 Only
--	TNFa	168-pH3	HSC	n.s.	n.s.	1.050E-05	4.537E-03	Up	Marrow 2 Only
--	TNFa	168-pH3	Immature B	n.s.	n.s.	1.987E-05	8.585E-03	Up	Marrow 2 Only
--	TNFa	176-pCREB	MPP	n.s.	n.s.	2.347E-05	1.014E-02	Up	Marrow 2 Only
--	TNFa	168-pH3	Myelocyte	n.s.	n.s.	3.245E-05	1.402E-02	Up	Marrow 2 Only
--	TNFa	168-pH3	MPP	n.s.	n.s.	4.006E-05	1.730E-02	Up	Marrow 2 Only
--	TPO	150-pSTAT5	MEP	2.251E-05	9.725E-03	n.s.	n.s.	Up	Marrow 1 Only
--	TPO	169-pP38	CD11bmid Monocytes	4.194E-05	1.812E-02	n.s.	n.s.	Down	Marrow 1 Only
--	TPO	171-pBtk/Itk	HSC	6.863E-05	2.965E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TPO	171-pBtk/Itk	Mature CD38lo B	8.917E-05	3.852E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TPO	172-pS6	MEP	1.119E-04	4.835E-02	n.s.	n.s.	Up	Marrow 1 Only
--	TPO	152-Ki67	Plasma cell	n.s.	n.s.	4.546E-06	1.964E-03	Up	Marrow 2 Only
--	TPO	150-pSTAT5	HSC	n.s.	n.s.	7.666E-06	3.312E-03	Up	Marrow 2 Only
--	TPO	151-pERK1/2	HSC	n.s.	n.s.	4.149E-05	1.793E-02	Up	Marrow 2 Only
--	TPO	169-pP38	Erythroblast	n.s.	n.s.	6.241E-05	2.696E-02	Down	Marrow 2 Only
DMSO	Unstim	166-IkBalp	Myelocyte	n.s.	n.s.	3.950E-05	1.707E-02	Up	Marrow 2 Only
DMSO	Unstim	168-pH3	Immature B	n.s.	n.s.	5.184E-05	2.240E-02	Up	Marrow 2 Only
DMSO	Unstim	164-pSLP-76	Myelocyte	n.s.	n.s.	7.644E-05	3.302E-02	Up	Marrow 2 Only
DMSO	Unstim	152-Ki67	Plasma cell	n.s.	n.s.	7.811E-05	3.374E-02	Up	Marrow 2 Only
Dasatinib	Unstim	174-pSrcFK	CD11bhi Monocytes	1.194E-07	5.159E-05	3.084E-07	1.332E-04	Down	Both
Dasatinib	Unstim	174-pSrcFK	CD11bmid Monocytes	1.348E-07	5.821E-05	1.895E-06	8.185E-04	Down	Both
Dasatinib	Unstim	174-pSrcFK	CD11b- Monocytes	3.320E-07	1.434E-04	1.752E-05	7.570E-03	Down	Both
Dasatinib	Unstim	174-pSrcFK	Pre-B II	3.968E-07	1.714E-04	4.139E-05	1.788E-02	Down	Both
Dasatinib	Unstim	168-pH3	CD11bhi Monocytes	7.723E-07	3.336E-04	8.731E-05	3.772E-02	Down	Both
Dasatinib	Unstim	168-pH3	CD11bmid Monocytes	2.508E-06	1.083E-03	6.421E-05	2.774E-02	Down	Both

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
Dasatinib	Unstim	169-pP38	CD11bmid Monocytes	2.631E-06	1.136E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	168-pH3	CD11b- Monocytes	4.101E-06	1.772E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	159-pSTAT3	Immature B	9.164E-06	3.959E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	171-pBtk/Itk	Mature CD38lo B	9.800E-06	4.233E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Naïve CD8+ T	1.077E-05	4.654E-03	5.849E-05	2.527E-02	Down	Both
Dasatinib	Unstim	171-pBtk/Itk	HSC	1.438E-05	6.214E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	169-pP38	CD11bhi Monocytes	1.740E-05	7.519E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Mature CD38lo B	1.854E-05	8.008E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Mature CD4+ T	2.659E-05	1.149E-02	1.054E-04	4.552E-02	Down	Both
Dasatinib	Unstim	174-pSrcFK	Mature CD8+ T	2.669E-05	1.153E-02	1.677E-05	7.245E-03	Down	Both
Dasatinib	Unstim	159-pSTAT3	HSC	2.773E-05	1.198E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Naïve CD4+ T	3.631E-05	1.569E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Plasmacytoid DC	3.782E-05	1.634E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	159-pSTAT3	CD11bhi Monocytes	5.538E-05	2.392E-02	2.816E-05	1.216E-02	Down	Both
Dasatinib	Unstim	174-pSrcFK	NK	5.718E-05	2.470E-02	7.593E-06	3.280E-03	Down	Both
Dasatinib	Unstim	171-pBtk/Itk	Mature CD8+ T	6.339E-05	2.738E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	172-pS6	CD11bmid Monocytes	7.153E-05	3.090E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	159-pSTAT3	CD11bmid Monocytes	8.838E-05	3.818E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Immature B	9.382E-05	4.053E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	174-pSrcFK	Mature CD38mid B	9.551E-05	4.126E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	141-pPLCgamma2	CD11b- Monocytes	9.771E-05	4.221E-02	1.097E-04	4.737E-02	Down	Both
Dasatinib	Unstim	172-pS6	Megakaryocyte	1.062E-04	4.588E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Unstim	169-pP38	Erythroblast	n.s.	n.s.	2.581E-06	1.115E-03	Down	Marrow 2 Only
Dasatinib	Unstim	156-pZAP70/Syk	CD11b- Monocytes	n.s.	n.s.	4.038E-06	1.744E-03	Down	Marrow 2 Only
Dasatinib	Unstim	174-pSrcFK	Myelocyte	n.s.	n.s.	1.954E-05	8.443E-03	Down	Marrow 2 Only
Dasatinib	Unstim	152-Ki67	Plasma cell	n.s.	n.s.	3.859E-05	1.667E-02	Up	Marrow 2 Only
Dasatinib	Unstim	156-pZAP70/Syk	CD11bmid Monocytes	n.s.	n.s.	5.042E-05	2.178E-02	Down	Marrow 2 Only
Dasatinib	Unstim	164-pSLP-76	Immature B	n.s.	n.s.	6.411E-05	2.770E-02	Down	Marrow 2 Only
Dasatinib	Unstim	174-pSrcFK	Erythroblast	n.s.	n.s.	7.914E-05	3.419E-02	Down	Marrow 2 Only
Dasatinib	Unstim	151-pERK1/2	HSC	n.s.	n.s.	8.365E-05	3.614E-02	Down	Marrow 2 Only
Dasatinib	Unstim	164-pSLP-76	CD11bmid Monocytes	n.s.	n.s.	9.206E-05	3.977E-02	Down	Marrow 2 Only
Dasatinib	BCR	174-pSrcFK	CD11bhi Monocytes	1.478E-07	6.386E-05	1.122E-06	4.845E-04	Down	Both
Dasatinib	BCR	174-pSrcFK	CD11bmid Monocytes	1.630E-07	7.041E-05	9.053E-06	3.911E-03	Down	Both
Dasatinib	BCR	174-pSrcFK	CD11b- Monocytes	3.388E-07	1.464E-04	1.073E-04	4.636E-02	Down	Both
Dasatinib	BCR	168-pH3	CD11bhi Monocytes	7.394E-07	3.194E-04	5.006E-05	2.163E-02	Down	Both
Dasatinib	BCR	174-pSrcFK	Pre-B II	8.452E-07	3.651E-04	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	169-pP38	CD11bmid Monocytes	1.950E-06	8.422E-04	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	168-pH3	CD11bmid Monocytes	2.367E-06	1.023E-03	4.780E-05	2.065E-02	Down	Both
Dasatinib	BCR	168-pH3	CD11b- Monocytes	3.165E-06	1.367E-03	1.086E-04	4.691E-02	Down	Both
Dasatinib	BCR	174-pSrcFK	Naïve CD8+ T	2.288E-05	9.882E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	171-pBtk/Itk	Mature CD38lo B	2.616E-05	1.130E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	169-pP38	CD11bhi Monocytes	3.378E-05	1.459E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	159-pSTAT3	CD11bhi Monocytes	5.339E-05	2.306E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	174-pSrcFK	Mature CD4+ T	6.657E-05	2.876E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	169-pP38	CD11b- Monocytes	6.952E-05	3.003E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	171-pBtk/Itk	HSC	7.294E-05	3.151E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	174-pSrcFK	Mature CD8+ T	8.073E-05	3.488E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	174-pSrcFK	Mature CD38lo B	8.667E-05	3.744E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	159-pSTAT3	CD11bmid Monocytes	8.739E-05	3.775E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	174-pSrcFK	Naïve CD4+ T	9.184E-05	3.967E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	171-pBtk/Itk	Mature CD8+ T	1.014E-04	4.379E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	141-pPLCgamma2	CD11b- Monocytes	1.097E-04	4.738E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	174-pSrcFK	NK	1.111E-04	4.801E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	BCR	156-pZAP70/Syk	CD11b- Monocytes	n.s.	n.s.	4.028E-05	1.740E-02	Down	Marrow 2 Only
Dasatinib	BCR	169-pP38	Erythroblast	n.s.	n.s.	5.609E-05	2.423E-02	Down	Marrow 2 Only
Dasatinib	BCR	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	9.935E-05	4.292E-02	Up	Marrow 2 Only
Dasatinib	Flt3L	174-pSrcFK	CD11bhi Monocytes	1.745E-07	7.539E-05	2.787E-07	1.204E-04	Down	Both
Dasatinib	Flt3L	174-pSrcFK	CD11bmid Monocytes	1.980E-07	8.551E-05	1.852E-06	8.000E-04	Down	Both
Dasatinib	Flt3L	174-pSrcFK	CD11b- Monocytes	5.056E-07	2.184E-04	1.549E-05	6.691E-03	Down	Both
Dasatinib	Flt3L	174-pSrcFK	Pre-B II	5.267E-07	2.275E-04	3.179E-05	1.373E-02	Down	Both
Dasatinib	Flt3L	168-pH3	CD11bhi Monocytes	8.431E-07	3.642E-04	3.186E-05	1.377E-02	Down	Both
Dasatinib	Flt3L	169-pP38	CD11bmid Monocytes	2.770E-06	1.197E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	168-pH3	CD11bmid Monocytes	3.577E-06	1.545E-03	3.356E-05	1.450E-02	Down	Both
Dasatinib	Flt3L	174-pSrcFK	Naïve CD8+ T	8.633E-06	3.729E-03	3.477E-05	1.502E-02	Down	Both
Dasatinib	Flt3L	168-pH3	CD11b- Monocytes	8.853E-06	3.824E-03	1.074E-04	4.641E-02	Down	Both
Dasatinib	Flt3L	171-pBtk/Itk	Mature CD38lo B	8.930E-06	3.858E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	169-pP38	CD11bhi Monocytes	1.589E-05	6.864E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	174-pSrcFK	Mature CD38lo B	1.843E-05	7.963E-03	n.s.	n.s.	Down	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
Dasatinib	Flt3L	171-pBtk/Itk	HSC	1.912E-05	8.261E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	159-pSTAT3	Immature B	1.928E-05	8.330E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	174-pSrcFK	Mature CD4+ T	2.120E-05	9.158E-03	6.503E-05	2.809E-02	Down	Both
Dasatinib	Flt3L	174-pSrcFK	Mature CD8+ T	2.162E-05	9.341E-03	1.160E-05	5.013E-03	Down	Both
Dasatinib	Flt3L	174-pSrcFK	Naïve CD4+ T	2.723E-05	1.176E-02	9.114E-05	3.937E-02	Down	Both
Dasatinib	Flt3L	171-pBtk/Itk	Mature CD8+ T	4.459E-05	1.926E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	174-pSrcFK	Plasmacytoid DC	4.848E-05	2.094E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	151-pERK1/2	Plasma cell	4.918E-05	2.125E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	Flt3L	159-pSTAT3	CD11bhi Monocytes	4.947E-05	2.137E-02	2.977E-06	1.286E-03	Down	Both
Dasatinib	Flt3L	174-pSrcFK	NK	5.489E-05	2.371E-02	6.076E-06	2.625E-03	Down	Both
Dasatinib	Flt3L	166-IkBalpa	MEP	7.770E-05	3.356E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	Flt3L	159-pSTAT3	CD11bmid Monocytes	8.325E-05	3.596E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	172-pS6	CD11bmid Monocytes	8.544E-05	3.691E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	176-pCREB	Plasmacytoid DC	9.450E-05	4.082E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	Flt3L	174-pSrcFK	Mature CD38mid B	9.551E-05	4.126E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	159-pSTAT3	HSC	1.115E-04	4.817E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	Flt3L	169-pP38	Erythroblast	n.s.	n.s.	2.516E-06	1.087E-03	Down	Marrow 2 Only
Dasatinib	Flt3L	156-pZAP70/Syk	CD11b- Monocytes	n.s.	n.s.	7.938E-06	3.429E-03	Down	Marrow 2 Only
Dasatinib	Flt3L	151-pERK1/2	HSC	n.s.	n.s.	1.354E-05	5.849E-03	Up	Marrow 2 Only
Dasatinib	Flt3L	174-pSrcFK	Myelocyte	n.s.	n.s.	2.535E-05	1.095E-02	Down	Marrow 2 Only
Dasatinib	Flt3L	151-pERK1/2	MEP	n.s.	n.s.	5.428E-05	2.345E-02	Up	Marrow 2 Only
Dasatinib	Flt3L	156-pZAP70/Syk	CD11bmid Monocytes	n.s.	n.s.	6.920E-05	2.989E-02	Down	Marrow 2 Only
Dasatinib	Flt3L	176-pCREB	CD11bmid Monocytes	n.s.	n.s.	7.142E-05	3.085E-02	Down	Marrow 2 Only
Dasatinib	Flt3L	174-pSrcFK	GMP	n.s.	n.s.	8.707E-05	3.761E-02	Down	Marrow 2 Only
Dasatinib	Flt3L	164-pSLP-76	CD11bmid Monocytes	n.s.	n.s.	8.886E-05	3.839E-02	Down	Marrow 2 Only
Dasatinib	Flt3L	141-pPLCgamma2	CD11b- Monocytes	n.s.	n.s.	1.031E-04	4.452E-02	Down	Marrow 2 Only
Dasatinib	IL7	174-pSrcFK	CD11bmid Monocytes	1.639E-07	7.079E-05	3.218E-06	1.390E-03	Down	Both
Dasatinib	IL7	174-pSrcFK	CD11bhi Monocytes	1.664E-07	7.189E-05	4.758E-07	2.055E-04	Down	Both
Dasatinib	IL7	174-pSrcFK	Pre-B II	3.725E-07	1.609E-04	4.139E-05	1.788E-02	Down	Both
Dasatinib	IL7	174-pSrcFK	CD11b- Monocytes	3.867E-07	1.670E-04	2.547E-05	1.100E-02	Down	Both
Dasatinib	IL7	169-pP38	CD11bmid Monocytes	5.724E-07	2.473E-04	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	168-pH3	CD11bhi Monocytes	8.532E-07	3.686E-04	2.752E-05	1.189E-02	Down	Both
Dasatinib	IL7	150-pSTAT5	Naïve CD4+ T	2.221E-06	9.594E-04	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	168-pH3	CD11bmid Monocytes	3.450E-06	1.491E-03	3.021E-05	1.305E-02	Down	Both
Dasatinib	IL7	166-IkBalpa	MEP	3.540E-06	1.529E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	171-pBtk/Itk	Mature CD38lo B	3.668E-06	1.585E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	159-pSTAT3	Immature B	3.726E-06	1.610E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	150-pSTAT5	Naïve CD8+ T	4.010E-06	1.732E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	171-pBtk/Itk	HSC	5.205E-06	2.249E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	168-pH3	CD11b- Monocytes	5.647E-06	2.440E-03	8.078E-05	3.490E-02	Down	Both
Dasatinib	IL7	169-pP38	CD11bhi Monocytes	6.200E-06	2.678E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	Naïve CD8+ T	7.315E-06	3.160E-03	5.188E-05	2.241E-02	Down	Both
Dasatinib	IL7	150-pSTAT5	Mature CD4+ T	7.801E-06	3.370E-03	7.691E-05	3.322E-02	Up	Both
Dasatinib	IL7	171-pBtk/Itk	Mature CD8+ T	1.528E-05	6.600E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	Mature CD38lo B	1.546E-05	6.679E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	166-IkBalpa	CD11bhi Monocytes	1.715E-05	7.409E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	Mature CD4+ T	1.773E-05	7.660E-03	9.963E-05	4.304E-02	Down	Both
Dasatinib	IL7	150-pSTAT5	Mature CD8+ T	1.901E-05	8.213E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	Mature CD8+ T	2.026E-05	8.752E-03	2.313E-05	9.992E-03	Down	Both
Dasatinib	IL7	169-pP38	CD11b- Monocytes	2.287E-05	9.881E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	Naïve CD4+ T	2.423E-05	1.047E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	Plasmacytoid DC	3.340E-05	1.443E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	171-pBtk/Itk	Mature CD4+ T	3.889E-05	1.680E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	159-pSTAT3	CD11bhi Monocytes	4.407E-05	1.904E-02	6.739E-06	2.911E-03	Down	Both
Dasatinib	IL7	176-pCREB	Naïve CD4+ T	4.473E-05	1.932E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	174-pSrcFK	NK	5.077E-05	2.193E-02	1.043E-05	4.508E-03	Down	Both
Dasatinib	IL7	174-pSrcFK	Mature CD38mid B	5.098E-05	2.202E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	176-pCREB	Plasmacytoid DC	5.126E-05	2.214E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	159-pSTAT3	HSC	5.253E-05	2.269E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	166-IkBalpa	Plasmacytoid DC	6.003E-05	2.593E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	159-pSTAT3	CD11bmid Monocytes	6.114E-05	2.641E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	159-pSTAT3	Pre-B II	6.569E-05	2.838E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	171-pBtk/Itk	Naïve CD8+ T	7.491E-05	3.236E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	166-IkBalpa	GMP	7.772E-05	3.357E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	171-pBtk/Itk	MEP	9.523E-05	4.114E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	172-pS6	CD11bmid Monocytes	9.880E-05	4.268E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	166-IkBalpa	CD11bmid Monocytes	9.889E-05	4.272E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	172-pS6	Megakaryocyte	1.001E-04	4.323E-02	n.s.	n.s.	Down	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
Dasatinib	IL7	166-IkBalp	Pre-B I	1.030E-04	4.447E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	IL7	172-pS6	Erythroblast	1.049E-04	4.533E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	141-pLcGama2	CD11b- Monocytes	1.130E-04	4.880E-02	1.031E-04	4.452E-02	Down	Both
Dasatinib	IL7	174-pSrcFK	Immature B	1.153E-04	4.979E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	171-pBtk/Itk	CD11b- Monocytes	1.157E-04	4.999E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	IL7	169-pP38	Erythroblast	n.s.	n.s.	2.116E-06	9.142E-04	Down	Marrow 2 Only
Dasatinib	IL7	156-pZAP70/Syk	CD11b- Monocytes	n.s.	n.s.	4.754E-06	2.054E-03	Down	Marrow 2 Only
Dasatinib	IL7	174-pSrcFK	GMP	n.s.	n.s.	3.740E-05	1.616E-02	Down	Marrow 2 Only
Dasatinib	IL7	156-pZAP70/Syk	CD11bmid Monocytes	n.s.	n.s.	5.467E-05	2.362E-02	Down	Marrow 2 Only
Dasatinib	IL7	174-pSrcFK	Myelocyte	n.s.	n.s.	6.282E-05	2.714E-02	Down	Marrow 2 Only
Dasatinib	IL7	152-Ki67	Plasma cell	n.s.	n.s.	6.520E-05	2.817E-02	Up	Marrow 2 Only
Dasatinib	IL7	164-pSLP-76	CD11bmid Monocytes	n.s.	n.s.	7.737E-05	3.342E-02	Down	Marrow 2 Only
Dasatinib	IL7	176-pCREB	CD11bmid Monocytes	n.s.	n.s.	9.240E-05	3.992E-02	Down	Marrow 2 Only
Dasatinib	IL7	176-pCREB	CD11b- Monocytes	n.s.	n.s.	9.676E-05	4.180E-02	Down	Marrow 2 Only
Dasatinib	IL7	175-pCrkL	GMP	n.s.	n.s.	1.064E-04	4.598E-02	Down	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	Naïve CD4+ T	5.097E-08	2.202E-05	2.578E-06	1.114E-03	Up	Both
Dasatinib	PMAiono	174-pSrcFK	CD11bhi Monocytes	1.408E-07	6.082E-05	6.552E-07	2.830E-04	Down	Both
Dasatinib	PMAiono	172-pS6	Mature CD4+ T	2.145E-07	9.267E-05	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	174-pSrcFK	CD11bmid Monocytes	2.226E-07	9.618E-05	6.421E-06	2.774E-03	Down	Both
Dasatinib	PMAiono	172-pS6	Naïve CD8+ T	3.149E-07	1.360E-04	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	151-pERK1/2	Plasma cell	6.242E-07	2.696E-04	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	174-pSrcFK	CD11b- Monocytes	6.922E-07	2.990E-04	1.052E-04	4.545E-02	Down	Both
Dasatinib	PMAiono	172-pS6	Naïve CD4+ T	9.902E-07	4.278E-04	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	174-pSrcFK	Pre-B II	1.210E-06	5.227E-04	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PMAiono	176-pCREB	Plasmacytoid DC	2.348E-06	1.014E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	168-pH3	Naïve CD4+ T	4.107E-06	1.774E-03	6.208E-06	2.682E-03	Up	Both
Dasatinib	PMAiono	172-pS6	Plasmacytoid DC	4.137E-06	1.787E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	172-pS6	Pre-B II	5.154E-06	2.226E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	172-pS6	Pre-B I	5.618E-06	2.427E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	172-pS6	CD11b- Monocytes	6.024E-06	2.602E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	176-pCREB	Mature CD38lo B	6.742E-06	2.912E-03	7.371E-06	3.184E-03	Up	Both
Dasatinib	PMAiono	176-pCREB	Pre-B I	8.716E-06	3.765E-03	7.219E-06	3.119E-03	Up	Both
Dasatinib	PMAiono	172-pS6	Immature B	8.989E-06	3.883E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	172-pS6	Mature CD8+ T	8.997E-06	3.886E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	176-pCREB	Naïve CD8+ T	9.497E-06	4.103E-03	2.480E-05	1.071E-02	Up	Both
Dasatinib	PMAiono	172-pS6	CD11bmid Monocytes	9.945E-06	4.296E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	172-pS6	GMP	1.068E-05	4.613E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	172-pS6	Mature CD38lo B	1.176E-05	5.079E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	176-pCREB	Mature CD38mid B	1.471E-05	6.354E-03	1.621E-05	7.003E-03	Up	Both
Dasatinib	PMAiono	165-pNFkB	Naïve CD8+ T	1.702E-05	7.352E-03	6.841E-05	2.955E-02	Up	Both
Dasatinib	PMAiono	165-pNFkB	Naïve CD4+ T	1.832E-05	7.916E-03	5.206E-05	2.249E-02	Up	Both
Dasatinib	PMAiono	172-pS6	NK	2.033E-05	8.782E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	168-pH3	Mature CD38lo B	2.162E-05	9.340E-03	7.785E-06	3.363E-03	Up	Both
Dasatinib	PMAiono	168-pH3	Mature CD4+ T	2.981E-05	1.288E-02	2.204E-06	9.522E-04	Up	Both
Dasatinib	PMAiono	166-IkBalp	Plasmacytoid DC	3.162E-05	1.366E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PMAiono	166-IkBalp	CD11bhi Monocytes	3.536E-05	1.528E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	176-pCREB	Pre-B II	3.539E-05	1.529E-02	3.217E-05	1.390E-02	Up	Both
Dasatinib	PMAiono	171-pBtk/Itk	Mature CD38lo B	3.849E-05	1.663E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PMAiono	168-pH3	Immature B	4.007E-05	1.731E-02	9.751E-07	4.212E-04	Up	Both
Dasatinib	PMAiono	151-pERK1/2	CD11b- Monocytes	4.029E-05	1.741E-02	7.527E-05	3.251E-02	Up	Both
Dasatinib	PMAiono	172-pS6	HSC	4.034E-05	1.743E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	176-pCREB	Mature CD4+ T	4.330E-05	1.871E-02	1.048E-05	4.526E-03	Up	Both
Dasatinib	PMAiono	176-pCREB	HSC	4.525E-05	1.955E-02	8.728E-05	3.770E-02	Up	Both
Dasatinib	PMAiono	174-pSrcFK	Naïve CD8+ T	4.829E-05	2.086E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PMAiono	168-pH3	Plasmacytoid DC	5.402E-05	2.334E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	171-pBtk/Itk	HSC	6.279E-05	2.713E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PMAiono	168-pH3	Naïve CD8+ T	6.611E-05	2.856E-02	5.733E-05	2.477E-02	Up	Both
Dasatinib	PMAiono	172-pS6	CD11bhi Monocytes	7.270E-05	3.141E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	151-pERK1/2	CD11bmid Monocytes	7.405E-05	3.199E-02	7.369E-05	3.183E-02	Up	Both
Dasatinib	PMAiono	172-pS6	MEP	7.792E-05	3.366E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PMAiono	151-pERK1/2	HSC	1.059E-04	4.576E-02	7.401E-08	3.197E-05	Up	Both
Dasatinib	PMAiono	151-pERK1/2	CD11bhi Monocytes	1.119E-04	4.833E-02	1.052E-04	4.545E-02	Up	Both
Dasatinib	PMAiono	174-pSrcFK	Mature CD8+ T	1.139E-04	4.923E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PMAiono	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	2.160E-08	9.331E-06	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Naïve CD4+ T	n.s.	n.s.	4.273E-08	1.846E-05	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Mature CD38lo B	n.s.	n.s.	7.245E-08	3.130E-05	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	MEP	n.s.	n.s.	2.608E-07	1.127E-04	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Naïve CD8+ T	n.s.	n.s.	3.971E-07	1.715E-04	Up	Marrow 2 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
Dasatinib	PMAiono	151-pERK1/2	CMP	n.s.	n.s.	1.363E-06	5.887E-04	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Mature CD8+ T	n.s.	n.s.	1.364E-06	5.891E-04	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Mature CD38mid B	n.s.	n.s.	1.695E-06	7.320E-04	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Pre-B II	n.s.	n.s.	3.714E-06	1.604E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	NK	n.s.	n.s.	3.845E-06	1.661E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	MPP	n.s.	n.s.	4.279E-06	1.848E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	GMP	n.s.	n.s.	7.979E-06	3.447E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	CMP	n.s.	n.s.	1.010E-05	4.365E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Pre-B I	n.s.	n.s.	1.289E-05	5.569E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	NK	n.s.	n.s.	1.357E-05	5.863E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	165-pNFkB	Plasmacytoid DC	n.s.	n.s.	1.590E-05	6.870E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	MPP	n.s.	n.s.	1.718E-05	7.424E-03	Up	Marrow 2 Only
Dasatinib	PMAiono	165-pNFkB	Mature CD4+ T	n.s.	n.s.	2.677E-05	1.157E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	153-pMAPKAPK2	GMP	n.s.	n.s.	4.044E-05	1.747E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	174-pSrcFK	NK	n.s.	n.s.	4.381E-05	1.893E-02	Down	Marrow 2 Only
Dasatinib	PMAiono	165-pNFkB	Immature B	n.s.	n.s.	4.744E-05	2.049E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	GMP	n.s.	n.s.	5.258E-05	2.272E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	CD11bmid Monocytes	n.s.	n.s.	5.654E-05	2.443E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	174-pSrcFK	Myelocyte	n.s.	n.s.	5.841E-05	2.523E-02	Down	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	Mature CD8+ T	n.s.	n.s.	6.223E-05	2.688E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	152-Ki67	CD11bhi Monocytes	n.s.	n.s.	6.269E-05	2.708E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	153-pMAPKAPK2	Mature CD4+ T	n.s.	n.s.	6.306E-05	2.724E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	169-pP38	Myelocyte	n.s.	n.s.	6.586E-05	2.845E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	153-pMAPKAPK2	Immature B	n.s.	n.s.	6.796E-05	2.936E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	CD11b- Monocytes	n.s.	n.s.	6.850E-05	2.959E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	151-pERK1/2	Immature B	n.s.	n.s.	6.868E-05	2.967E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	176-pCREB	Immature B	n.s.	n.s.	7.644E-05	3.302E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	153-pMAPKAPK2	Mature CD8+ T	n.s.	n.s.	9.709E-05	4.194E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	153-pMAPKAPK2	Mature CD38lo B	n.s.	n.s.	1.049E-04	4.532E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	169-pP38	Mature CD4+ T	n.s.	n.s.	1.081E-04	4.668E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	152-Ki67	MEP	n.s.	n.s.	1.094E-04	4.728E-02	Up	Marrow 2 Only
Dasatinib	PMAiono	165-pNFkB	Pre-B I	n.s.	n.s.	1.106E-04	4.778E-02	Up	Marrow 2 Only
Dasatinib	PVO4	169-pP38	CD11bmid Monocytes	6.099E-08	2.635E-05	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	CD11bhi Monocytes	2.512E-07	1.085E-04	4.902E-07	2.118E-04	Down	Both
Dasatinib	PVO4	174-pSrcFK	CD11bmid Monocytes	3.404E-07	1.471E-04	3.181E-06	1.374E-03	Down	Both
Dasatinib	PVO4	169-pP38	CD11b- Monocytes	1.150E-06	4.970E-04	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	169-pP38	CD11bhi Monocytes	1.428E-06	6.169E-04	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	CD11b- Monocytes	1.432E-06	6.188E-04	4.360E-05	1.883E-02	Down	Both
Dasatinib	PVO4	171-pBtk/Itk	Mature CD38lo B	1.625E-06	7.020E-04	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	Pre-B II	1.820E-06	7.864E-04	4.625E-05	1.998E-02	Down	Both
Dasatinib	PVO4	168-pH3	CD11bhi Monocytes	1.879E-06	8.117E-04	3.597E-05	1.554E-02	Down	Both
Dasatinib	PVO4	171-pBtk/Itk	HSC	2.237E-06	9.663E-04	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	169-pP38	Mature CD8+ T	6.024E-06	2.603E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	Mature CD8+ T	6.303E-06	2.723E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	151-pERK1/2	Plasma cell	6.533E-06	2.822E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	168-pH3	CD11bmid Monocytes	9.831E-06	4.247E-03	4.562E-05	1.971E-02	Down	Both
Dasatinib	PVO4	169-pP38	MEP	1.218E-05	5.261E-03	2.130E-05	9.201E-03	Up	Both
Dasatinib	PVO4	169-pP38	Mature CD4+ T	1.524E-05	6.585E-03	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	Naïve CD8+ T	1.826E-05	7.889E-03	5.485E-05	2.370E-02	Down	Both
Dasatinib	PVO4	171-pBtk/Itk	Mature CD4+ T	1.960E-05	8.467E-03	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	169-pP38	HSC	2.534E-05	1.095E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	169-pP38	CMP	3.041E-05	1.314E-02	2.909E-05	1.257E-02	Up	Both
Dasatinib	PVO4	171-pBtk/Itk	CD11b- Monocytes	3.075E-05	1.328E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	169-pP38	NK	3.206E-05	1.385E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	168-pH3	CD11b- Monocytes	3.288E-05	1.420E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	CD11bmid Monocytes	3.545E-05	1.531E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	Naïve CD8+ T	3.667E-05	1.584E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	166-IkBalph	MEP	3.762E-05	1.625E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	CD11bhi Monocytes	4.299E-05	1.857E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	CMP	5.015E-05	2.167E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	Mature CD4+ T	5.187E-05	2.241E-02	1.042E-04	4.501E-02	Down	Both
Dasatinib	PVO4	174-pSrcFK	Naïve CD4+ T	5.846E-05	2.525E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	Mature CD8+ T	7.058E-05	3.049E-02	2.174E-05	9.390E-03	Down	Both
Dasatinib	PVO4	169-pP38	MPP	7.153E-05	3.090E-02	8.196E-05	3.541E-02	Up	Both
Dasatinib	PVO4	153-pMAPKAPK2	Plasma cell	7.393E-05	3.194E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	MEP	7.458E-05	3.222E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	176-pCREB	Naïve CD4+ T	7.568E-05	3.270E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	171-pBtk/Itk	Naïve CD4+ T	8.314E-05	3.592E-02	n.s.	n.s.	Down	Marrow 1 Only

Inhibitor	Stimulus	Antibody	Population	Marrow 1 unadjusted t-test P value	Marrow 1 Bonferroni-corrected t-test P value	Marrow 2 unadjusted t-test P value	Marrow 2 Bonferroni-corrected t-test P value	Direction of Shift	Dataset(s) with significant shift (Bonferroni P < 0.05)
Dasatinib	PVO4	172-pS6	Megakaryocyte	8.577E-05	3.705E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	176-pCREB	HSC	8.601E-05	3.716E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	159-pSTAT3	Immature B	9.389E-05	4.056E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	169-pP38	Naïve CD8+ T	9.711E-05	4.195E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	169-pP38	Plasmacytoid DC	1.013E-04	4.375E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	174-pSrcFK	Mature CD38lo B	1.030E-04	4.450E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	159-pSTAT3	CD11bhi Monocytes	1.100E-04	4.753E-02	1.373E-05	5.932E-03	Down	Both
Dasatinib	PVO4	171-pBtk/Itk	Plasmacytoid DC	1.115E-04	4.818E-02	n.s.	n.s.	Down	Marrow 1 Only
Dasatinib	PVO4	150-pSTAT5	Plasmacytoid DC	1.130E-04	4.882E-02	n.s.	n.s.	Up	Marrow 1 Only
Dasatinib	PVO4	141-pPLCgamma2	MEP	n.s.	n.s.	8.643E-07	3.734E-04	Up	Marrow 2 Only
Dasatinib	PVO4	169-pP38	Myelocyte	n.s.	n.s.	1.048E-06	4.528E-04	Up	Marrow 2 Only
Dasatinib	PVO4	151-pERK1/2	MEP	n.s.	n.s.	2.382E-06	1.029E-03	Up	Marrow 2 Only
Dasatinib	PVO4	164-pSLP-76	Myelocyte	n.s.	n.s.	2.510E-06	1.084E-03	Up	Marrow 2 Only
Dasatinib	PVO4	152-Ki67	Plasma cell	n.s.	n.s.	3.819E-06	1.650E-03	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	GMP	n.s.	n.s.	5.369E-06	2.319E-03	Up	Marrow 2 Only
Dasatinib	PVO4	141-pPLCgamma2	Myelocyte	n.s.	n.s.	6.451E-06	2.787E-03	Up	Marrow 2 Only
Dasatinib	PVO4	169-pP38	Erythroblast	n.s.	n.s.	9.096E-06	3.930E-03	Up	Marrow 2 Only
Dasatinib	PVO4	164-pSLP-76	Immature B	n.s.	n.s.	1.166E-05	5.036E-03	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	CD11bmid Monocytes	n.s.	n.s.	1.348E-05	5.823E-03	Up	Marrow 2 Only
Dasatinib	PVO4	141-pPLCgamma2	Plasmacytoid DC	n.s.	n.s.	1.476E-05	6.377E-03	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	Mature CD8+ T	n.s.	n.s.	1.775E-05	7.667E-03	Up	Marrow 2 Only
Dasatinib	PVO4	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	2.207E-05	9.533E-03	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	CD11b- Monocytes	n.s.	n.s.	2.386E-05	1.031E-02	Up	Marrow 2 Only
Dasatinib	PVO4	141-pPLCgamma2	CMP	n.s.	n.s.	2.412E-05	1.042E-02	Up	Marrow 2 Only
Dasatinib	PVO4	176-pCREB	MPP	n.s.	n.s.	3.013E-05	1.302E-02	Up	Marrow 2 Only
Dasatinib	PVO4	174-pSrcFK	NK	n.s.	n.s.	3.187E-05	1.377E-02	Down	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	MEP	n.s.	n.s.	3.445E-05	1.488E-02	Up	Marrow 2 Only
Dasatinib	PVO4	172-pS6	Plasma cell	n.s.	n.s.	4.995E-05	2.158E-02	Down	Marrow 2 Only
Dasatinib	PVO4	169-pP38	Megakaryocyte	n.s.	n.s.	5.314E-05	2.296E-02	Up	Marrow 2 Only
Dasatinib	PVO4	156-pZAP70/Syk	CD11b- Monocytes	n.s.	n.s.	5.943E-05	2.568E-02	Down	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	CD11bhi Monocytes	n.s.	n.s.	6.167E-05	2.664E-02	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	Pre-B I	n.s.	n.s.	6.388E-05	2.759E-02	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	Mature CD4+ T	n.s.	n.s.	8.364E-05	3.613E-02	Up	Marrow 2 Only
Dasatinib	PVO4	153-pMAPKAPK2	Plasmacytoid DC	n.s.	n.s.	1.048E-04	4.528E-02	Up	Marrow 2 Only
Dasatinib	PVO4	174-pSrcFK	GMP	n.s.	n.s.	1.085E-04	4.687E-02	Down	Marrow 2 Only
Dasatinib	PVO4	151-pERK1/2	CMP	n.s.	n.s.	1.148E-04	4.959E-02	Up	Marrow 2 Only
JAKi	Unstim	168-pH3	CD11bhi Monocytes	5.032E-06	2.174E-03	n.s.	n.s.	Down	Marrow 1 Only
JAKi	Unstim	168-pH3	CD11bmid Monocytes	1.069E-05	4.618E-03	n.s.	n.s.	Down	Marrow 1 Only
JAKi	Unstim	168-pH3	CD11b- Monocytes	1.464E-05	6.325E-03	n.s.	n.s.	Down	Marrow 1 Only
JAKi	Unstim	174-pSrcFK	CD11bhi Monocytes	n.s.	n.s.	2.195E-05	9.485E-03	Down	Marrow 2 Only
JAKi	Unstim	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	4.792E-05	2.070E-02	Up	Marrow 2 Only
JAKi	Unstim	174-pSrcFK	CD11bmid Monocytes	n.s.	n.s.	8.519E-05	3.680E-02	Down	Marrow 2 Only
JAKi	GCSF	168-pH3	CD11bhi Monocytes	6.901E-06	2.981E-03	n.s.	n.s.	Down	Marrow 1 Only
JAKi	GCSF	168-pH3	CD11bmid Monocytes	1.628E-05	7.034E-03	n.s.	n.s.	Down	Marrow 1 Only
JAKi	GCSF	168-pH3	CD11b- Monocytes	3.209E-05	1.386E-02	n.s.	n.s.	Down	Marrow 1 Only
JAKi	GCSF	159-pSTAT3	HSC	5.612E-05	2.424E-02	n.s.	n.s.	Down	Marrow 1 Only
JAKi	GCSF	175-pCrkL	Megakaryocyte	9.351E-05	4.040E-02	n.s.	n.s.	Up	Marrow 1 Only
JAKi	GCSF	169-pP38	CD11bmid Monocytes	9.849E-05	4.255E-02	n.s.	n.s.	Up	Marrow 1 Only
JAKi	GCSF	152-Ki67	Plasma cell	n.s.	n.s.	6.182E-06	2.670E-03	Up	Marrow 2 Only
JAKi	GCSF	151-pERK1/2	Mature CD4+ T	n.s.	n.s.	2.512E-05	1.085E-02	Up	Marrow 2 Only
JAKi	GCSF	151-pERK1/2	Naïve CD4+ T	n.s.	n.s.	5.705E-05	2.464E-02	Up	Marrow 2 Only
JAKi	GCSF	165-pNFkB	Erythroblast	n.s.	n.s.	7.350E-05	3.175E-02	Down	Marrow 2 Only