

Data S4: Multimodal Annotation of CITE-seq Data, Related to STAR Methods, Figure 1B,C and Table S2

Related to **Figure 1B,C** and the **STAR Methods: CITE-seq: multimodal cluster annotation**. Supporting GEX and ADT clustering analyses are shown in **Figure S1E** and **Data S3: Analysis of Mass and Flow Cytometry, Repertoire and Proteomics, Related to STAR Methods**. The multimodal definitions of the lymphoid cell populations are given in **Table S2: Definition of lymphoid clusters for CITE-seq data**.

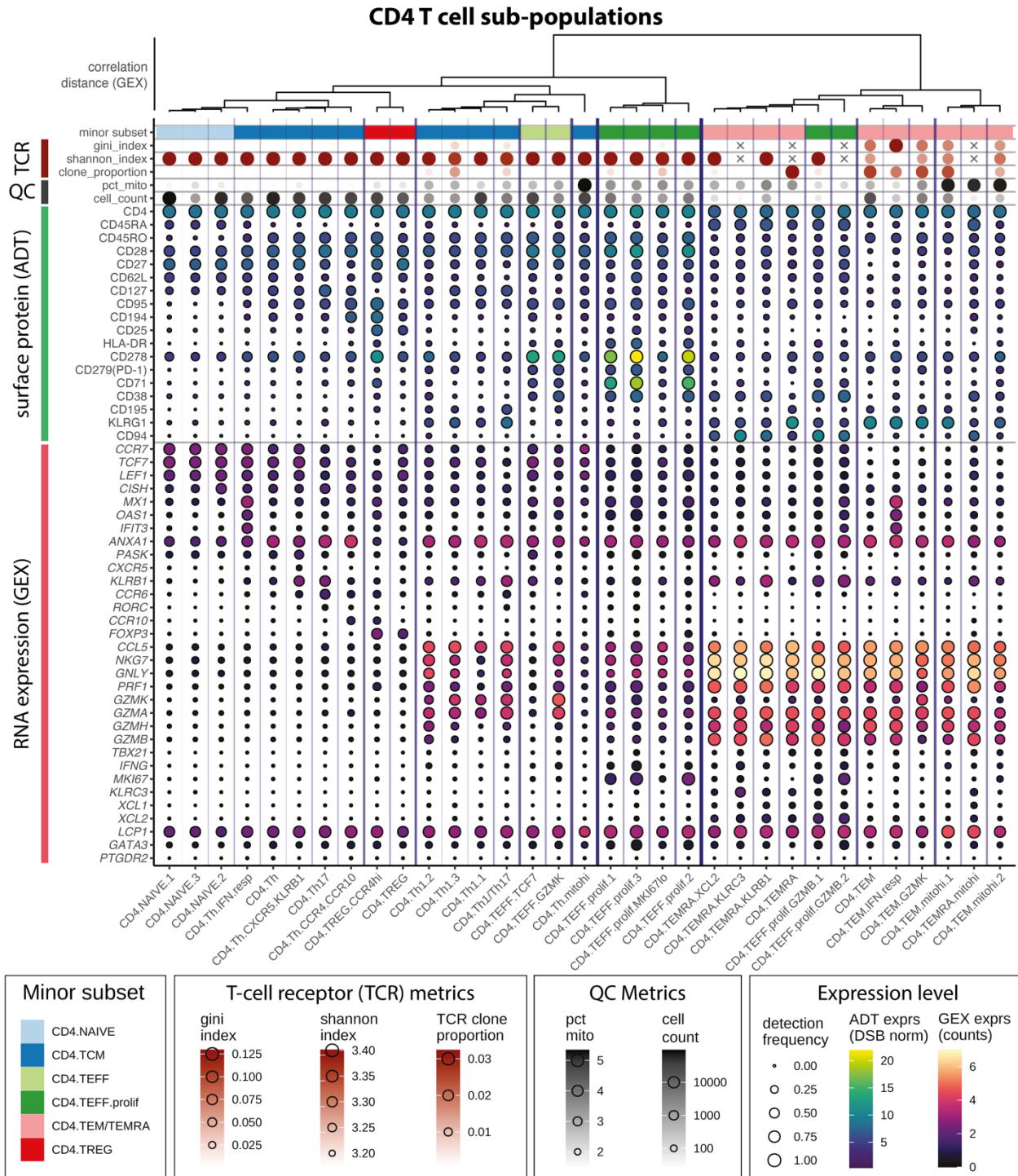
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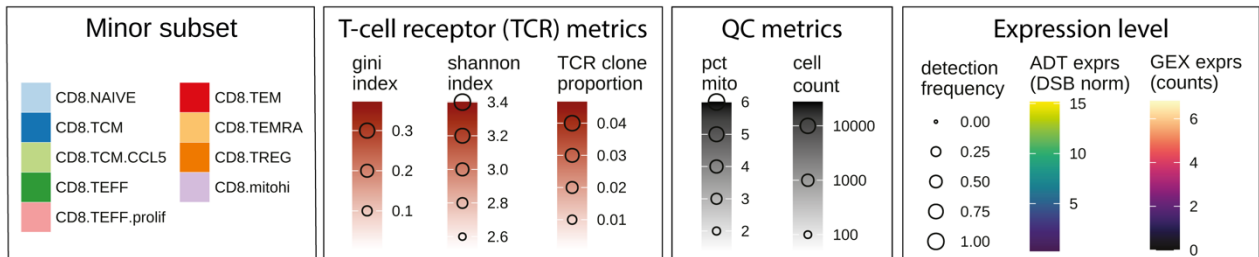
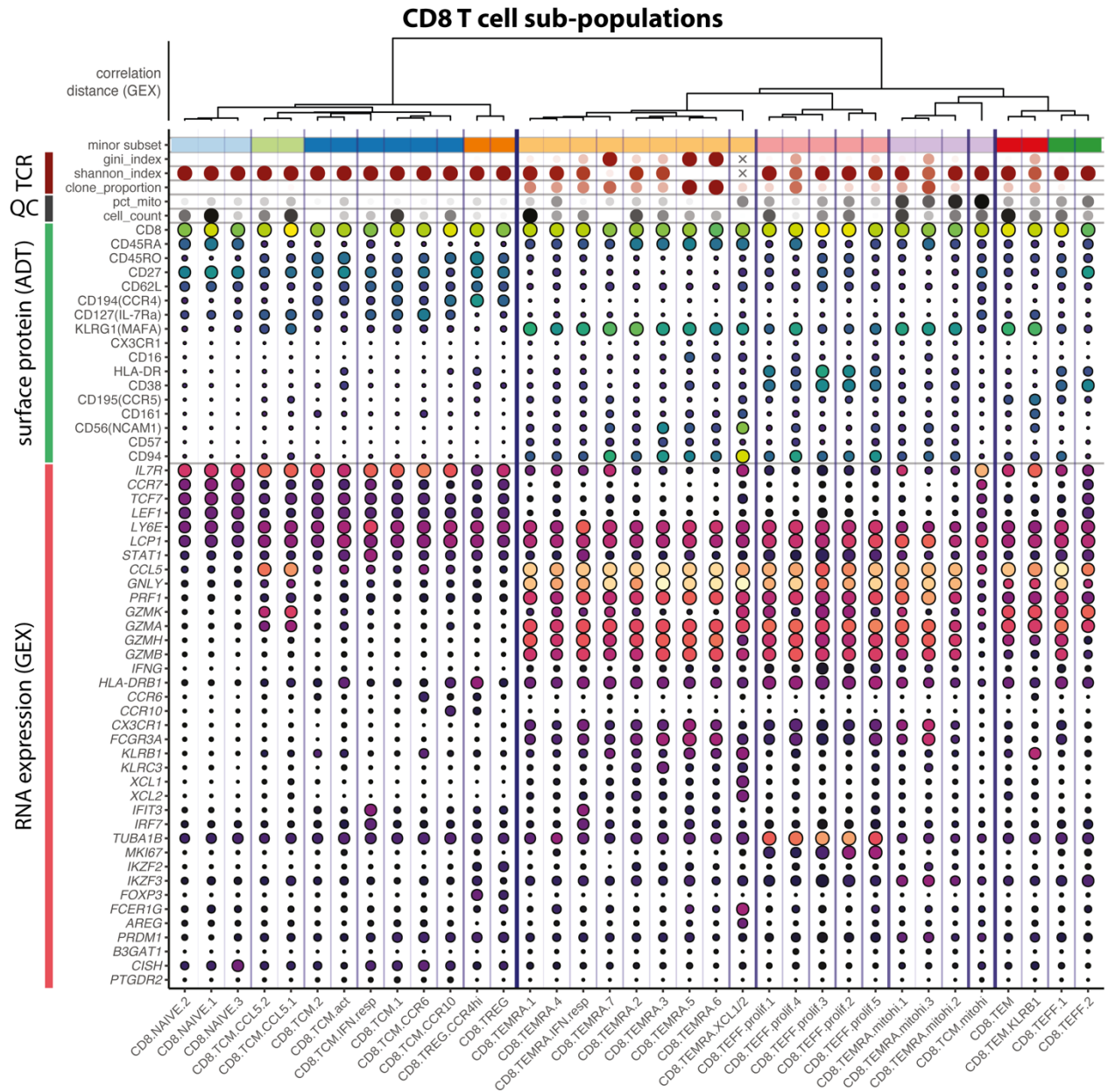
T and NK cell populations

The multimodal definition of the major T and NK cell populations is given in **Table S2: Definition of lymphoid clusters for CITE-seq data.**

CD4 and CD8 T cell sub-populations



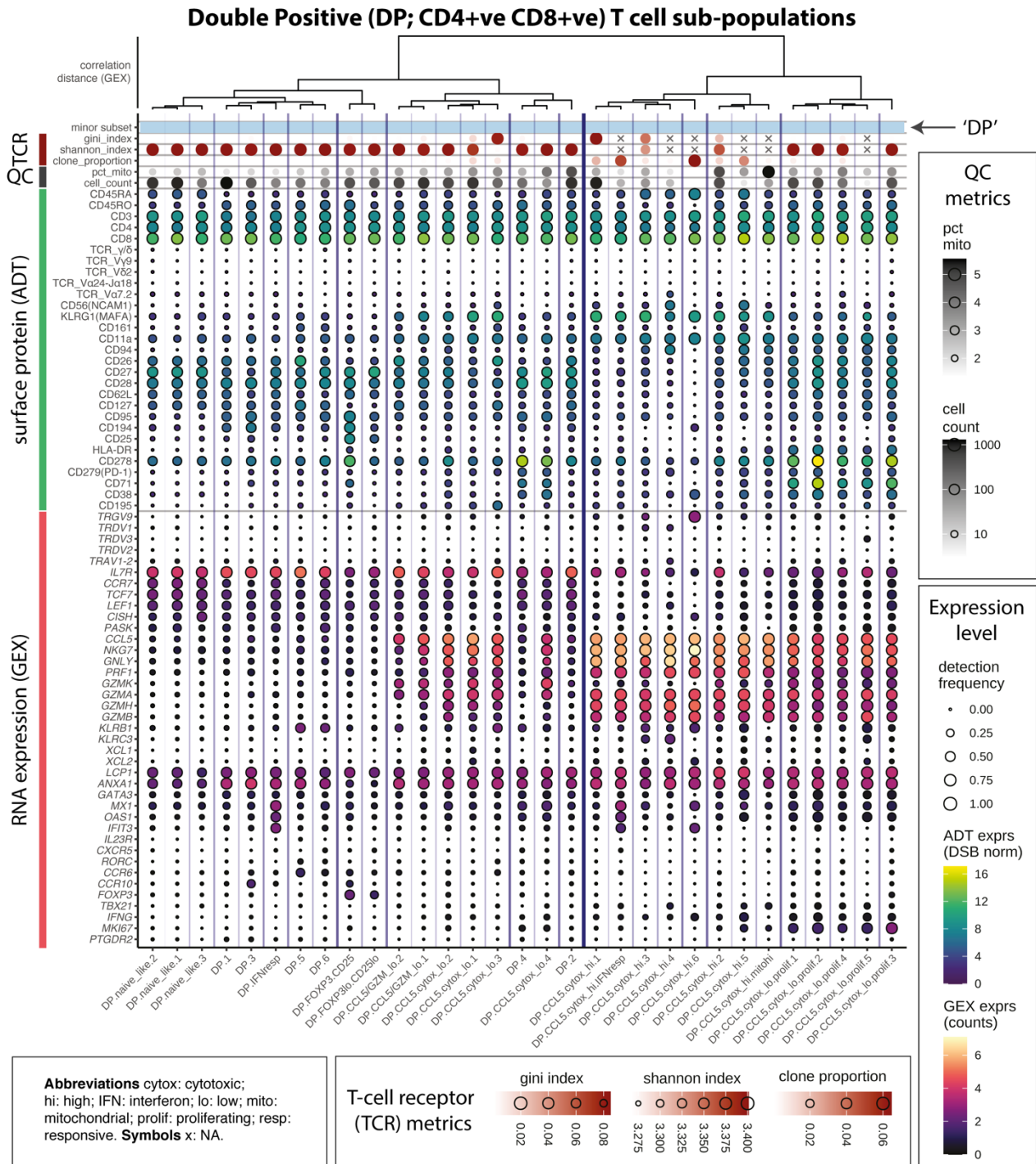
1: Dot plot of CD4 T-cell sub-populations.



Abbreviations act: activated; hi: high; IFN: interferon; lo: low; mito: mitochondrial; prolif: proliferating; resp: responsive; TCM: T central memory; TEFF: T effector; TEM: T effector memory; TEMRA: CD45RA+ T effector memory; Th: T-helper; TREG: regulatory T cell. **Symbols:** x: NA.

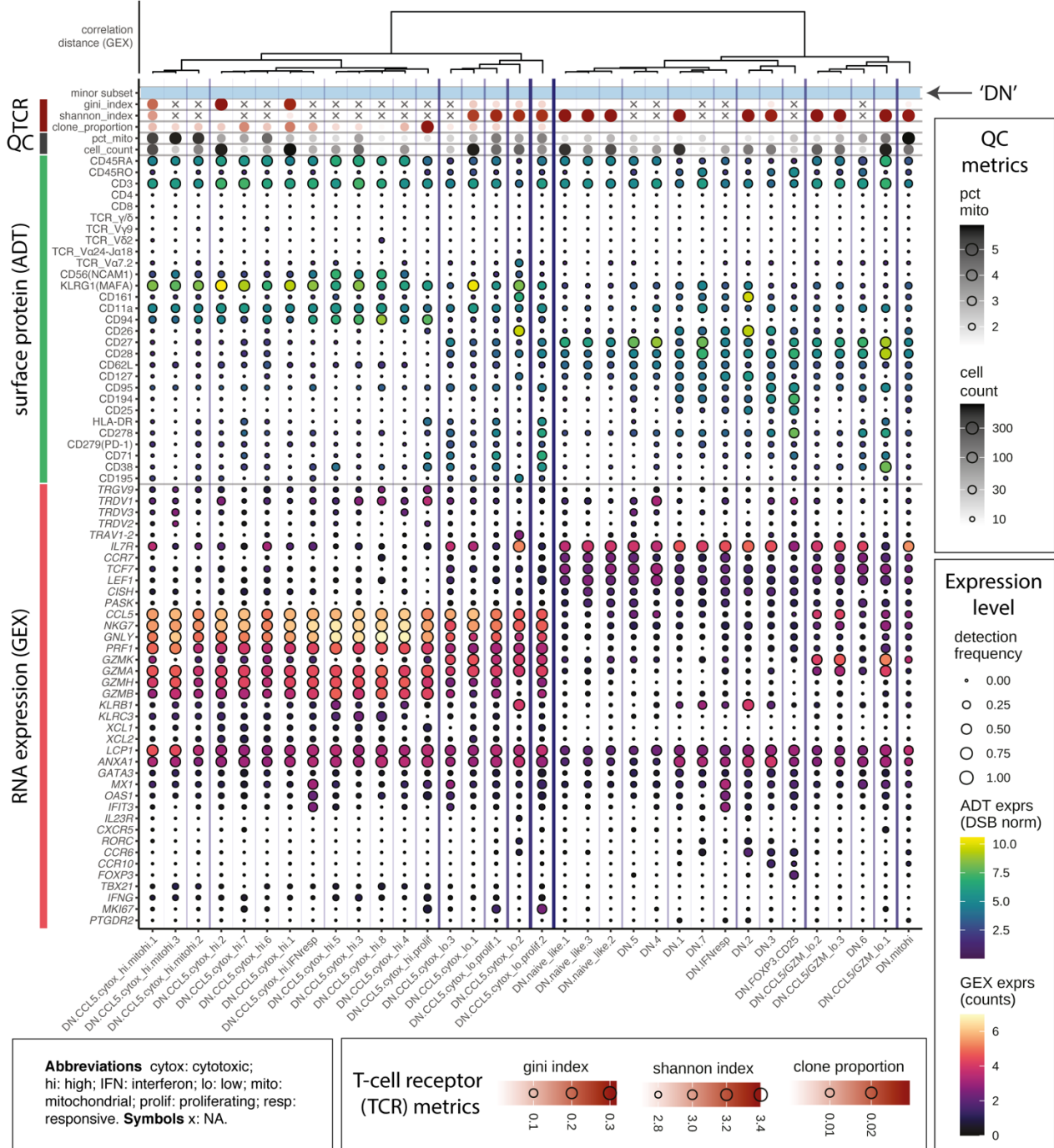
2: Dot plot of CD8 T-cell sub-populations.

Double positive and negative T cell sub-populations



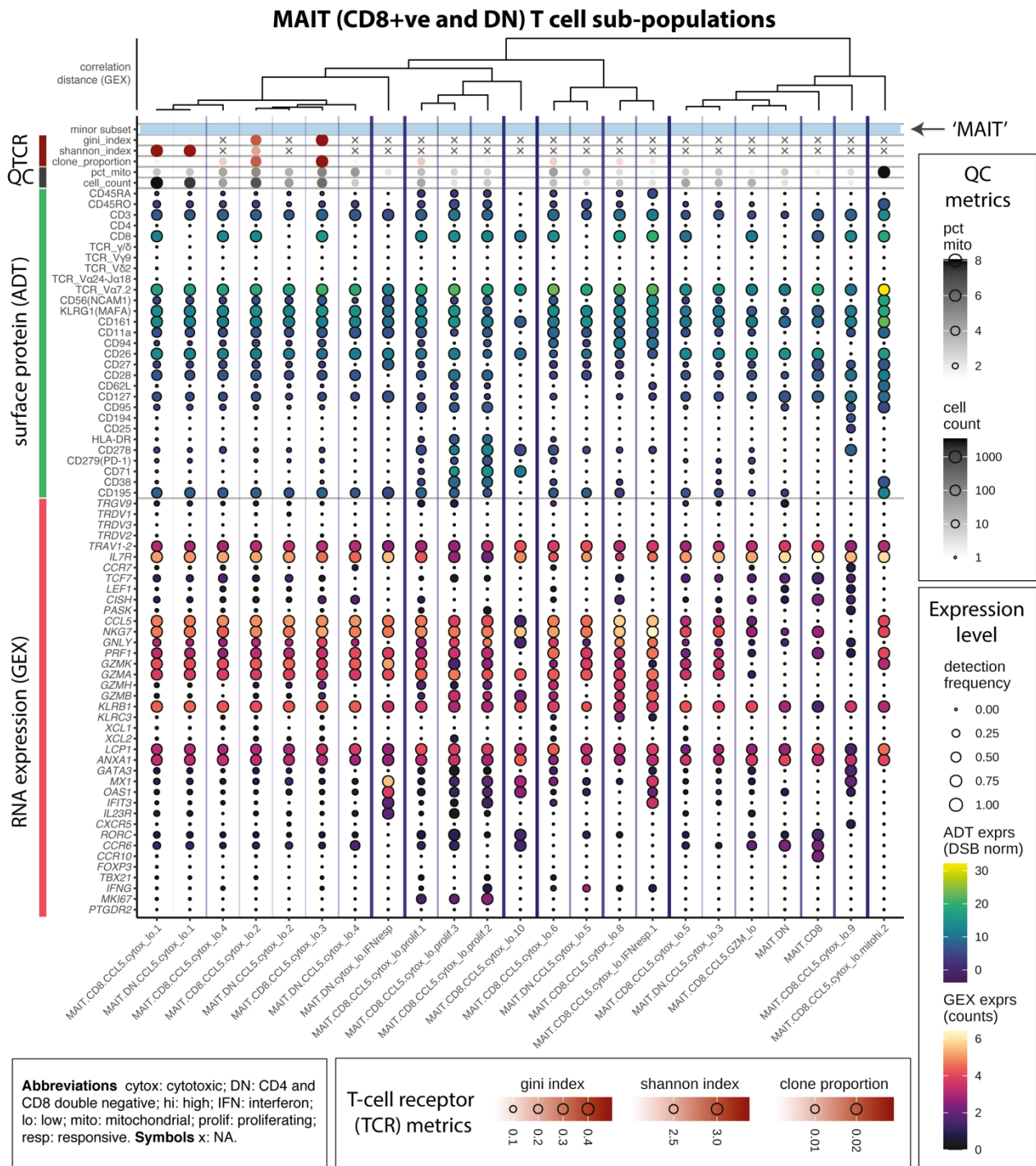
3: Dot plot of double positive (DP) T-cell populations.

Double Negative (DN; CD4-ve CD8-ve) T cell sub-populations



4: Dot plot of double negative (DN) T-cell populations.

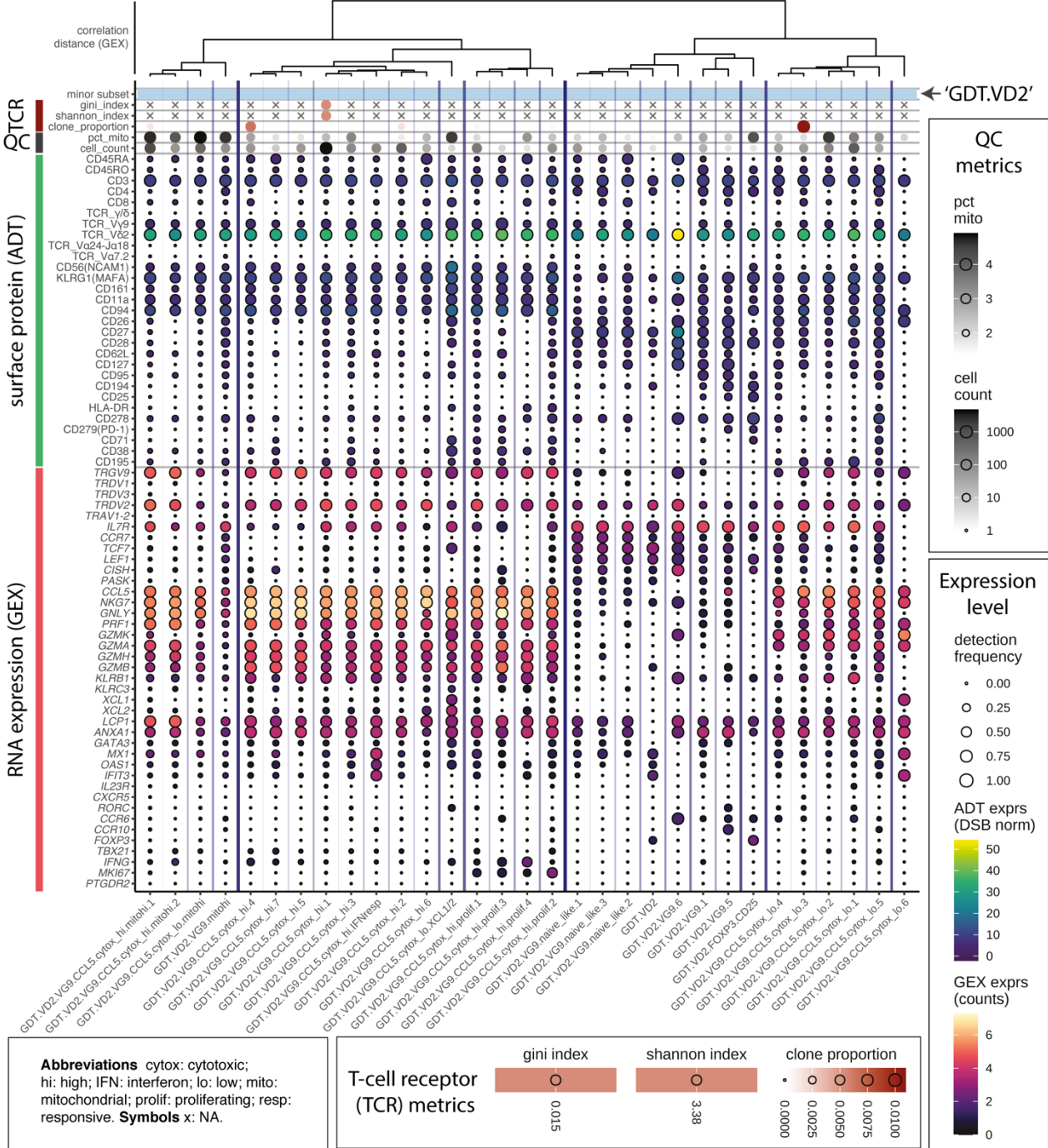
Mucosal associated invariant T (MAIT) cell sub-populations



5: Dot plot of MAIT cell sub-populations.

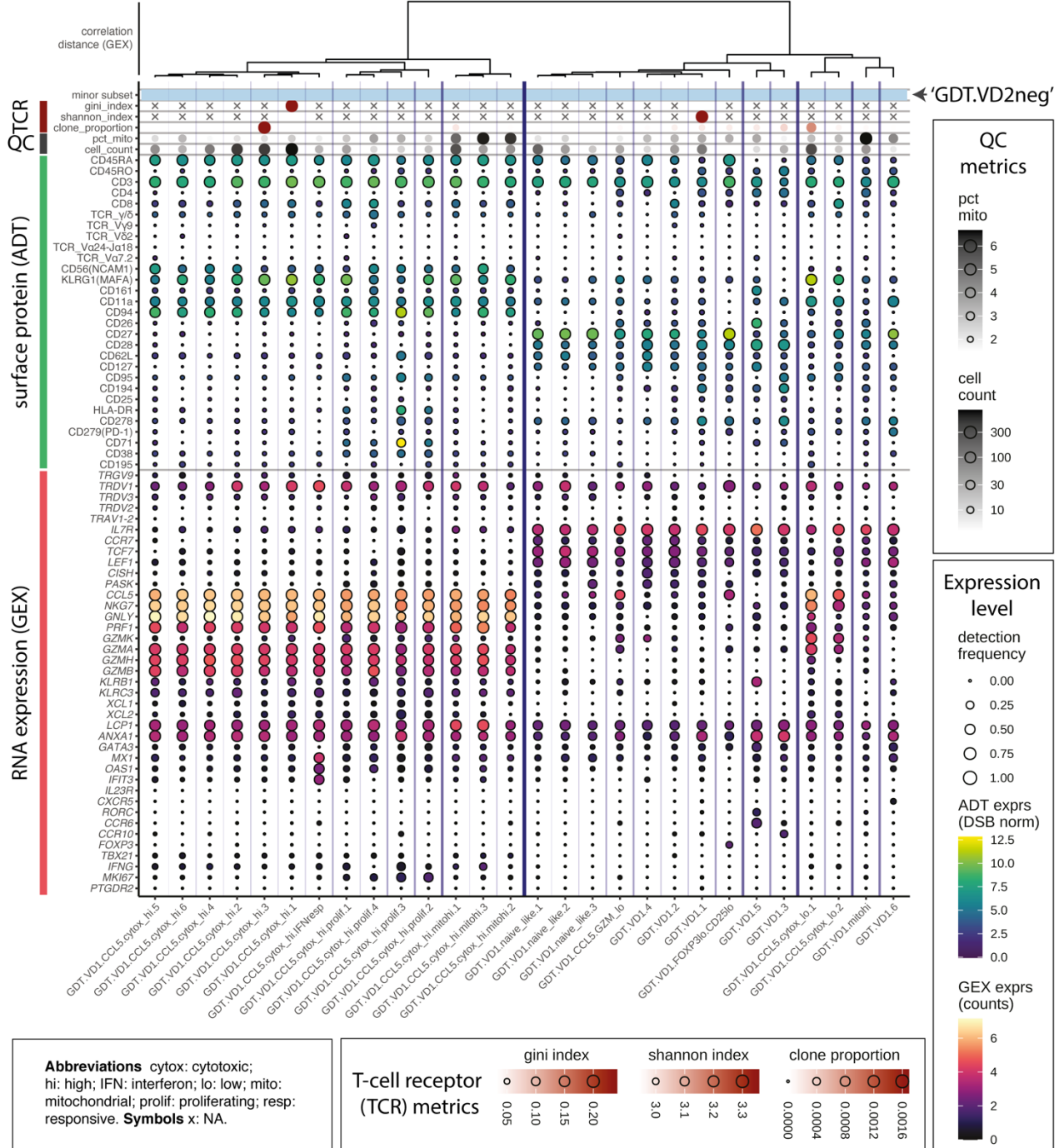
Gamma delta T cell sub-populations

Gamma delta Vδ2+ve T cell sub-populations



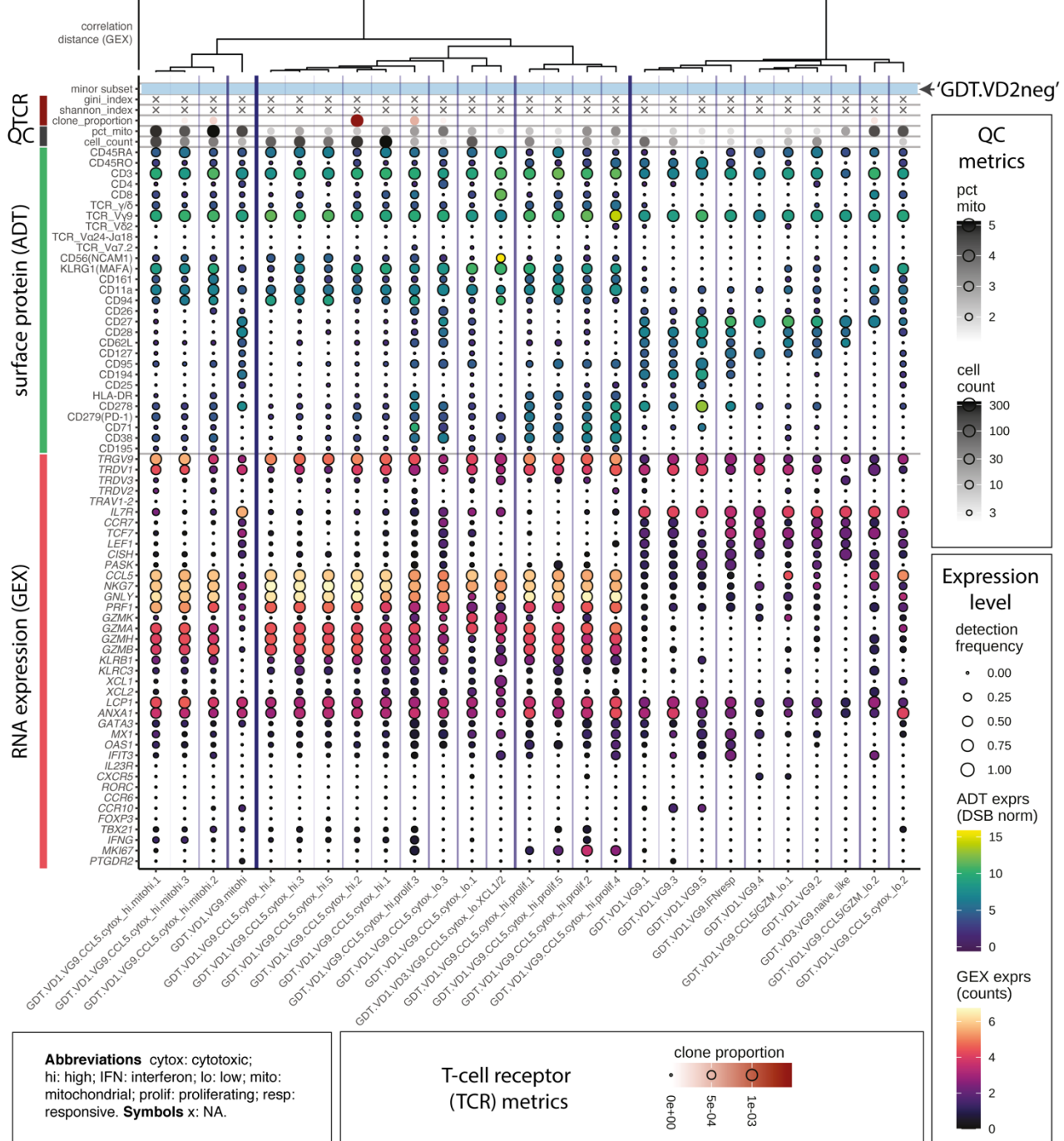
6: Dot plot of Vδ2+ve γδ T-cell sub-populations.

Gamma delta Vδ2-ve Vy9-ve T cell sub-populations



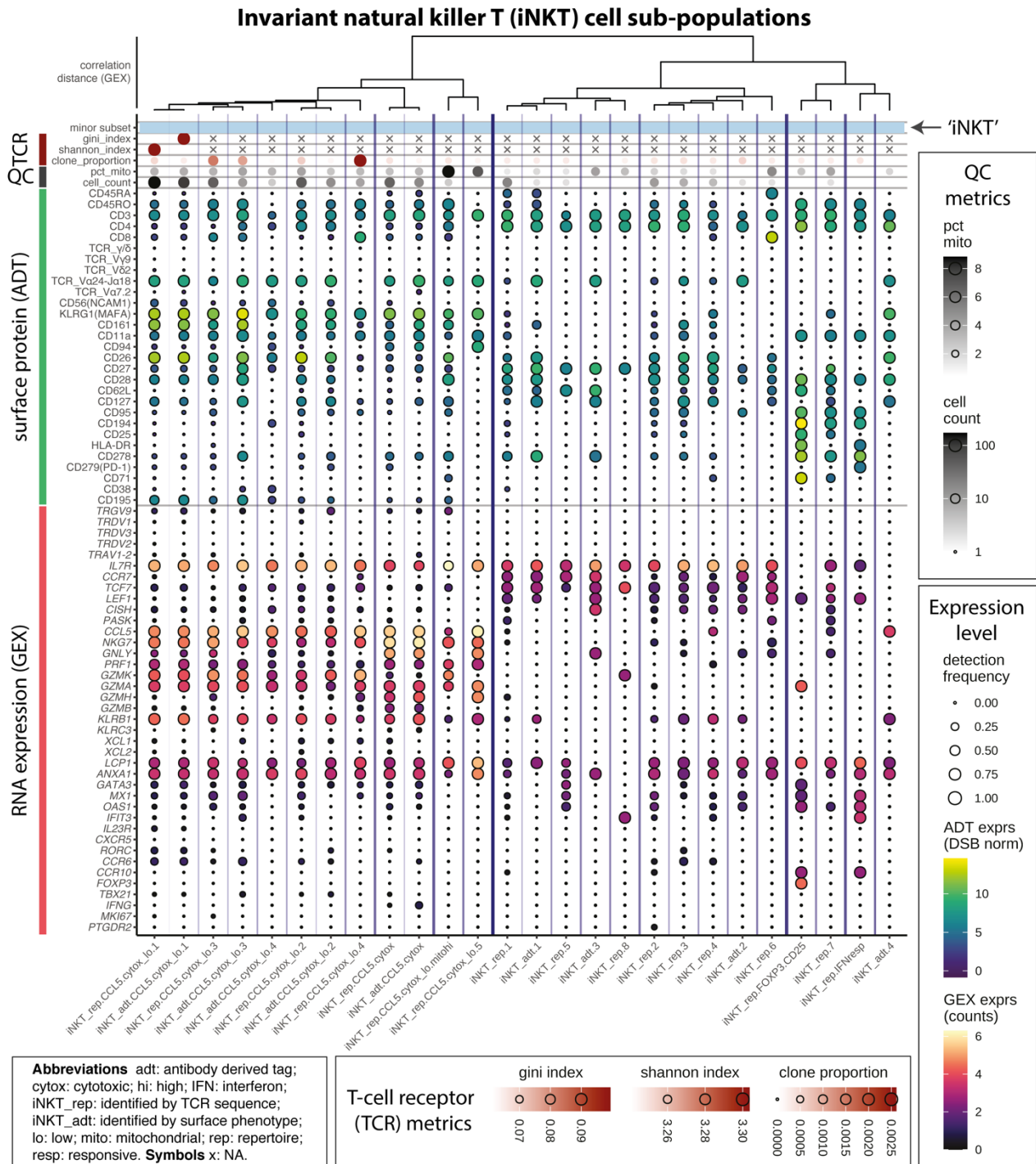
7: Dot plot of Vδ2-ve Vy9-ve γδ T-cell sub-populations.

Gamma delta Vδ2-ve Vy9+ve T cell sub-populations



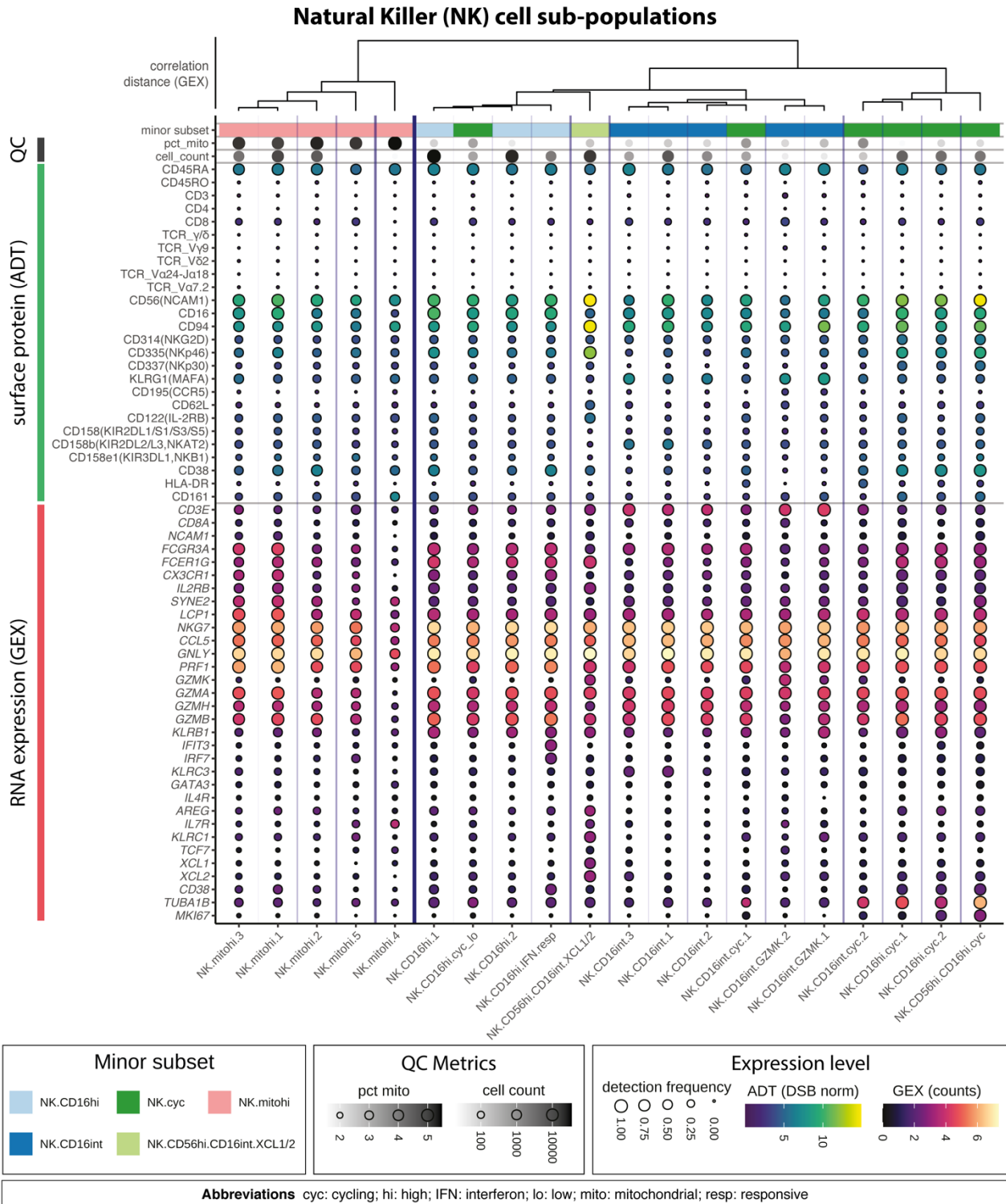
8: Dot plot of Vδ2-ve Vy9+ve γδ T-cell sub-populations.

Invariant natural killer T (iNKT) sub-populations



9: Dot plot of iNKT cells.

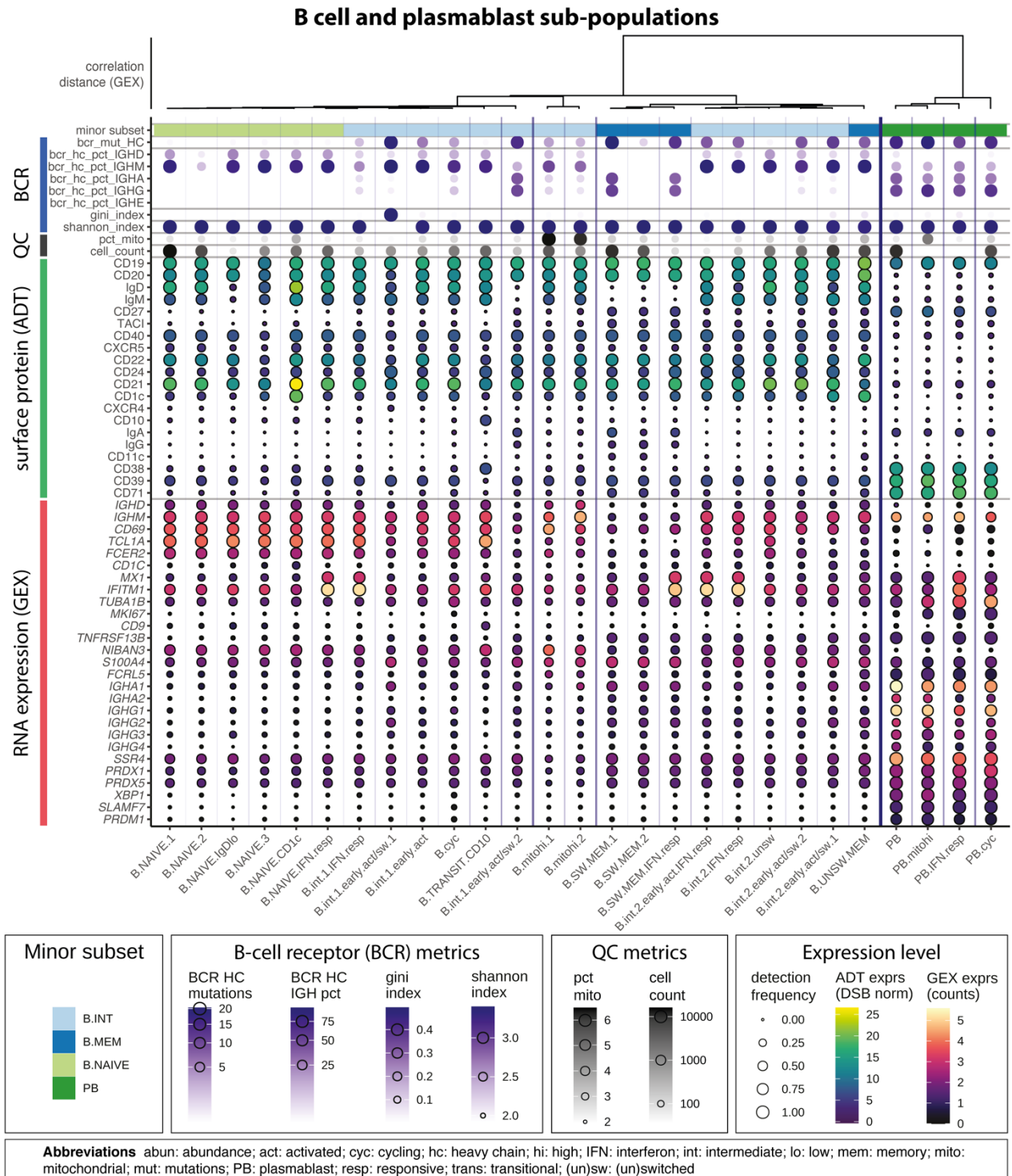
Natural Killer (NK) cell sub-populations



10: Dot plot of NK cell sub-populations.

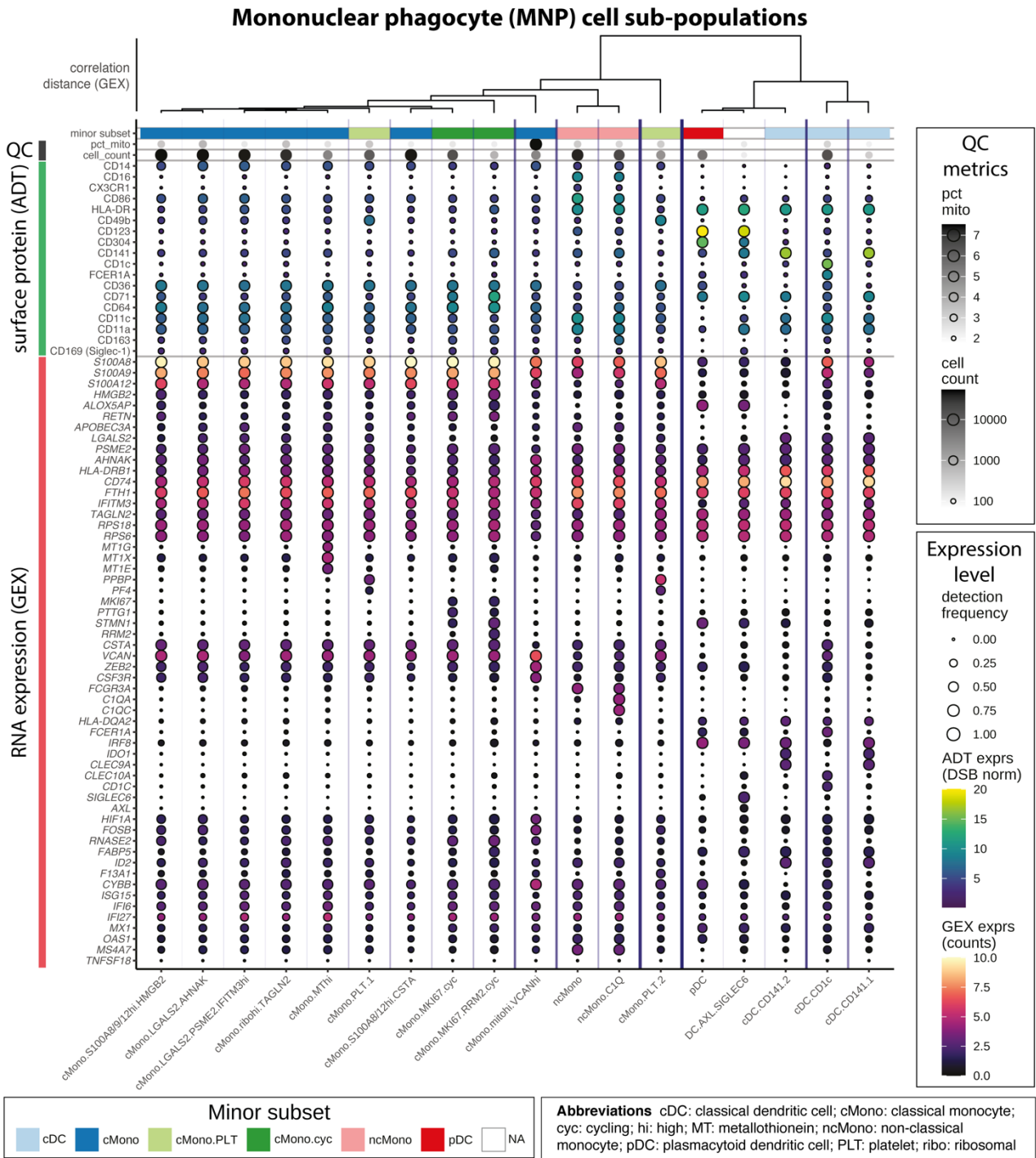
B cell and plasmablast sub-population phenotypes

The multimodal definition of the B cell and plasmablast populations are given in **Table S2: Definition of lymphoid clusters for CITE-seq data.**



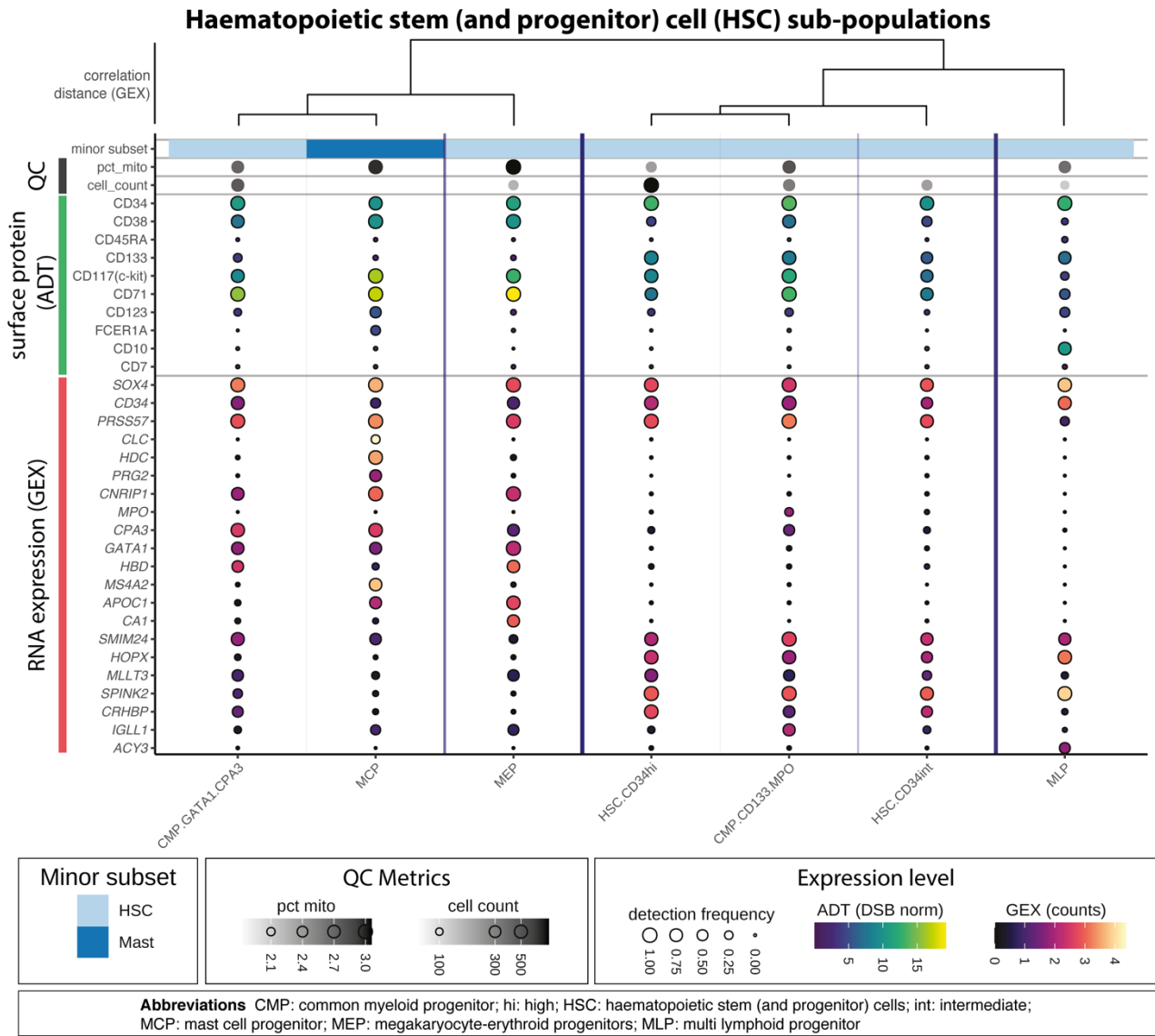
11: Dot plot of B cell and plasmablast sub-populations.

Mononuclear phagocyte (MNP) sub-populations



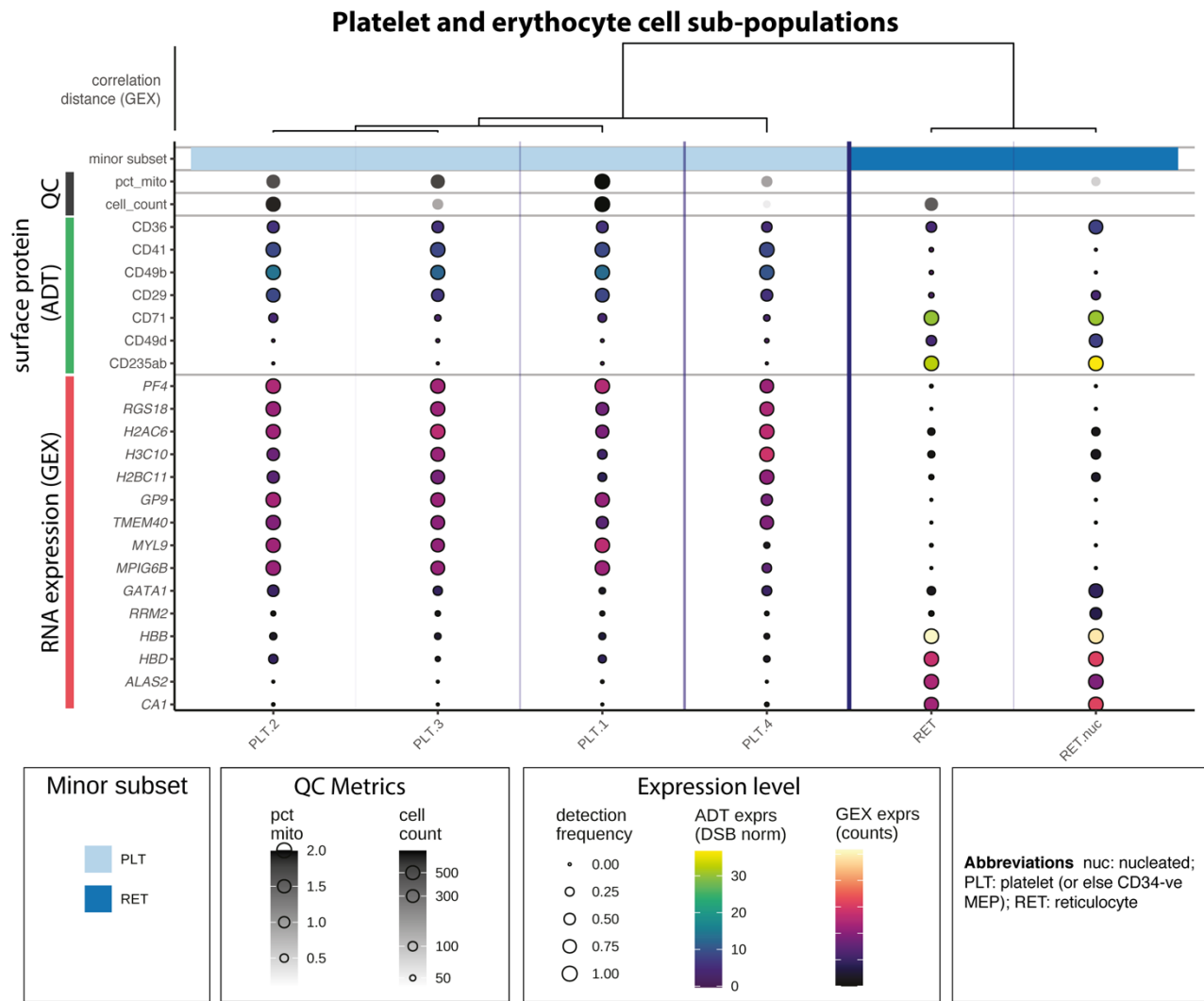
12: Dot plot of MNP cell sub-populations.

Hematopoietic stem (and progenitor) cell sub-populations



13: Dot plot of hematopoietic stem (and progenitor) cell sub-populations.

Platelet and erythrocyte sub-populations



14: Dot plot of platelet and erythrocyte cell sub-populations.