

10x Genomics guidelines for 5'GE + VDJ scRNA-seq v3.0

CAUTION: For 5'GE_VDJ, our guidelines for 3'GE scRNA-seq v4 are the reference ones, therefore start by reading those. This is just an addendum for 5'GE_VDJ-specific elements.

- This method allows to collect VDJ sequences at single-cell level for either TCR (T cells), BCR (B cells), or both, along to gene expression data.

- 10XG oligos allow to amplify human or mouse VDJ. If you plan to use a distinct species, let us know in advance as we'll have to design/order the custom oligos.

- This method is 5'-end-based, it keeps only the 5' end of mRNAs, contrary to the main 10XG scRNA-seq method, which is 3'end-based. Thus, a direct comparison gene expression datasets obtained by these different methods is not trivial.

- The bioinformatics comments regarding 3'UTR in our main 3'GE guidelines rather apply to 5'UTR here.

- Samples can be multiplexed through an antibody-based system (TotalSeqC for 5'GE). See our separate guidelines for details.

Versions log

- vA.01: initial release.
- vA.02 (30.09.2024): mentioned that the new chemistry is v3.