



Figure S2. IGH-VDJ Mutation and deletion/insertion analysis on the public sequences. (A) VDJ mutation number statistics. (B) VDJ deletion/insertion length statistics. The data sets were obtained from IMGT/LIGM-DB database(<http://www.imgt.org/ligmdb/>), searched by “Homo sapiens”, “rearranged”, ”TRB” or “IGH”, and then selected the sequences annotated by manual(Annot. level==”manual”) and annotated by V,D,J genes. So these sequences have fairly high level of annotation confidence.