**Figure S1A.** Genotyping of the EBV+ sequencing reads aligned to human genome. The pie charts display the distribution of mapped reads from EBV+ patient samples.

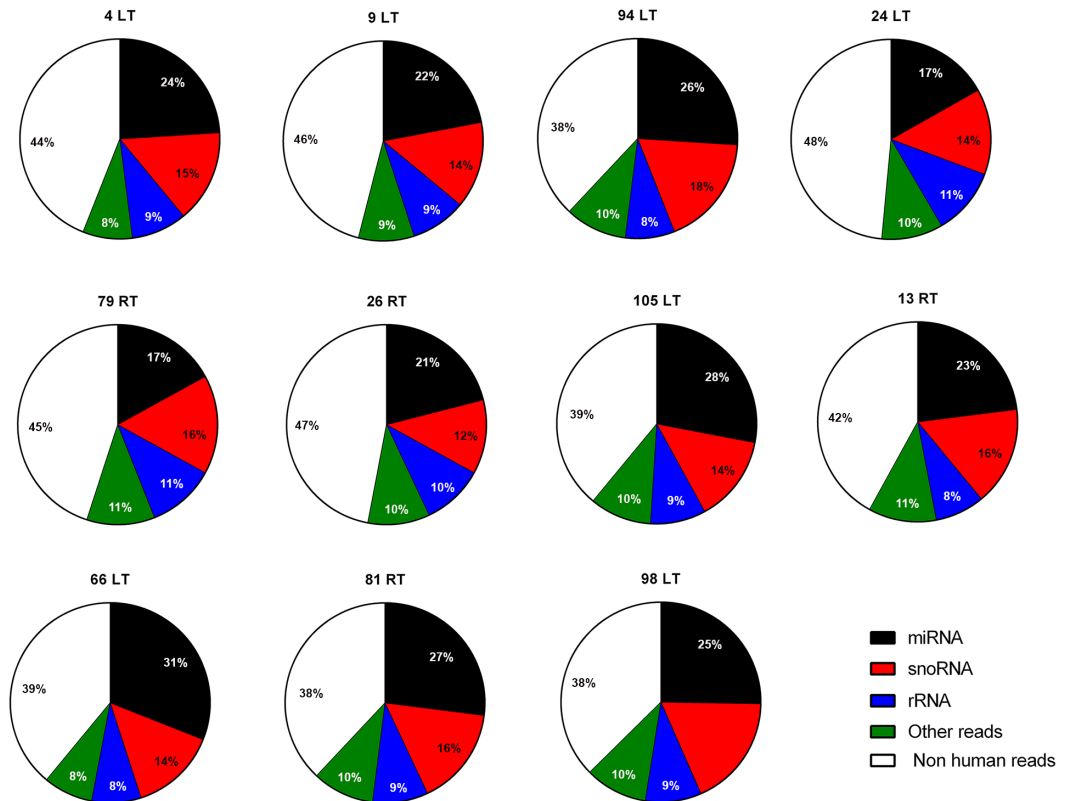**Figure S1B.** Genotyping of the HAdV sequencing reads aligned to human genome. The pie charts display the distribution of the mapped reads from HAdV+ patient samples.