



\* Mapped pairs

**Supplemental Fig S2: Example of insert of insertion site identification with 3' vs 5' bias.**

While insertion sites were generally well correlated between 5' and 3' QIseq libraries, in some cases biases were seen. In this example, the poly-A tract 3' to the insertion site could either cause a PCR bias during the QIseq library preparation procedure, or could reduce mapping efficiency for 3' QIseq reads and their pairs.