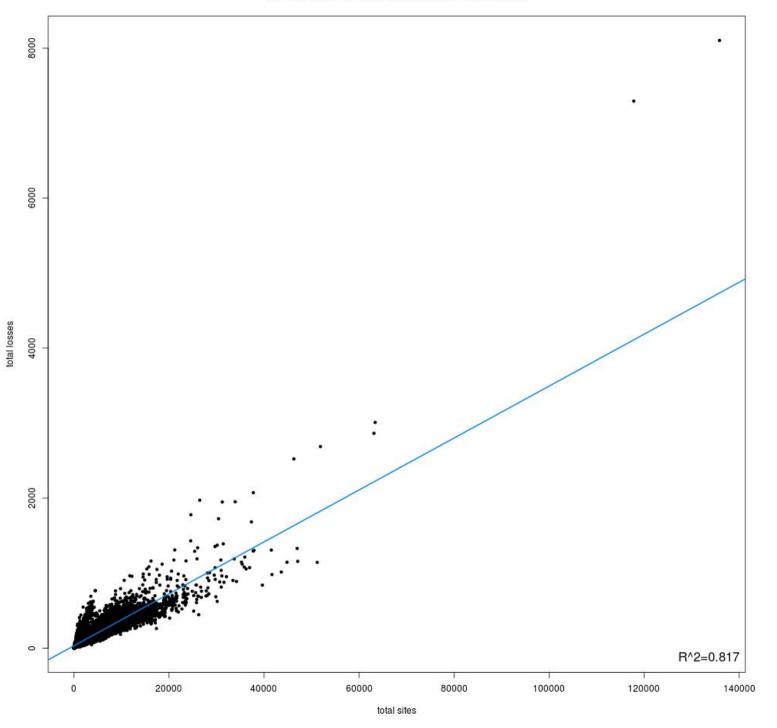


Supplemental Figure 1A: Inferred gain rates correlate with total number of binding sites

8mers that occur frequently have a higher likelihood that one or more 8mers will have a gain event occur. It is therefore necessary to normalize turnover rates by dividing the number of inferred gains by number of total observed sites



Supplemental Figure 1B: Inferred loss rates correlate with total number of binding sites

8mers that occur frequently have a higher likelihood that one or more 8mers will have a loss event occur. It is therefore necessary to normalize turnover rates by dividing the number of inferred losses by number of total observed sites