

$$P(\text{E} \begin{array}{|c|} \hline \text{ACAC} \\ \text{TCAC} \\ \text{ACAG} \end{array}) = \frac{P(\begin{array}{|c|} \hline \text{ACAC} \\ \text{TCAC} \\ \text{ACAG} \end{array} | \text{E} \begin{array}{|c|} \hline \text{ } \\ \text{ } \\ \text{ } \end{array}) P(\text{E} | \begin{array}{|c|} \hline \text{ } \\ \text{ } \\ \text{ } \end{array}) P(\begin{array}{|c|} \hline \text{ } \\ \text{ } \\ \text{ } \end{array}) P(\begin{array}{|c|} \hline \text{ } \\ \text{ } \\ \text{ } \end{array}) P(\begin{array}{|c|} \hline \text{ } \\ \text{ } \\ \text{ } \end{array})}{P(\begin{array}{|c|} \hline \text{ACAC} \\ \text{TCAC} \\ \text{ACAG} \end{array})}$$