

$$\mathbf{Q} = \begin{bmatrix} \cdot & \mu\pi_T & \mu\pi_C & \mu\pi_G \\ \mu\pi_A & \cdot & \mu\pi_C & \mu\pi_G \\ \mu\pi_A & \mu\pi_T & \cdot & \mu\pi_G \\ \mu\pi_A & \mu\pi_T & \mu\pi_C & \cdot \end{bmatrix}$$