

Erratum**Intrastrand Parity Rules of DNA Base Composition and Usage Biases of Synonymous Codons**

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Page 324, With corrections of errors, the diagram of Appendix I and some equations in Appendix II should appear as follows:

Appendix I: A Logical Derivation of PRI**Appendix 2: Equations for the Calculation of A, T, G, and C at Equilibrium**

$$\begin{aligned} dA/dt &= (-r_1 - r_4 - r_6)A + r_2T + r_3G + r_5(1-A-T-G) = 0 \\ dT/dt &= r_1A + (-r_2 - r_8 - r_{10})T + r_7(1-A-T-C) + r_9C = 0 \\ dG/dt &= r_4A + r_8(1-A-G-C) + (-r_3 - r_7 - r_{11})G + r_{12}C = 0 \\ dC/dt &= r_6(1-T-G-C) + r_{10}T + r_{11}G + (-r_5 - r_9 - r_{12})C = 0, \end{aligned}$$

or

$$\begin{aligned} dA/dt &= (-r_1 - r_4 - r_5 - r_6)A + (r_2 - r_5)T + (r_3 - r_5)G + 0^*C + r_5 = 0 \\ dT/dt &= (r_1 - r_7)A + (-r_2 - r_7 - r_8 - r_{10})T + 0^*G + (r_9 - r_7)C + r_7 = 0 \\ dG/dt &= (r_4 - r_8)A + 0^*T + (-r_3 - r_7 - r_8 - r_{11})G + (r_{12} - r_8)C + r_8 = 0 \\ dC/dt &= 0^*A + (r_{10} - r_6)T + (r_{11} - r_6)G + (-r_5 - r_6 - r_9 - r_{12})C + r_6 = 0. \end{aligned}$$

ISOTYPE SUBSTITUTIONS	
$A \rightarrow T(r_1)$ or $T \rightarrow A(r_2)$	$G \rightarrow C(r_{11})$ or $C \rightarrow G(r_{12})$
<p> $r_1 = r_2'$ $r_2 = r_1'$ (BPR) If no-strand-bias, $r_1 = r_1'$. Therefore, $r_1 = r_2$ $r_1' = r_2'$ (PR1) </p>	<p> $r_{11} = r_{12}'$ $r_{12} = r_{11}'$ (BPR) If no-strand-bias, $r_{11} = r_{11}'$. Therefore, $r_{11} = r_{12}$ $r_{11}' = r_{12}'$ (PR1) </p>

ALLOYPE SUBSTITUTIONS	
$A \rightarrow G(r_4)$ or $T \rightarrow C(r_{10})$	$A \rightarrow C(r_6)$ or $T \rightarrow G(r_8)$
<p> $r_4 = r_{10}'$ $r_{10} = r_4'$ (BPR) If no-strand-bias, $r_4 = r_4'$. Therefore, $r_4 = r_{10}$ $r_4' = r_{10}'$ (PR1) </p>	<p> $r_6 = r_8'$ $r_8 = r_6'$ (BPR) If no-strand-bias, $r_6 = r_6'$. Therefore, $r_6 = r_8$ $r_6' = r_8'$ (PR1) </p>
$G \rightarrow A(r_3)$ or $C \rightarrow T(r_9)$	$G \rightarrow T(r_7)$ or $C \rightarrow A(r_5)$
<p> $r_3 = r_9'$ $r_9 = r_3'$ (BPR) If no-strand-bias, $r_3 = r_3'$. Therefore, $r_3 = r_9$ $r_3' = r_9'$ (PR1) </p>	<p> $r_7 = r_5'$ $r_5 = r_7'$ (BPR) If no-strand-bias, $r_5 = r_5'$. Therefore, $r_5 = r_7$ $r_5' = r_7'$ (PR1) </p>