$$i0 = d0$$
$$i1 = d1$$
$$i2 = d2$$
$$i_j = i * \omega_z$$
$$1 - i_j = (1 - i_j) + (1 - \omega_z)i_j \sum I_k l_k$$
$$j = \{1, 2\}$$
$$\omega_z = 1, \text{if synonymous indels; 0 otherwise}$$

S: Start
M: Match/Mismatch
I: Insertion
D: Deletion
E: End

i_0: phase 0 insertion open weight
d_0: phase 0 deletion open weight
e_i: insertion extension weight
e_d: deletion extension weight
$\emptyset$: empty codon
N: codon