



# Corrigendum: Co-receptor CD8-mediated modulation of T-cell receptor functional sensitivity and epitope recognition degeneracy

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## A corrigendum on

### Co-receptor CD8-mediated modulation of T-cell receptor functional sensitivity and epitope recognition degeneracy

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It has been kindly pointed out to us by Dr. Omer Dushek of Oxford University that the thermodynamic constraints (arising from the principle of detailed balance) impose the following condition on the parameters:

$$\nu = \gamma_{\text{kin}} \delta \quad (1)$$

which means that the parameter  $\nu$  is fixed once  $\gamma_{\text{kin}}$  and  $\delta$  have each been assigned a value. The objective of the paper was to exhibit the range of qualitative behaviors that is possible when pMHC/CD8

kinetics interacts with TCR/pMHC1 kinetics and to show how varying levels of the co-receptor at the T-cell surface may be able to modulate the functional sensitivity of the T-cell to various ligands in a differential fashion. These qualitative phenomena remain very much the same when we choose parameter values that respect the constraint  $\nu = \gamma_{\text{kin}} \delta$ , as shown in the corrected figures that follow below (**Figures 2–4**). It is these qualitative patterns that are currently guiding experimental research to elucidate CD8-mediated ligand focusing in the T-cell system. The main thrust of the paper is therefore unaltered.

The kinetic scheme (Figure 1) and the equations are all unaltered, except for a typographical error in the subscript of a quantity appearing in one of the equations. Specifically, equation (23) in the published text should read:

$$W = M_R \lambda_{-1} \mathbb{P}_0^0 + M_{XR} \lambda_{-4} \mathbb{P}_0^* \quad (2)$$

We apologize profusely for any inconvenience our oversight may have caused.

**Conflict of Interest Statement:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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