Table 2. Definitions of velocities

Velocities	Definition
v_1	k
v_2	$\left(\dfrac{V_1 AcP}{Km\mathbf{1}+AcP}-\dfrac{V_2 OAc_i^{-}}{Km\mathbf{2}+OAc_i^{-}}\right)\dfrac{ack}{Vc}$
v_3	$k_f\left(OAc_i^{-}\right)\left(H_i^{+}\right)-k_{rev}HOAc_i$
v_4	$n\,a_s g_m\left(HOAc_i - HOAc_e\right)$
v_5	$k_f\left(OAc_e^{-}\right)\left(H_e^{+}\right)-k_{rev}HOAc_e$
v_6	$k_d AcP$
v_7	$\dfrac{\alpha\left(AcP/K_l\right)^{h}}{\mathbf{1}+\left(AcP/K_l\right)^{h}}+\alpha_o$
v_8	$\gamma\left(mgfp\right)$
v_9	$\theta\left(mgfp\right)$
v_{10}	$\beta\left(GfP\right)$