

## S2 Fig

### List of Model Equations

C1 induced T-bet	$\frac{s_1 \cdot C_1}{(k_1 + C_1) \cdot (1 + \frac{RORgt}{g_2})}$
C17 induced RO-R $\gamma$ t	$\frac{s_2 \cdot C_{17}}{(k_2 + C_{17}) \cdot (1 + \frac{Tbet}{g_1})}$
Baseline Transcription T-bet	$b_1$
Baseline Transcription ROR- $\gamma$ t	$b_2$
Decay T-bet	$-\mu_1 \cdot Tbet$
Decay ROR- $\gamma$ t	$-\mu_2 \cdot RORgt$
Decay C1	$-\mu_3 \cdot C_1$
Decay C17	$-\mu_4 \cdot C_{17}$
Auto-stimulation T-bet	$\frac{a_1 \cdot T - bet^n}{(k_3^n + Tbet^n) \cdot (1 + \frac{RORgt}{g_2})}$
Auto-stimulation ROR- $\gamma$ t	$\frac{a_2 \cdot RORgt^n}{(k_4^n + RORgt^n) \cdot (1 + \frac{Tbet}{g_1})}$
T-bet-induced IFN- $\gamma$	$\frac{a_3 \cdot Tbet}{(k_5 + Tbet) \cdot (1 + \frac{RORgt}{g_3})}$
RORgt-induced IL21	$\frac{a_5 \cdot RORgt}{(k_6 + RORgt) \cdot (1 + \frac{Tbet}{g_4})}$
Decay IFN- $\gamma$	$-\mu_5 \cdot IFNg$
Decay IL21	$-\mu_6 \cdot IL21$
IL21 to C17	$k_7 \cdot IL21$
IFNg to C1	$k_8 \cdot IFNg$

S2 Fig: Equations governing processes involved in the model described in Figure 3.