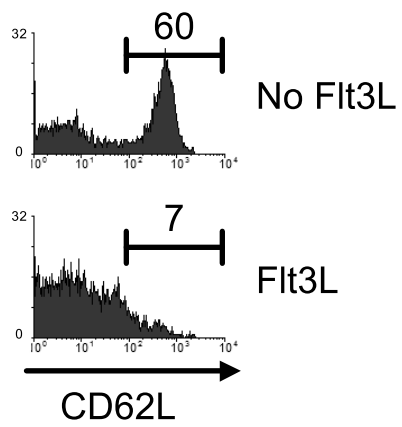


Supplementary Figure 1

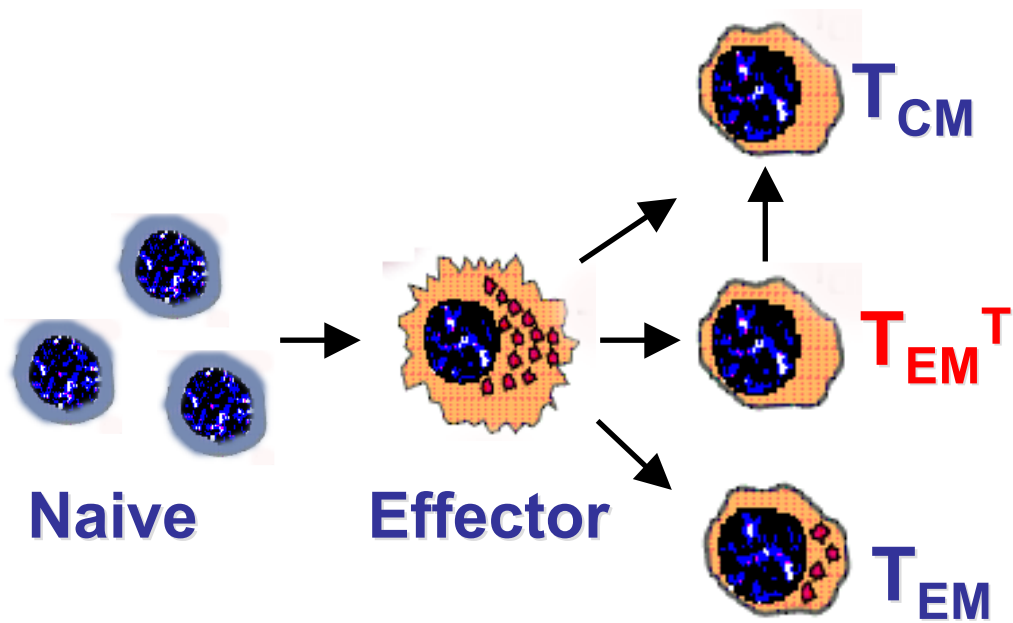
**Supplementary Figure 1** T<sub>EM</sub> do not convert to T<sub>CM</sub> following secondary challenge. CD45.2 B6 mice were infected i.v. with 1x10<sup>6</sup> pfu of VSV-Indiana and 128 days later FACS-purified CD62L<sup>lo</sup> memory CD8 T cells were transferred into CD45.1 B6 mice. 1 day later mice were challenged with VSV-New Jersey. 107 days after transfer, the tetramer positive transferred cells were analyzed for CD62L expression in the spleen. Data shown are from gated tetramer positive CD8 T cells and are from two representative animals.



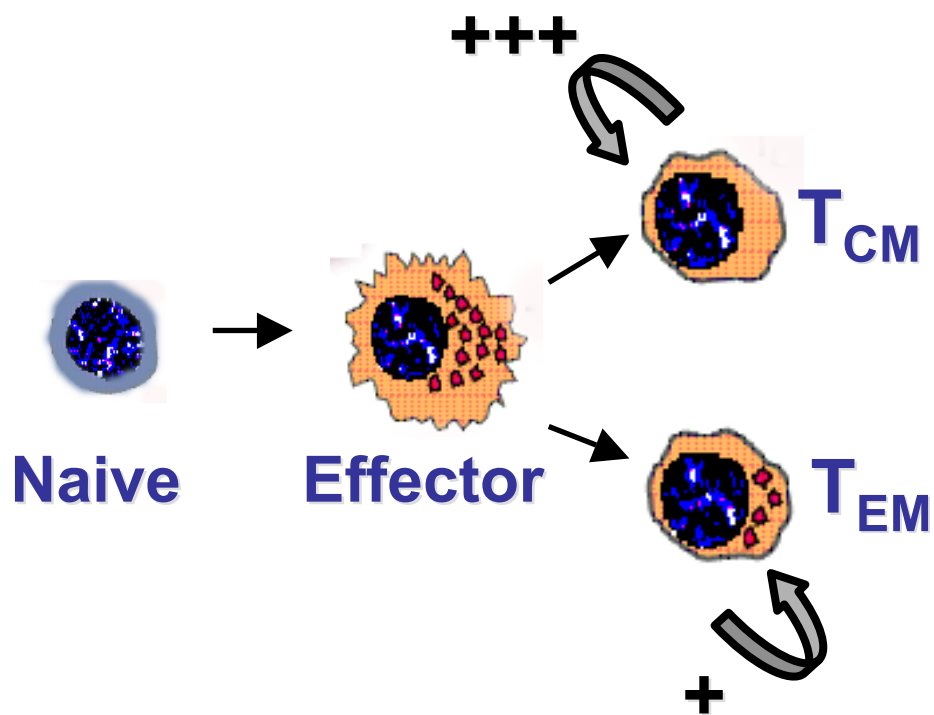
Supplementary Figure 2

**Supplementary Figure 2** Increasing DC numbers results in enhanced T<sub>EM</sub> generation. 1x10<sup>5</sup> splenocytes from CD45.2 OT-I TCR transgenic mice were transferred into CD45.1 B6 mice, and infected with VSV-ova (1x10<sup>6</sup> pfu i.v.) 1 day later. Daily i.p. injections of FLT3-L (10ug) or PBS were given 4 days before infection and continued for 7 days. 67 days post infection the level of CD62L was examined on splenic OT-I T cells.

a



b



Supplementary Figure 3

**Supplementary Figure 3** Proposed model for the differentiation pathways of  $T_{CM}$  and  $T_{EM}$  cells. The model depicts the differentiation pathways of  $T_{CM}$  and  $T_{EM}$  cells generated from (a) high precursor frequency where naïve T cells after being activated generate primary effectors which differentiate into either  $T_{EM}$  which are stable or into transitional  $T_{EM}$  that have the capacity to convert to  $T_{CM}$  or (b) low precursor frequency where following naïve T cell activation primary effectors are produced which differentiate into stable  $T_{CM}$  and  $T_{EM}$  lineages.