

Supplemental S1. PF4<sup>-/-</sup> mice have increased intragraft *Foxp3* expression compared to WT mice (N=3,  $\pm$  S.D. \*P<0.01 vs WT).



Supplemental S2. WT and PF4<sup>-/-</sup> mice were infected with nonlethal *Plasmodium yoelii* XNL and 7 days later CD4<sup>+</sup>IL-17<sup>+</sup> splenocytes were quantified in infected mice and control uninfected mice (\*P<0.03).



Supplemental S3. PF4<sup>-/-</sup> mice have increased plasma G-CSF (N=5, ± S.D. \*P<0.01 vs WT).



Supplemental S4. PF4<sup>-/-</sup> mice have increased, but not significantly, T reg T cells compared to WT mice (N=5, ± S.D.).







Supplemental S6. WT and PF4-/- platelets have the same effect on Th1 differentiation *in vitro* (N=3,  $\pm$  S.D. \*P<0.05 vs control).



Supplemental S7. Jurkat T cells stimulated with PMA express CXCL4 and the PF4 variant *PF4V1* (n=3± S.D. \*P<0.01 vs Control).



Supplemental S8. Mice were given BM12 heart transplant and 7 days later monocytes were isolated. *Cxcl4* expression was determined by qRT-PCR (± S.D. \*P<0.01 vs Control).



Supplemental S9. PF4<sup>-/-</sup> mice were reconstituted with either WT or PF4<sup>-/-</sup> bone marrow. Beginning 4 weeks later baseline and post-transplant plasma IL-17 was measured (N=4 ± S.D. \*P<0.01 vs WT $\rightarrow$ PF4<sup>-/-</sup>).