

Fig. S1 Deficiency of Bim protein in Treg cells, but not Tcon cells, from *Foxp3^{Cre};Bim^{fl/fl}* mice

- (a) Expression of Bim in CD4⁺Foxp3⁺ Treg cells in peripheral lymph nodes from *Foxp3^{Cre}* and *Foxp3^{Cre};Bim^{fl/fl}* mice (4-weeks-old).
- (b) Expression of Bim in CD4⁺Foxp3⁻ Tcon cells in peripheral lymph nodes from *Foxp3^{Cre}* and *Foxp3^{Cre};Bim^{fl/fl}* mice (4-weeks-old).

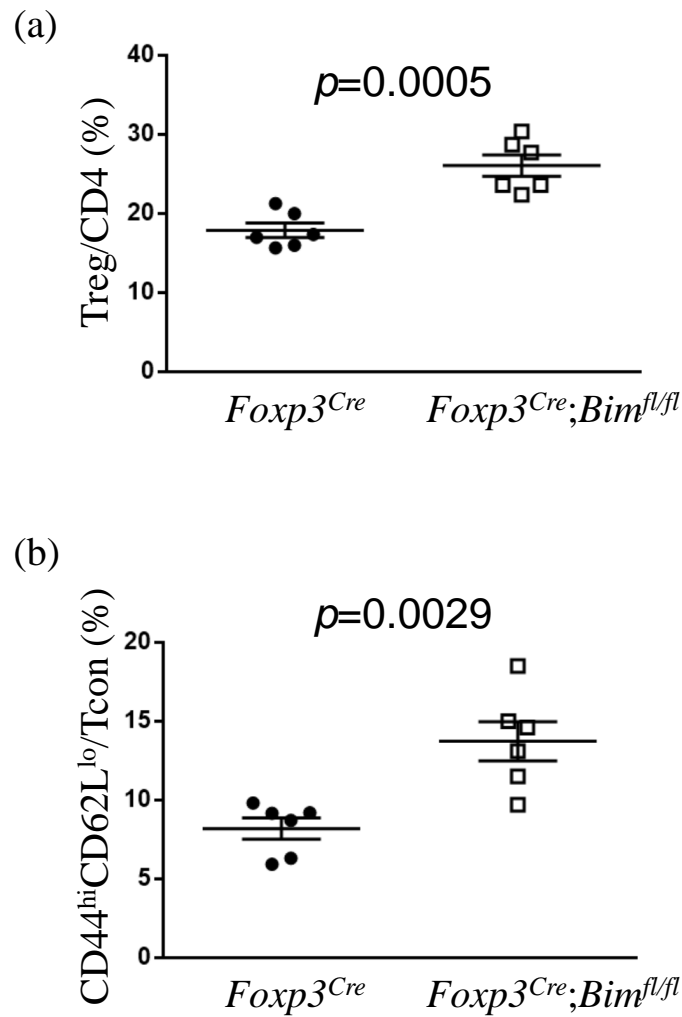


Fig. S2 Immune activation in *Foxp3^{Cre};Bim^{fl/fl}* mice

- (a) The proportion of CD4⁺Foxp3⁺ Treg cells among Tcon cells in peripheral lymph nodes from *Foxp3^{Cre}* and *Foxp3^{Cre};Bim^{fl/fl}* mice (4-month-old).
- (b) The proportion of CD44^{hi}CD62L^{lo} (effector/memory cells) among Tcon cells in peripheral lymph nodes from *Foxp3^{Cre}* and *Foxp3^{Cre};Bim^{fl/fl}* mice (4-month-old).

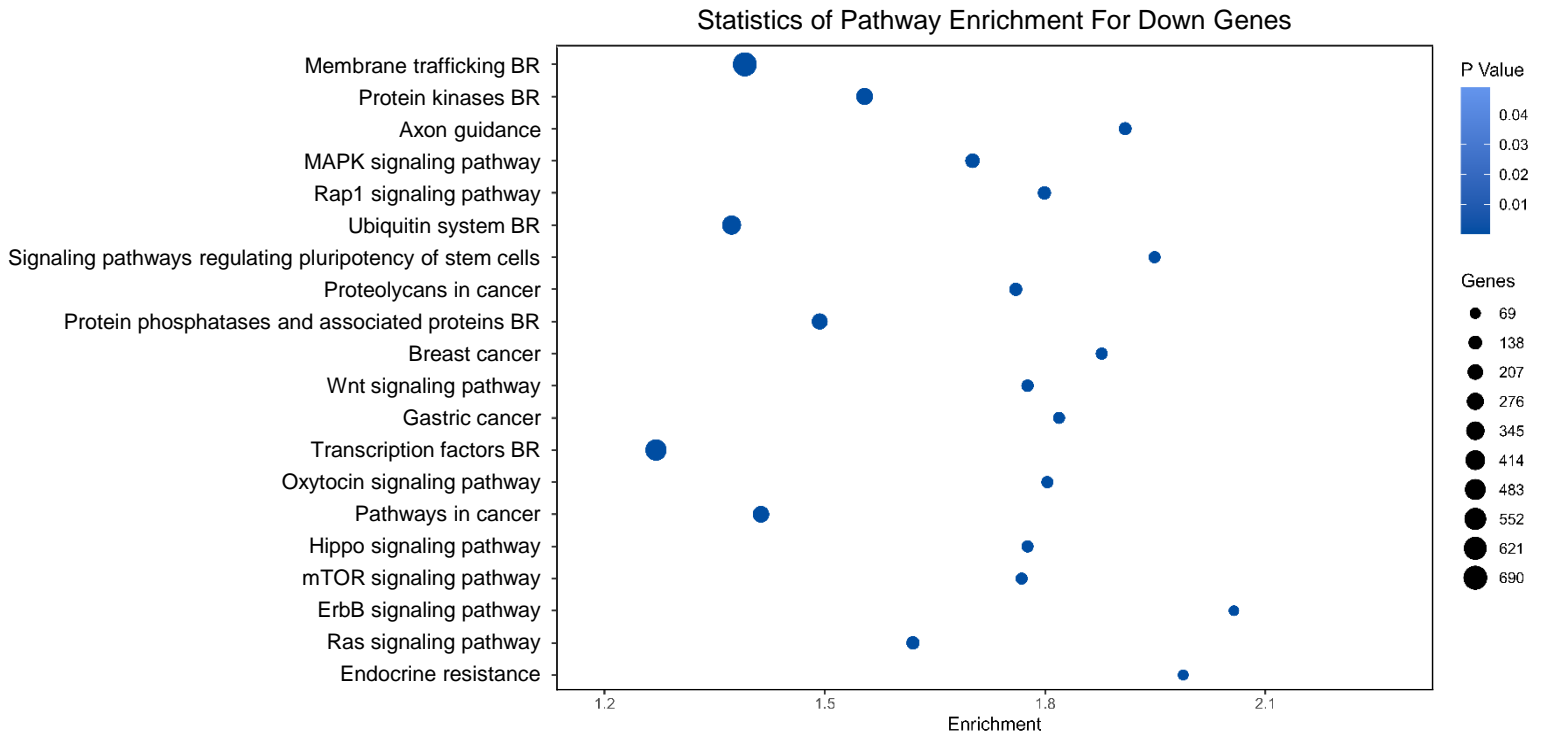


Fig. S3 Transcriptional alterations in *Bim*-deficient Treg cells

KEGG pathway analysis of the altered non-coding RNAs in *Bim*-deficient Treg cells compared to the *Foxp3^{Cre}* control Treg cells; the non-coding RNAs with alters more than 1.5-folds and p -values <0.05 were selected.

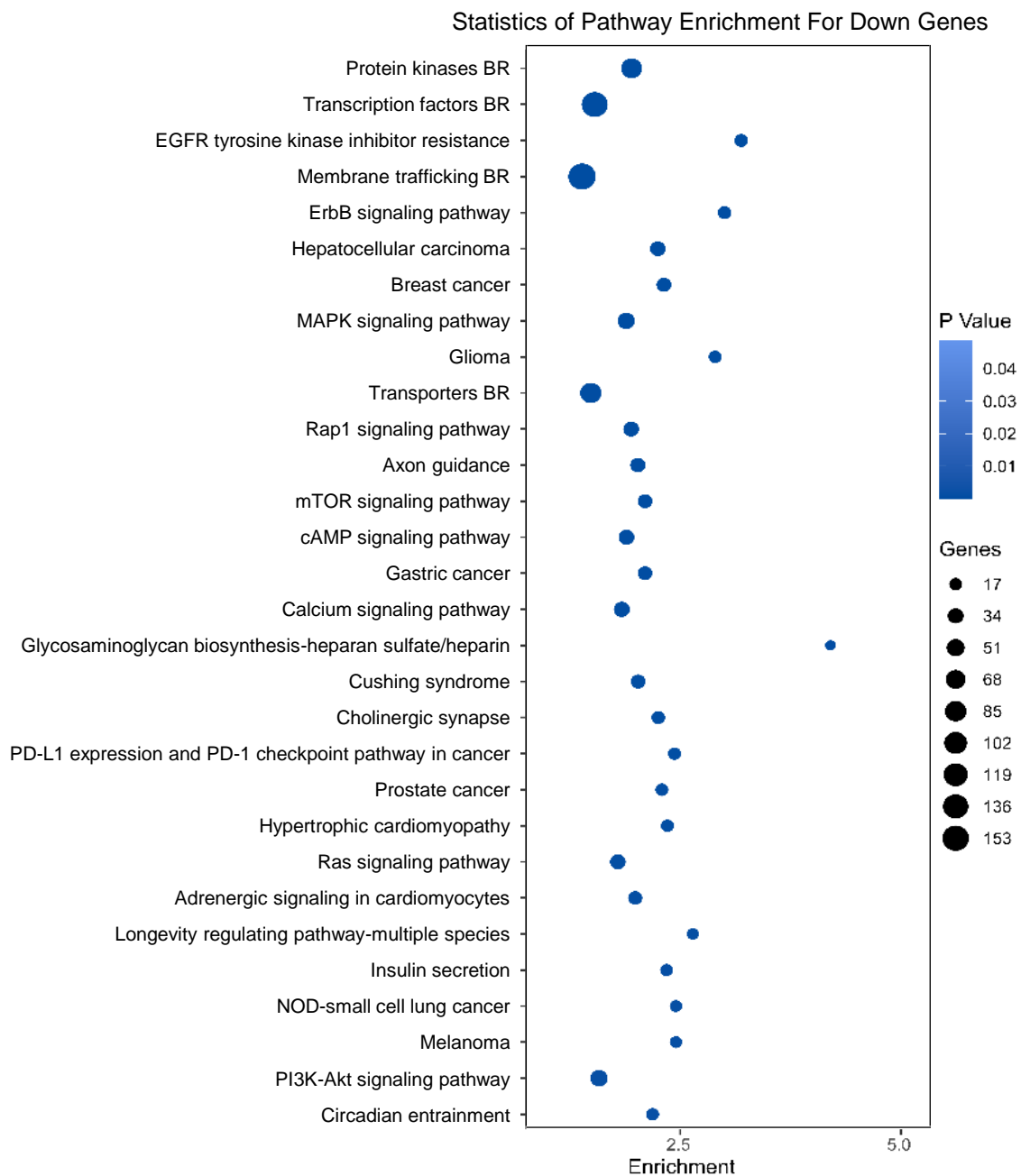


Fig. S4 Transcriptional alterations in aged Treg cells

KEGG pathway analysis of the altered non-coding RNAs in aged *Foxp3^{Cre}* Treg cells compared to young *Foxp3^{Cre}* control Treg cells; the non-coding RNAs with alters more than 1.5-folds and p -values<0.05 were selected.

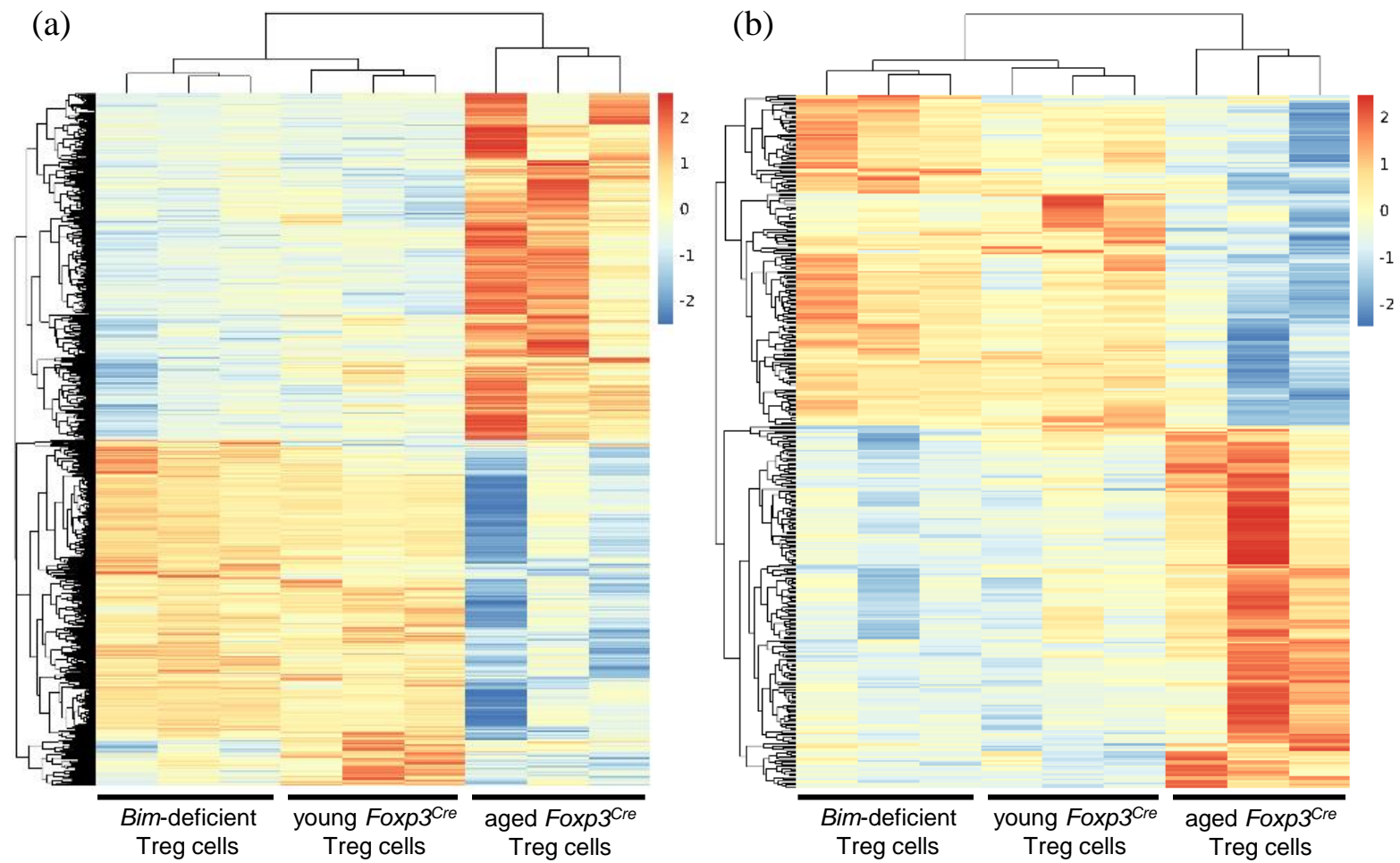


Fig. S5 Comparison of transcriptional programs of *Bim*-deficient and aged Treg cells

- (a) Unsupervised cluster analysis of altered long non-coding RNAs from *Bim*-deficient and aged *Foxp3^{Cre}* Treg cells compared to the young *Foxp3^{Cre}* control Treg cells.
- (b) Unsupervised cluster analysis of altered other non-coding RNAs from *Bim*-deficient and aged *Foxp3^{Cre}* Treg cells compared to the young *Foxp3^{Cre}* control Treg cells.