

Supplementary Figure 1:

(a) Genotype results from murine ear samples taken 3 weeks after birth are shown. PCR primers to demonstrate CD11cCre (300bp), to distinguish wildtype (1300bp) from floxed (900bp) and deleted (900bp) *LAMTOR2* alleles were used to identify all possible genotypes. M: DNA-ladder, 1: *LAMTOR2*_{+/+}, 2: *LAMTOR2*_{t/+}, 3: *LAMTOR2*_{t/t}, 4: CD11c *LAMTOR2*_{+/+}, 5: CD11c *LAMTOR2*_{del/4}, 6: CD11c *LAMTOR2*_{del/del}. (b) Western blot of splenic DC lysates from control and CD11c *LAMTOR*_{del} mice was performed against LAMTOR2 and 3. Actin was used as loading control. (c) mRNA levels of LAMTOR2 in FL-BMDCs, B cells and T cells were measured. Mean±SD, *ns p>0.05*, *** *p<0.001* as determined by unpaired Student's t-test. (d) Body weight of control and CD11c *LAMTOR2*_{del} mice (n=7 per genotype), Mean±SD, *p=n.s.*, as determined by unpaired Student's t-test. (e) Paraffin sections of 3 months old control and CD11c *LAMTOR2*_{del} mice for liver were stained with H&E. Cryosections were stained for CD11c. "*" indicates the sinus. Scale bar = 50µm.





Supplementary Figure 2:

(**a**, **b**, **c**, **d**) Analyses of major spleen cell populations by flow cytometry. One representative for each genotype is shown. (**d**) Combined analyses of 5 individual measurements for each genotype are shown. Mice at the age of 3 months were analyzed. Mean \pm SD, *ns p*>0.05 as determined by unpaired Student's t-test.



Supplementary Figure 3:

(a) Serum samples of 3 control and CD11c $LAMTOR2_{del}$ mice were analyzed for the indicated cytokines by immune multiplexing. Two technical replications were performed. Mean±SD, *ns p>0.05, * p<0,05* as determined by unpaired Student's t-test. (b) Spleen cells of 3 control and CD11c $LAMTOR2_{del}$ mice were isolated. 5 x10⁶ cells were cultured overnight in R10 medium. Next day, supernatant was collected and cytokines were analyzed by multiplexing. Mean±SD, *ns p>0.05, * p<0,05, ** p<0,01* as determined by unpaired Student's t-test.

Fig. S4 a



Supplementary Figure 4:

(a) Gating strategies for MDPs and CDPs in the BM by flow cytometry analyses. One representative example out of 4 individual measurements is shown.



Supplementary Figure 5:

(a) Gating strategy for Ki67 positive cells. Cells were pre-gated for cDCs, pDCs and PDCA-1^{int} cells as shown in Fig. 1d and 2a and then gated for Ki67 according to the isotype control.





Supplementary Figure 6:

(a) Gating strategy for splenic DCs from control and CD11c $LAMTOR2_{del}$ mice after MACS preparation is shown. Cells were pre-gated by FSC and SSC and then gated for CD11c according to the isotype control. (b) BMDCs cultured in presence of FL were analyzed via flow cytometry for their purity. Cells were harvested on day 8 and viable cells were pre-gated by FSC and SSC. DCs are analyzed as CD11c⁺ CD11b⁺ and as CD11c⁺ CD11b⁻ cells according to the isotype controls.



Supplementary Figure 7:

Shown are uncropped Western blots to the corresponding figures. Dotted lines indicate where the membranes were cut to allow incubation with different antibodies. M: marker, 1: control and 2: CD11c *LAMTOR2*_{del} BMDC lysates, 3: control and 4: CD11c *LAMTOR2*_{del} BMDC lysates. Treatments as indicated.





Supplementary Figure 8:

Shown are uncropped Western blots to the corresponding figures. Dotted lines indicate where the membranes were cut to allow incubation with different antibodies. M: marker, 1: control and 2: CD11c $LAMTOR2_{del}$ BMDC lysates, 3: control and 4: CD11c $LAMTOR2_{del}$ BMDC lysates. Treatments as indicated.