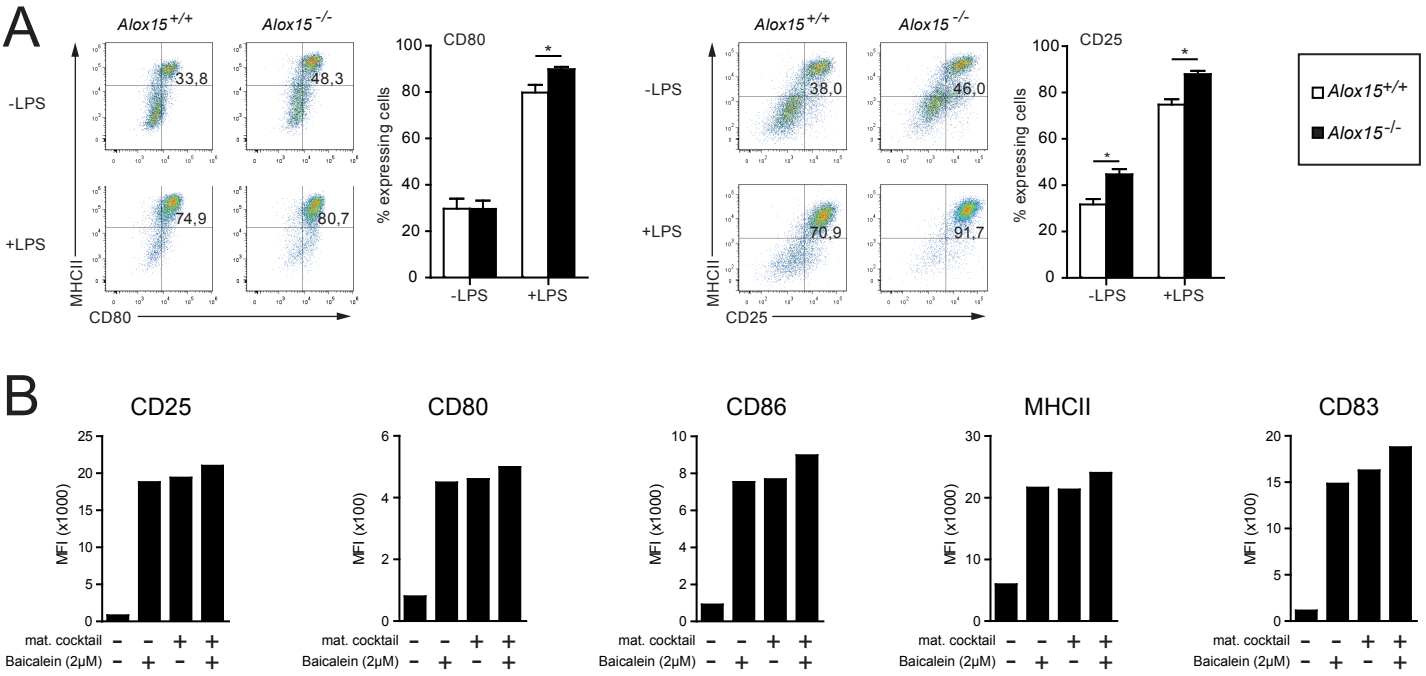

Figure S1

(A) Flow cytometric-based analysis of the expression of of the indicated co-stimulatory molecules or activation markers on wild-type (Alox15$^{+/+}$) and Alox15$^{-/-}$ CD11c^{+} bone marrow-derived dendritic cells (BMDCs) after LPS-induced maturation (100ng LPS/ml). **(B)** Effect of the 15-lipoxygenase inhibitor Baicalein on the expression of indicated surface molecules on human monocyte-derived DCs in the absence and presence of maturation cocktail. Data shown are representative for at least 3 indenpendent experiments (n=3). Error bars represent SEM. *p<0.05, **p<0.005, Students *t* test.

supplementary Figure 1

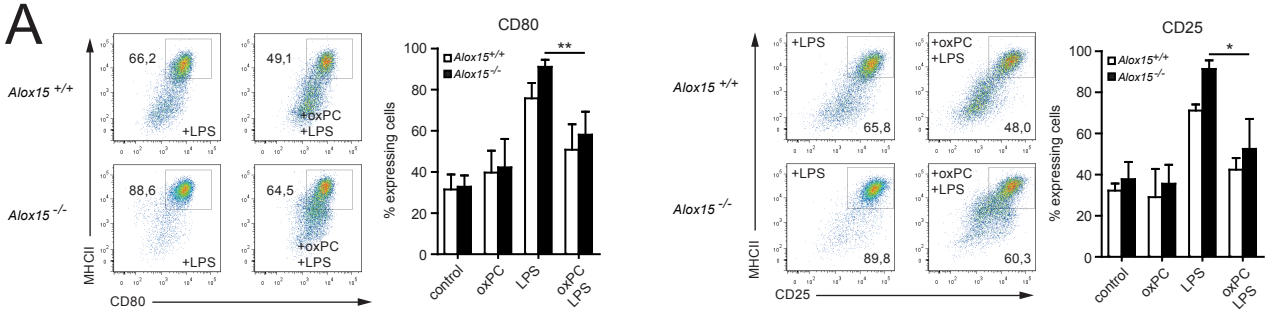

Figure S2

(A) Flow-cytometric-based analysis of the expression of the indicated co-stimulatory molecules or activation markers on wild-type (Alox15$^{+/+}$) and Alox15$^{-/-}$ CD11c^{+} bone marrow-derived dendritic cells after LPS-induced maturation (100ng LPS/ml) in the absence and presence of oxydized phosphatidylcholine (oxPC) (50µg/ml). Data shown are representative for at least 3 indenpendent experiments (n=3). Error bars represent SEM. *p<0.05, **p<0.005, Students *t* test.

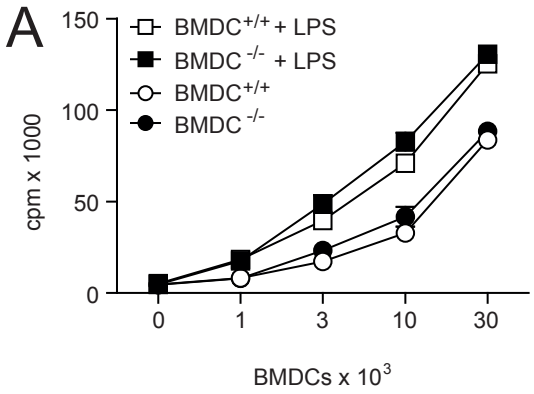

Figure S3

(A) Measurement of T-cell proliferation by [methyl-3H] thymidine incorporation after allogeneic stimulation of BALB/c lymphocytes with immature or maturated (LPS-treated) bone marrow-derived dendritic cells (BMDCs) isolated from wild-type (WT) and Alox15$^{-/-}$ mice (both C57BL/6 background). Data shown are representative for at least 3 indenpendent experiments (n=3).

Mixed lymphocyte reaction (MLR)

For the MLR, allogenic lymphoid LN-T cells (4 x 10^5/well) were incubated in 96-well cell culture plates with graded numbers of mature WT and Alox15$^{-/-}$ DCs for 5 days. The assay was performed in triplicates. Proliferation of T cells was monitored by measuring [methyl-3H]thymidine incorporation, added on day 4 of culture. Cells were pulsed with 1 µCi/well [methyl-3H]thymidine (Hartmann Analytik) for 16 h, harvested onto glass fiber filters (Printed Filtermat A; Wallac, Turcu, Finnland) using an ICH-110 harvester (Inotech, Dottikon, Switzerland), and [methyl-3H]thymidine incorporation was determined using a microplate counter (Wallac).

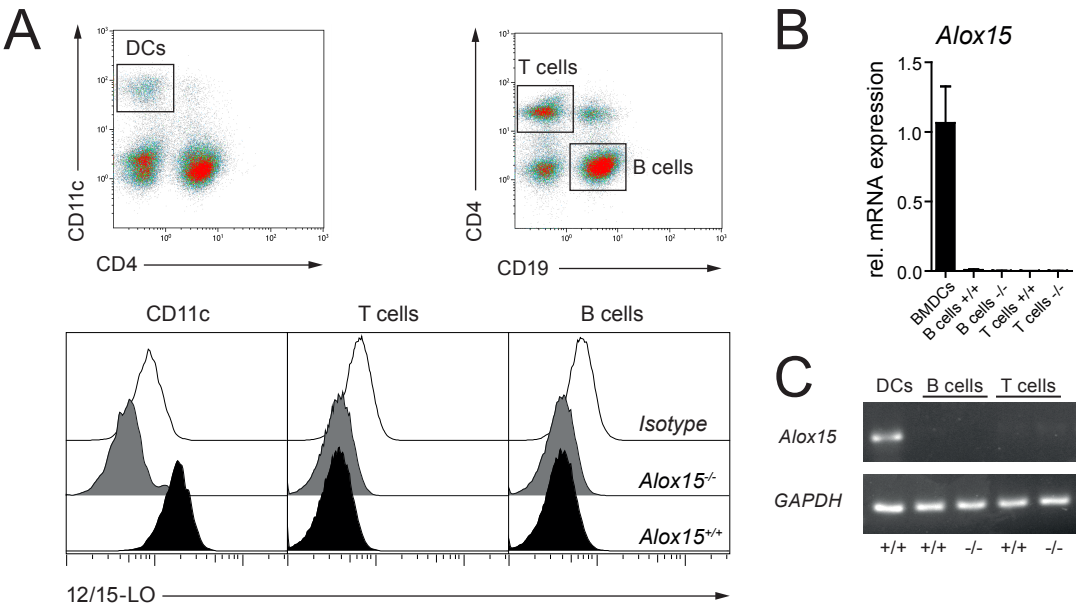

Figure S4

(**A**) Flow-cytometric-based measurement of the 12/15-LO expression in splenocytes of naive wild-type (Alox15$^{+/+}$) and Alox$^{-/-}$ mice. (**B**) Quantification of the Alox15 mRNA expression levels in enriched CD19^{+} or CD4^{+} splenocytes isolated from naive wild-type (+/+) and Alox$^{-/-}$ (-/-) mice, compared to mRNA expression levels of wild-type bone marrow-derived DCs. (**C**) Agarose gel electrophoresis of the corresponding products of the performed real-time PCR of the Alox15 and GAPDH genes in the indicated cell types. Data shown are representative for at least 3 indenpendent experiments (n=3).

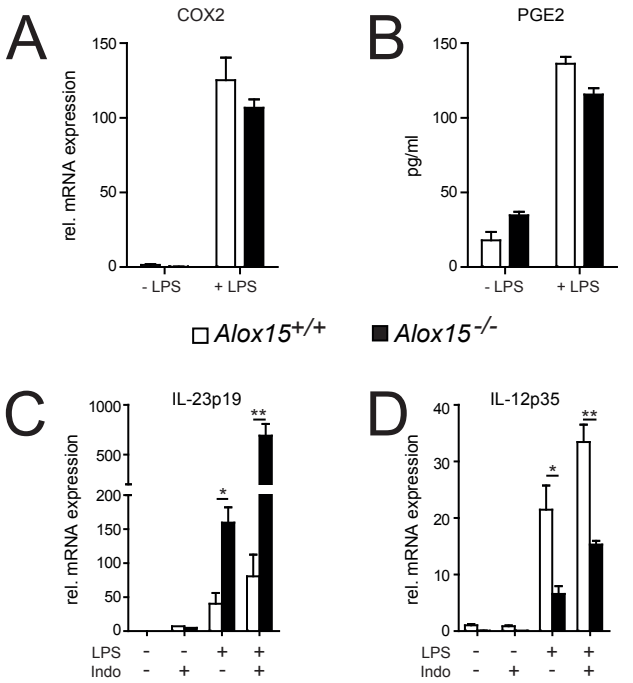

Figure S5

(A) Real-time PCR-based quantification of mRNA expression levels of COX-2 and in **(B)** ELISA-based analysis of the PGE2 production by Alox15$^{+/+}$ and Alox15$^{-/-}$ CD11c^{+} bone marrow-derived dendritic cells after LPS-induced maturation (100ng LPS/ml for 16 hours). **(C)** Effect of the Cyclooxygenase-2 inhibitor Indomethacin on the expression levels of the IL-23 specific subunit p19 and **(D)** the IL-12 specific subunit p35 in Alox15$^{+/+}$ and Alox15$^{-/-}$ CD11c^{+} bone marrow-derived dendritic cells after LPS-induced maturation (100ng/ml) with or without pretreament (4h) of the cells with 10µM Indomethacin. Data shown are representative for at least 3 indenpendent experiments (n=3). Error bars represent SEM. *p<0.05, **p<0.005, Students *t* test.