Supplemental data:

Alveolar macrophage activation and an emphysema-like phenotype in adiponectin deficient mice

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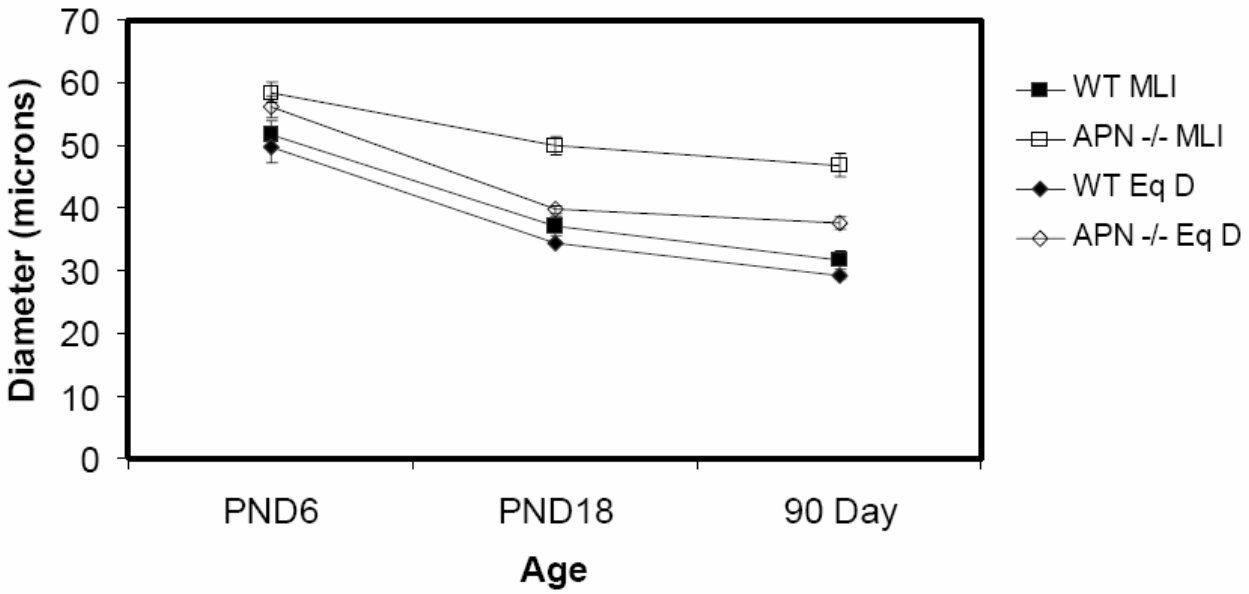
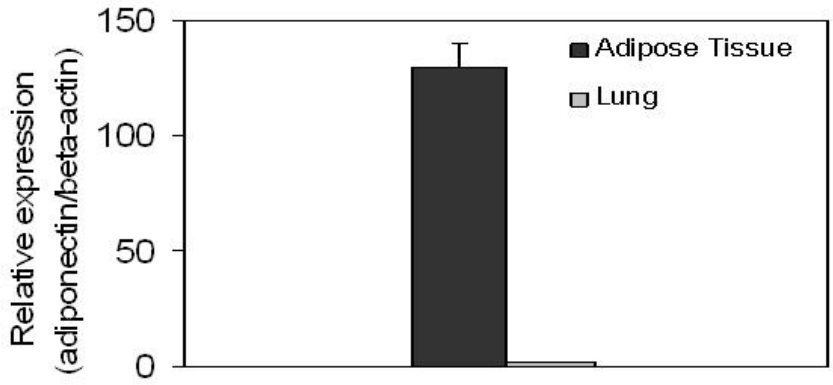
Body Mass (grams)

	Day 6	Day 18	3 Month
WT	3.42 +/- 0.21	8.34 +/- 0.22	24.66 +/- 0.31
APN -/-	3.92 +/- 0.25	7.94 +/- 0.26	26.675 +/- 0.60

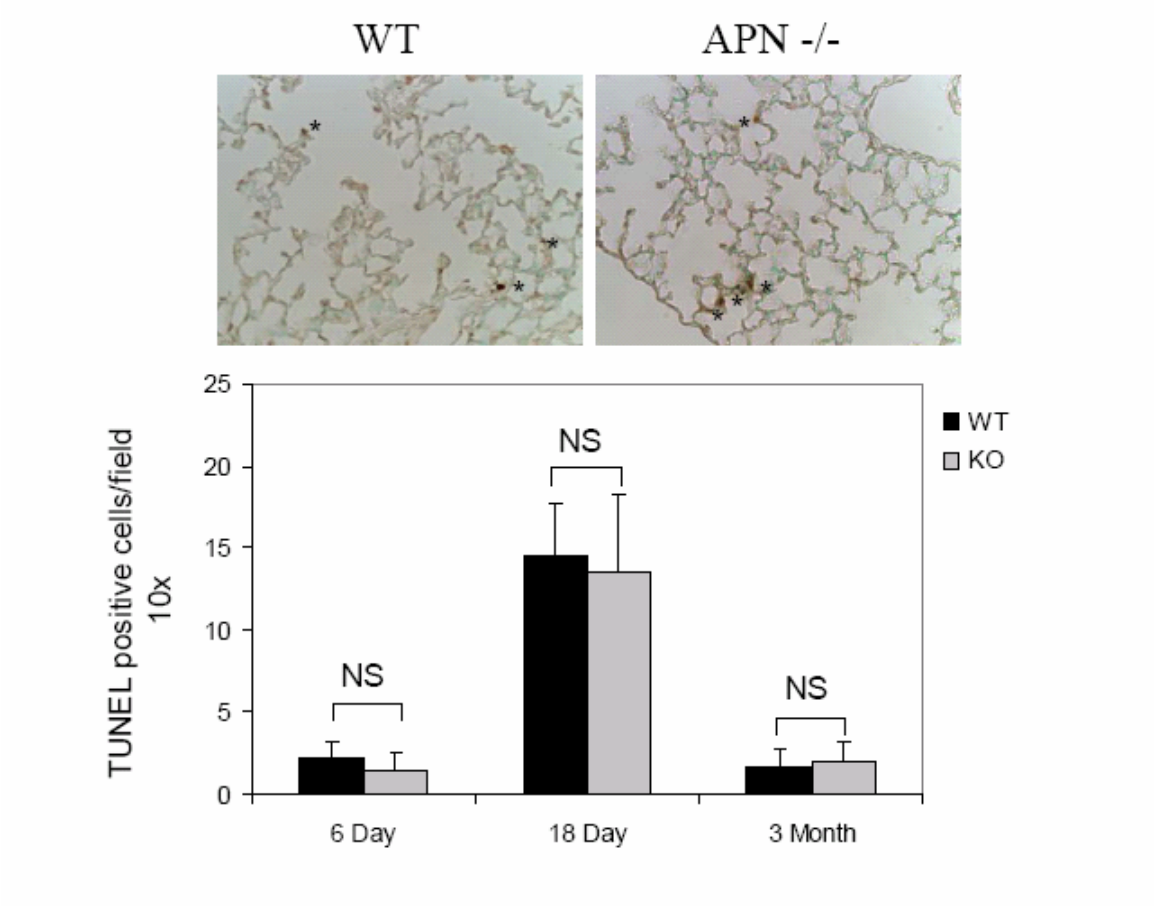
Supplemental Figure 1: Body mass of age matched wild-type and adiponectin -/- mice (n = 5, each time point).



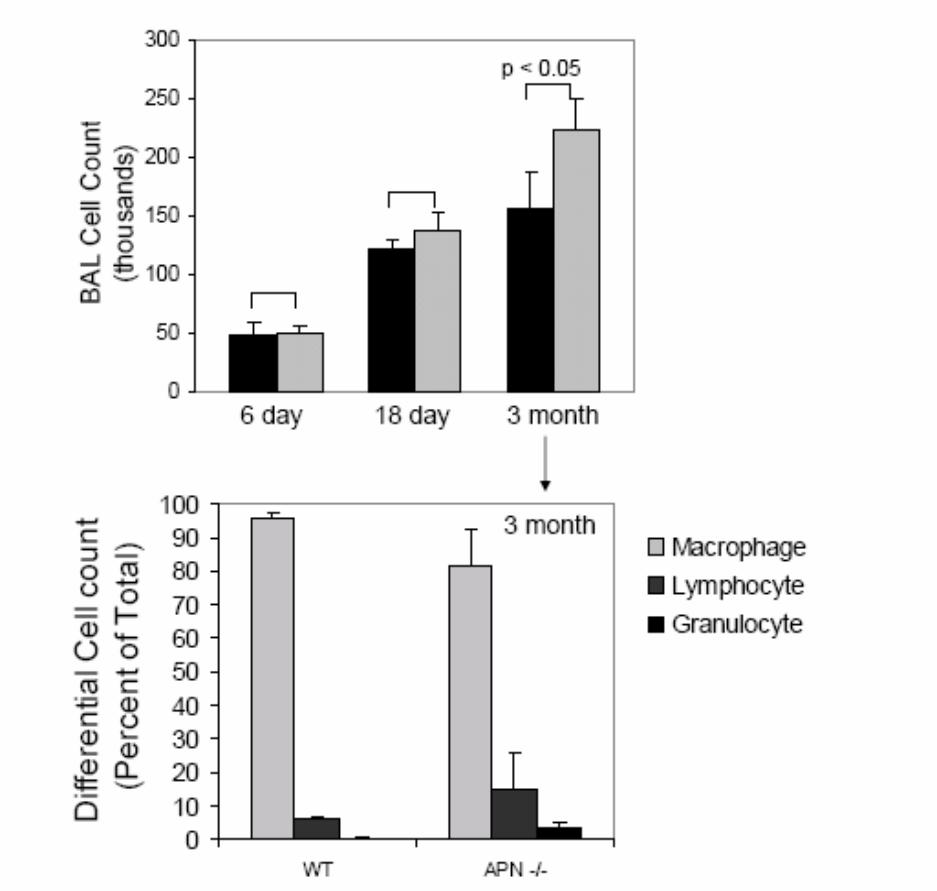
Supplemental figure 2: Alveolar size estimated by an automated computer assisted method (equivalent diameter, Eq D) and by mean linear intercept (MLI) was increased in adiponectin -/- mice. MLI and equivalent diameter measurements were compared in wild-type and adiponectin -/- mice at 6 days, 18 days and 3 months of age. Alveolar diameter by both methods was found to be significantly increased in adiponectin -/- mice at 18 days and 3 months of age ($p<0.0001$). In wild-type mice, alveolar diameter decreased with age as a result of post-natal alveolarization. In contrast, alveolar diameter was not significantly different at 18 days and 3 months in adiponectin -/- mice.



Supplemental figure 3: Negligible quantities of adiponectin transcript are expressed in lung. Real-time PCR in wild-type lung demonstrates that the relative quantity of adiponectin transcript in lung is negligible, whereas the message is abundantly expressed in adipose tissue (n =3, each group). The numbers reported represent the mean and the standard error (S.E.).



Supplemental figure 4: The number of TUNEL+ cells (Chemicon, Billerica, MA) was similar in wild-type and adiponectin -/- mice. Staining was performed on paraffin-embedded lung sections at 6 days, 18 days and 3 months of age (n = 3 at all time points). A) Representative image at 3 months shows similar number of TUNEL+ (brown) cells. B) The number of TUNEL+ cells in lungs of wild-type and adiponectin -/- mice was similar at all time points (N.S, non-significant). Values are representative of the mean and S.E. from counting the number of positive cells per 10x field in three random sections in each mouse.



Supplemental figure 5: Profile of cells in broncho-alveolar lavage fluid (BALF) of 6 day, 18 day, and 3 month-old wild- type and adiponectin -/- mice (n =5). *A:* Total cell counts were significantly increased in BALF of 3-month old adiponectin -/- mice. Total cell counts in wild-type and adiponectin -/- BALF were similar at 6 days and 18 days. *B:* Differential cell counts showed that the relative percent of macrophages, lymphocytes and granulocytes were similar in wild-type and adiponectin -/- mice at 3 months. Neutrophils were the predominant granulocyte population in BALF of adiponectin -/- mice (95%). Differential cell counts in wild-type and adiponectin -/- mice were similar in post-natal day 6 and 18 BALF (data not shown). Numbers reported represent the mean and the standard error (S.E.).