

865 respective murine PAS positive cells are shown (G). ALT-803-induced IL-10 in BALF of  
866 *Aspergillus* challenged mice (H). Data is expressed as mean  $\pm$  SD, n=8 mice/group,  
867 \*p<0.001.

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869 **Legends for supplementary figures:**

870 **Supplementary figure 1. Relative mRNA expression of Th2 cytokines,**  
871 **quantification of eosinophils and goblet cells in rIL-15 pretreated mice exposed to**  
872 **saline or *Aspergillus* challenge.** A diagrammatic representation of rIL-15 treatment  
873 and induction in the employed experimental asthma protocol is shown (A). A  
874 representative photomicrograph of eosinophil accumulation in lung tissue of rIL-15  
875 treated saline- or *Aspergillus*-challenge mice is shown (B-E, original magnification x200).  
876 Real time PCR for mRNA of IL-4 (F), IL-5 (G), IL-13 (H) and IL-10 (I) are shown in rIL-  
877 15 treated saline- or *Aspergillus*-challenge mice. A representative photomicrograph of  
878 goblet cell hyperplasia in the lungs of rIL-15 treated saline or *Aspergillus* challenged  
879 mice is shown (J-M). Data are expressed as mean  $\pm$  SD, n=12 mice/group. \*p<0.05  
880 \*\*p<0.001, \*\*\* p<0.0001.

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882 **Supplementary figure 2. Analysis airway obstruction in rIL-15 treated dust mite**  
883 **and cockroach allergen challenged mice.** A diagrammatic representation of rIL-15  
884 treatment and allergen challenged protocol is shown (A). Airway resistance (RI) and  
885 compliance (C<sub>dyn</sub>) in response to various concentrations of methacholine were  
886 measured in saline and dust mite (B, C) and saline and cockroach allergen challenged

887 rIL-15 treated and not treated mice are shown (D, E). Data are expressed as mean  $\pm$   
888 SD, n = 3 mice/group. \* $p < 0.001$ .

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890 **Supplementary figure 3. Relative mRNA expression for Th2 and eosinophil**  
891 **cytokines and chemokines in Aspergillus-challenged DOX and non-DOX diet CC-**  
892 **10 IL-15 transgenic mice.** Real time PCR analysis for relative mRNA of IL-4, IL-5, IL-  
893 13, eotaxin-1 and eotaxin-2 in saline- or Aspergillus challenged DOX and non-DOX diet  
894 CC-10-IL-15 bitransgenic mice are shown (A-E). Data are expressed as mean  $\pm$  SD,  
895 n=12 mice/group. \*\* $p < 0.001$ , \*\*\*  $p < 0.0001$ , NS, not significant.

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897 **Supplementary figure 4. Analysis of IL-10 producing regulatory T cells in**  
898 **Aspergillus challenged non DOX and DOX exposed IL-15 bitransgenic mice.** Flow  
899 cytometry analysis showed that IL-10 producing regulatory T cells are increased in the  
900 spleen and mediastinal lymph nodes in DOX exposed Aspergillus challenged mice  
901 compared to non DOX exposed Aspergillus challenged mice. The absolute number of  
902 regulatory T cells and IL-10 producing regulatory T cells are shown in non DOX and  
903 DOX exposed IL-15 bitransgenic mice (B-E). Data is the representative of 4 mice/group  
904 analyzed, \* $p < 0.05$ .

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906 **Supplementary figure 5. Analysis airway resistance and compliance in rIL-10**  
907 **treated Aspergillus challenged mice.** Airway resistance (RI) and compliance (C<sub>dyn</sub>)  
908 in response to various concentrations of methacholine were measured in rIL-10 treated,  
909 saline and Aspergillus challenged mice. Resistance (A) and compliance (B) is shown for

910 Aspergillus challenged mice with and without rIL-10 treatment. . Data are expressed as  
911 mean  $\pm$  SD, n = 6 mice/group. \*p<0.001.

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913 **Supplementary figure 6. Analysis of regulatory T cells in rIL-15 treated WT and *IL-***  
914 ***15*<sup>-/-</sup> mice and anti-IL-15 treated mouse model of experimental asthma.** Flow  
915 cytometer analysis was performed using anti-CD4-PE, anti-CD25-PECy7 and anti-  
916 Foxp3-APC antibodies. The Foxp3 anti-IgG isotype match is used to identify Foxp3<sup>+</sup>  
917 regulatory T cells (A). To establish that IL-15 association to regulatory T cells, we  
918 examined Splenocytes of saline and Aspergillus challenged WT and *IL-15*<sup>-/-</sup> mice. The  
919 decrease levels of regulatory T cells is observed at baseline and following allergen  
920 challenge in the *IL-15*<sup>-/-</sup> mice compare to WT mice (A-E). Further, the flow cytometer  
921 analysis indicated that rIL-15 given WT and *IL-15*<sup>-/-</sup> mice show increase levels of  
922 regulatory T cells in the spleen compare non treated WT and *IL-15*<sup>-/-</sup> mice (F-J). Data is  
923 the representative of 4 mice/group analysed.

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