

SUPPLEMENTARY INFORMATION

IL-17C-mediated innate inflammation decreases the response to PD-1 blockade in a model of Kras-driven lung cancer

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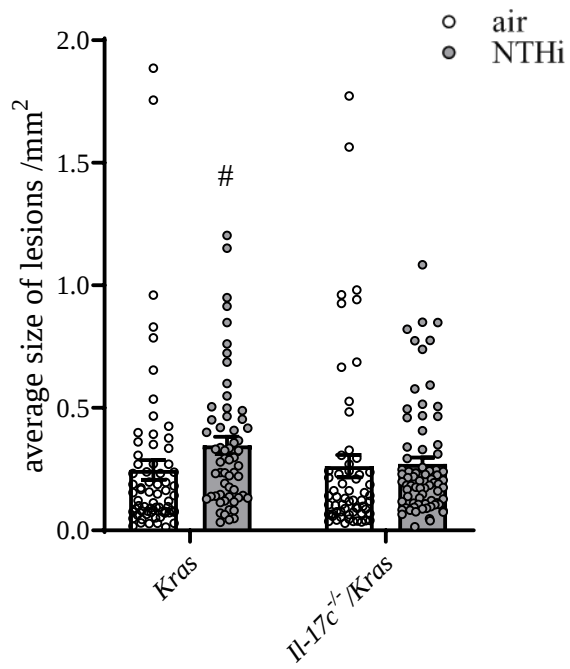
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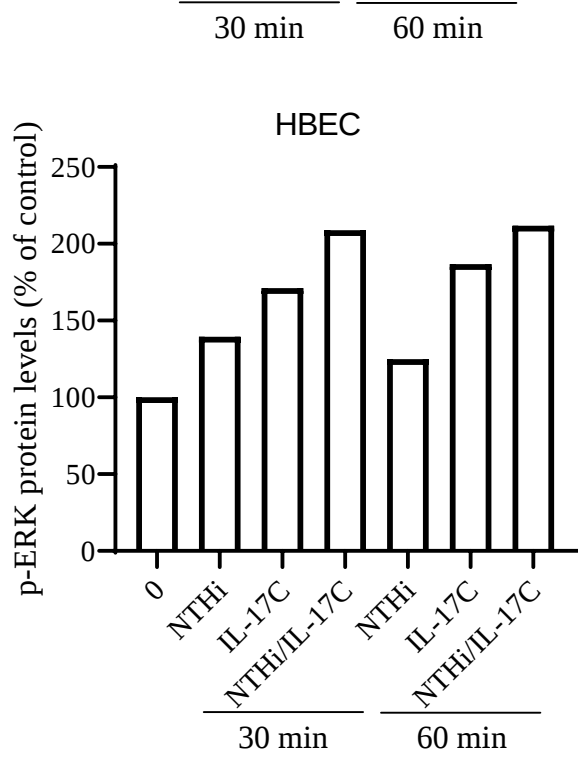
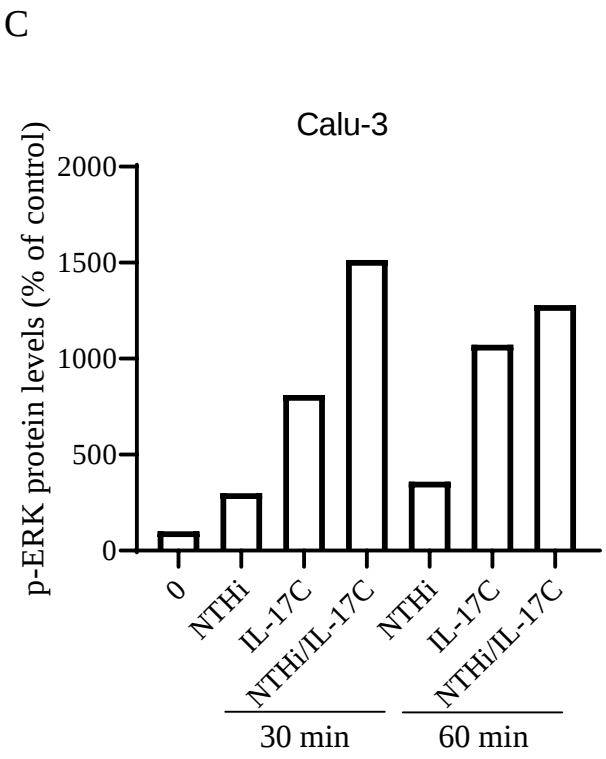
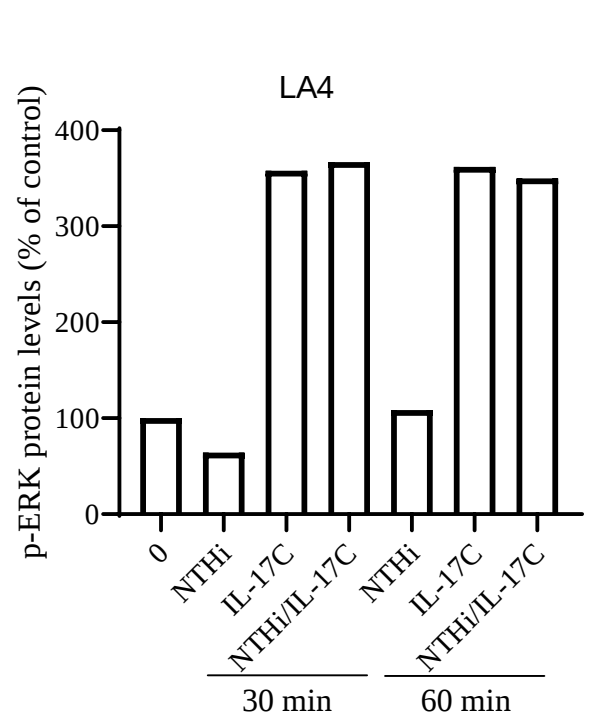
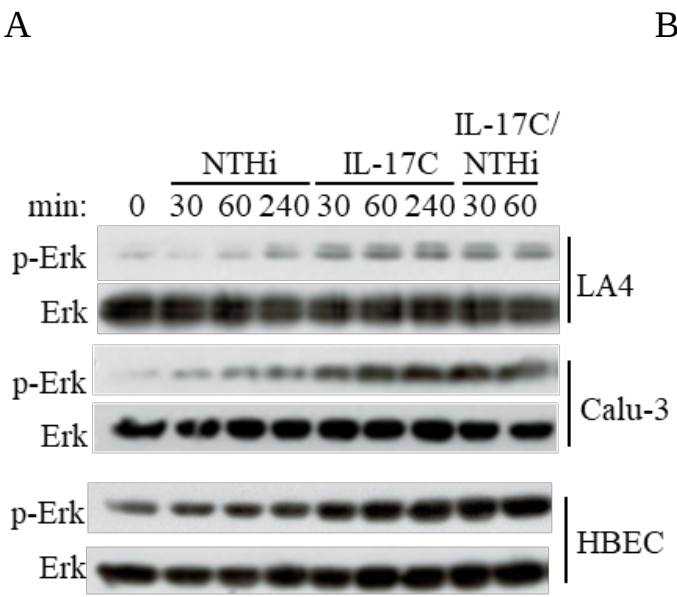
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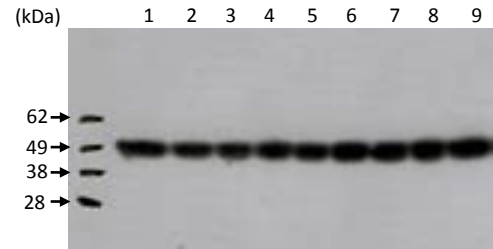
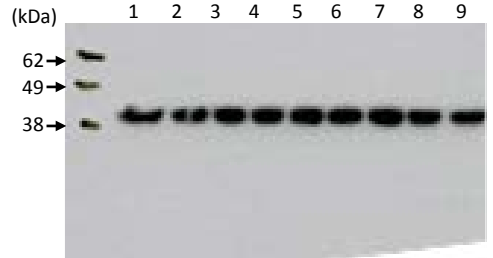
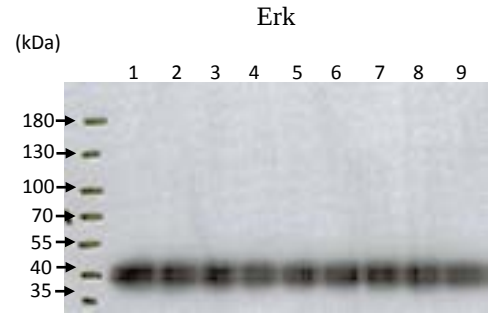
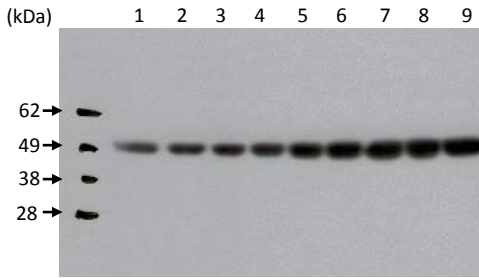
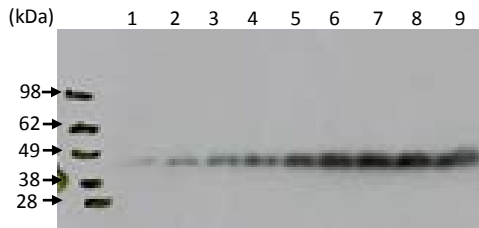
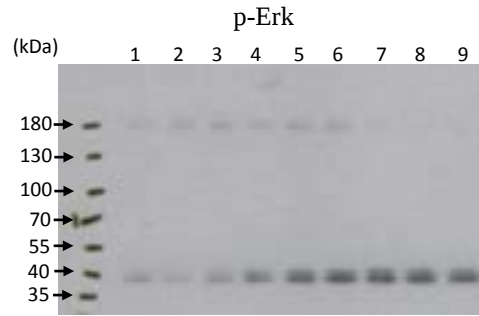


S1: Average size of tumor lesions after exposure to NTHi for four weeks. Data were compared by Mann Whitney test air-exposed Kras mice with #p < 0.001.



S2: The cancer cell lines LA4 and Calu-3 and HBEC were stimulated with 100 ng/ml IL-17C or heat-inactivated NTHi (10^7 CFU/ml) for the indicated time points. (A) Cell lysates were gel separated and immunoblotted. (B to D) Semi-quantitative densitometry of P-ERK normalized to ERK.

Lanes:
 1: NTHi, 0 min
 2: NTHi, 30 min
 3: NTHi, 60 min
 4: NTHi, 240 min
 5: IL-17C, 30 min
 6: IL-17C, 60 min
 7: IL-17C, 240 min
 8: NTHi + IL-17C, 30 min
 9: NTHi + IL-17C, 60 min

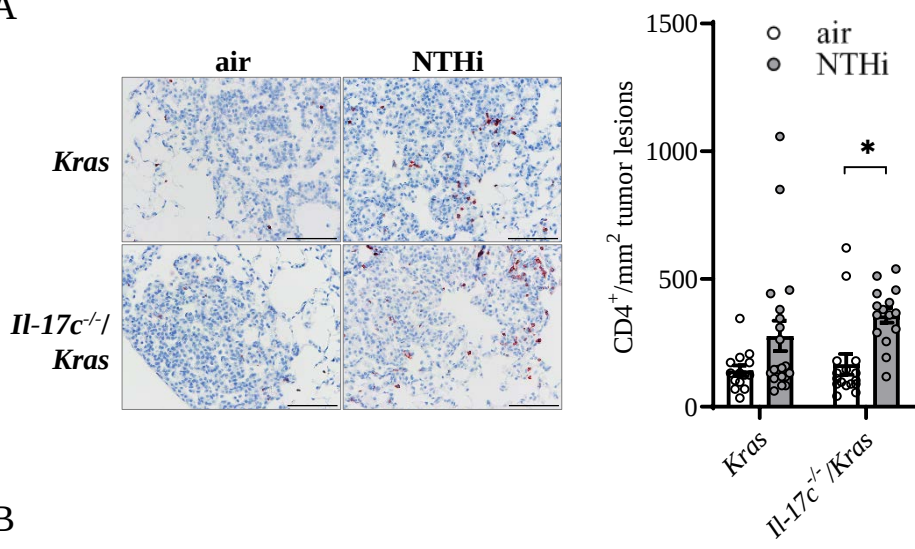


LA4

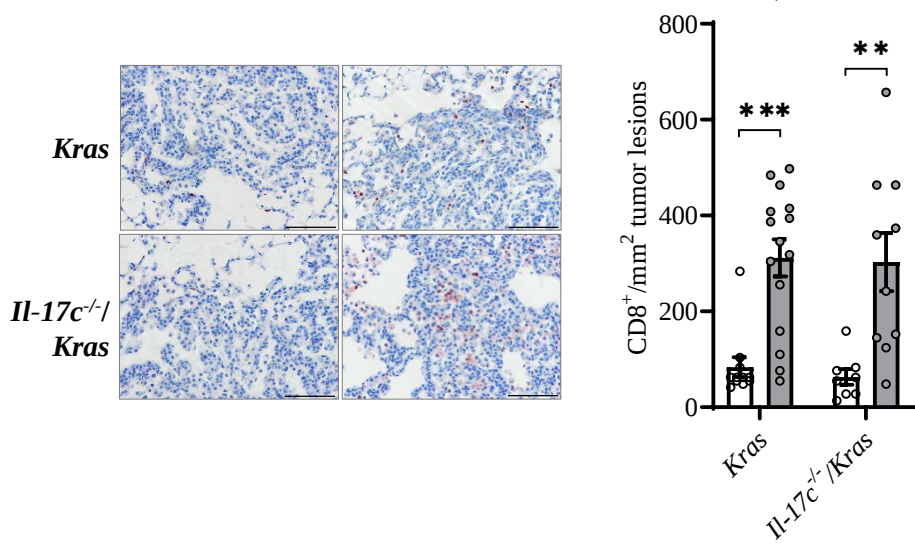
Calu-3

HBEC

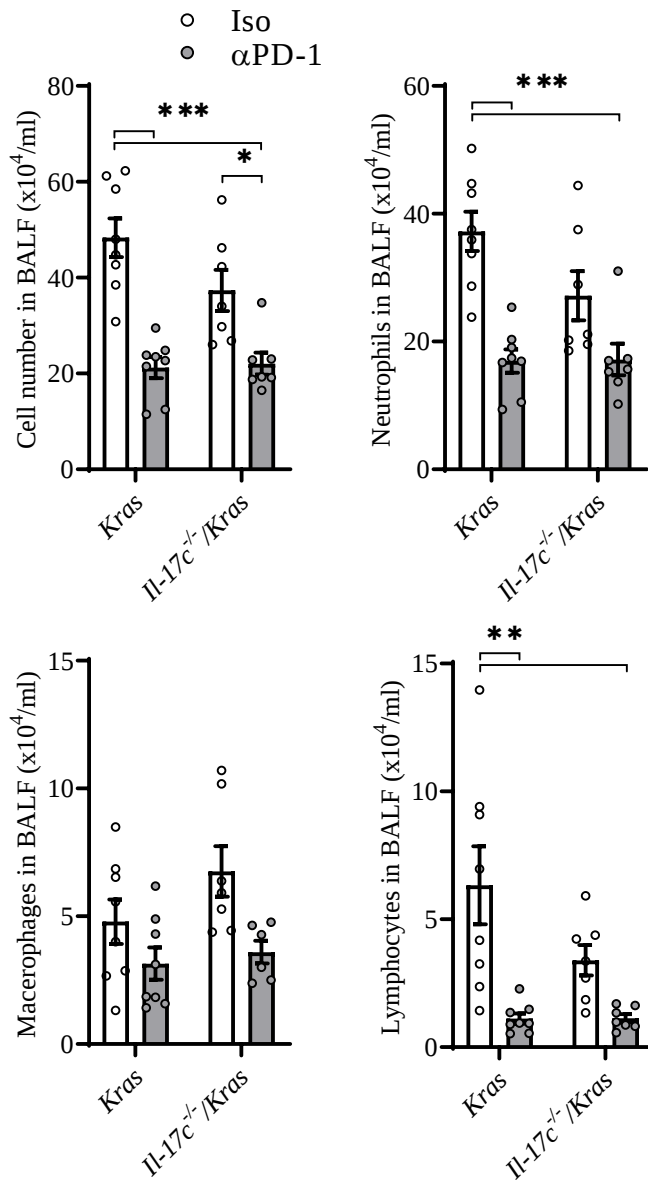
A



B

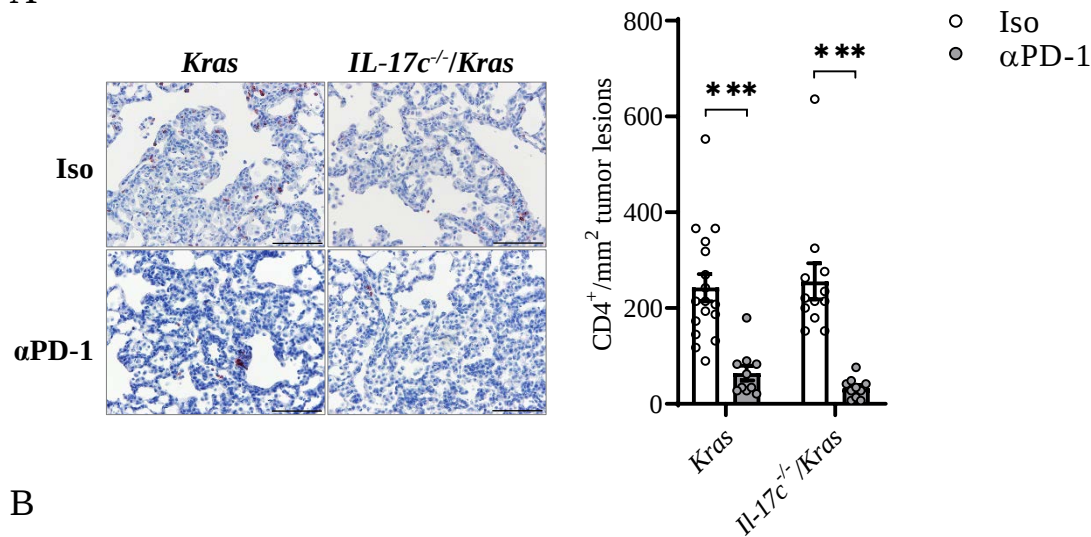


S3: *Kras* mice and *Il-17c^{-/-}/Kras* mice were exposed to NTHi for 4 weeks. (A) IHC of CD4 and quantification of the CD4 positive cells in cancerous lesions. (B) Representative IHC of CD8 and quantification of the CD8 positive cells in cancerous lesions. Data were compared by Two-way ANOVA with Bonferroni post test and *p < 0.05, **p < 0.01, and ***p < 0.001.

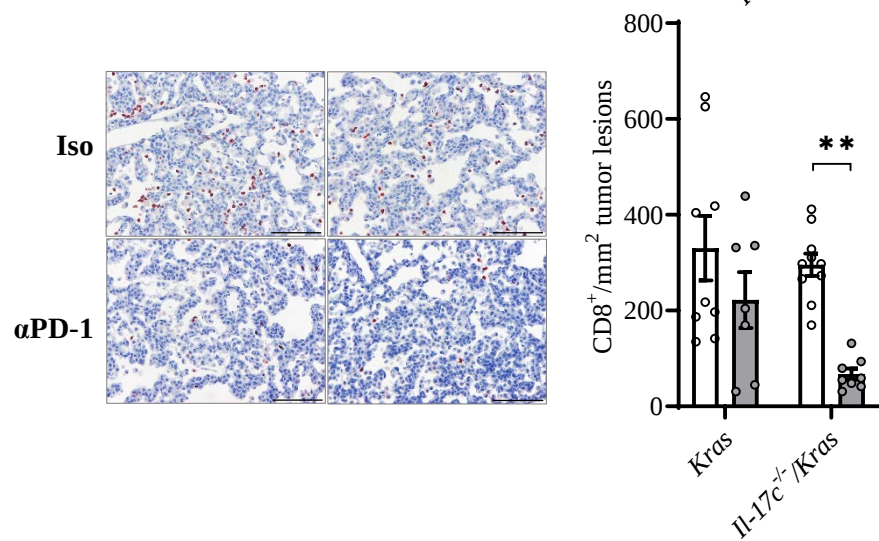


S4: *Kras* mice and *Il-17c^{-/-}/Kras* mice were exposed to NTHi for 4 weeks and treated with an anti-PD-1 antibody or an isotope antibody during the exposure phase. Numbers of total cells, neutrophils, macrophages, and lymphocytes were determined in BAL fluids Data were compared by Two-way ANOVA with Bonferroni post test and * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$.

A



B



S5: *Kras* mice and *IL-17c^{-/-}/Kras* mice were exposed to NTHi for 4 weeks and treated with an anti-PD-1 antibody or an isotype antibody during the exposure phase. (A) Representative IHC of CD4 and quantification of the CD4 positive cells in tumor lesions. (B) Representative IHC of CD8 and quantification of the CD8 positive cells in tumor lesions. Data were compared by Two-way ANOVA with Bonferroni post test and are shown as the mean ± SEM. **p < 0.01, and ***p < 0.001.