

## **Interleukin-12 and -23 blockade mitigates elastase-induced abdominal aortic aneurysm**

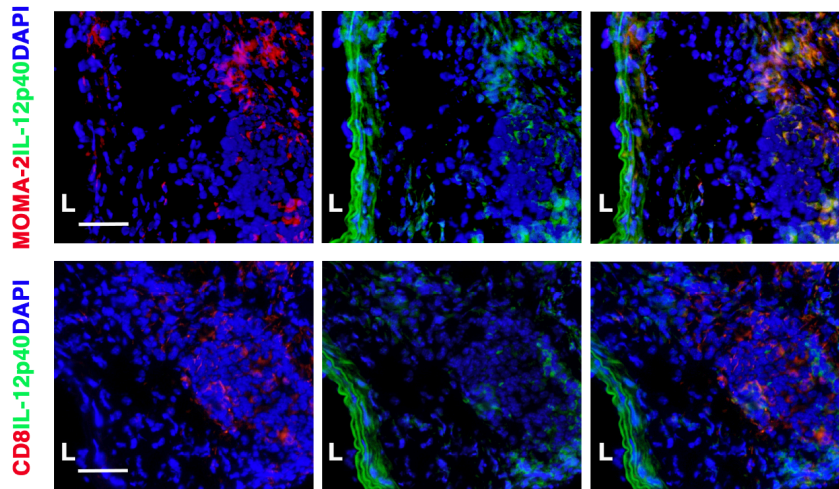
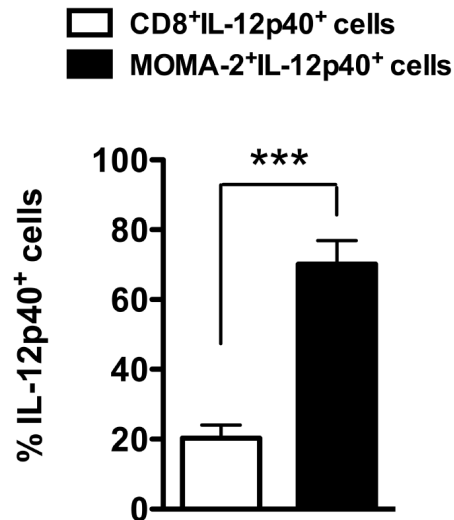
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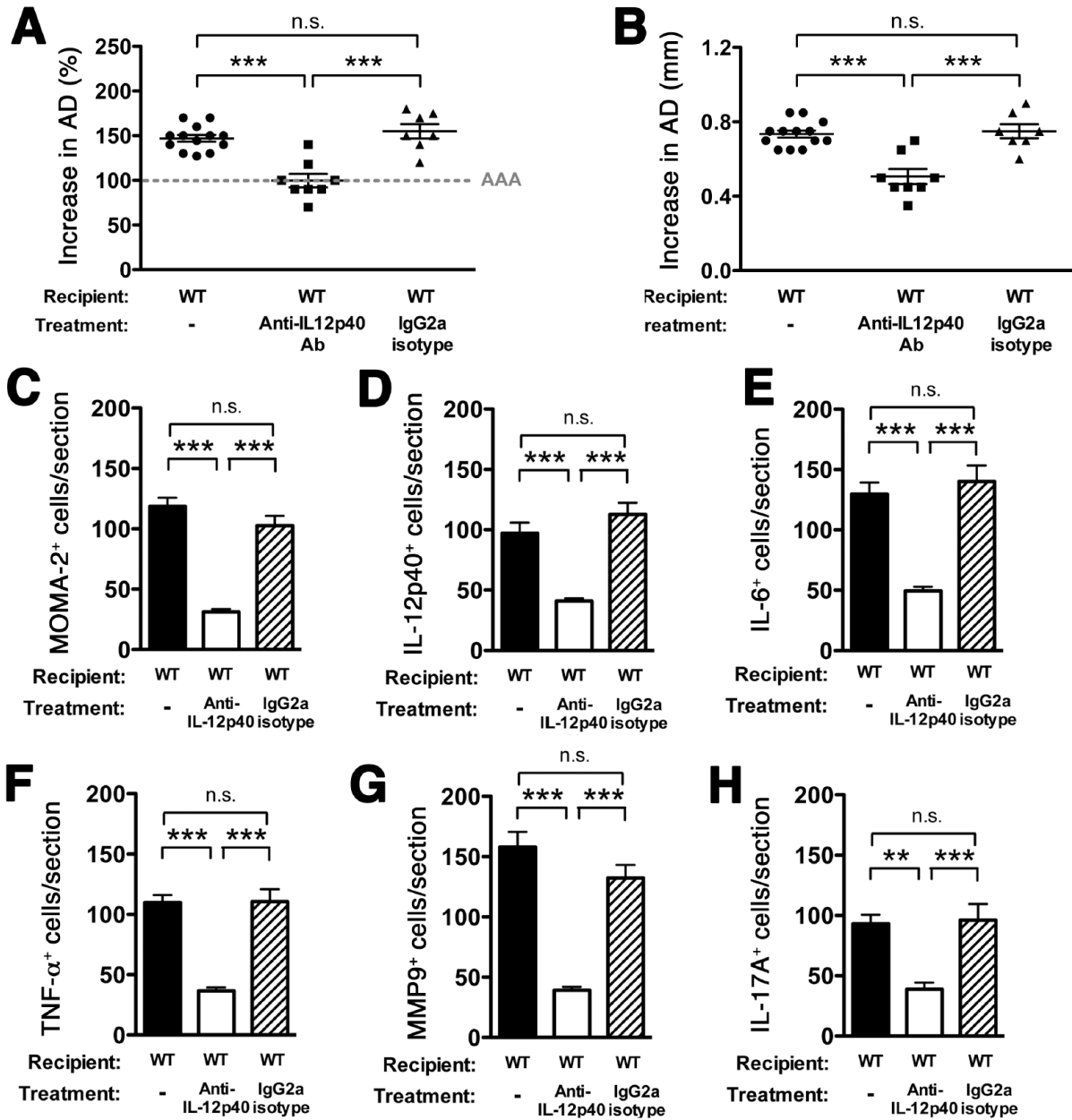
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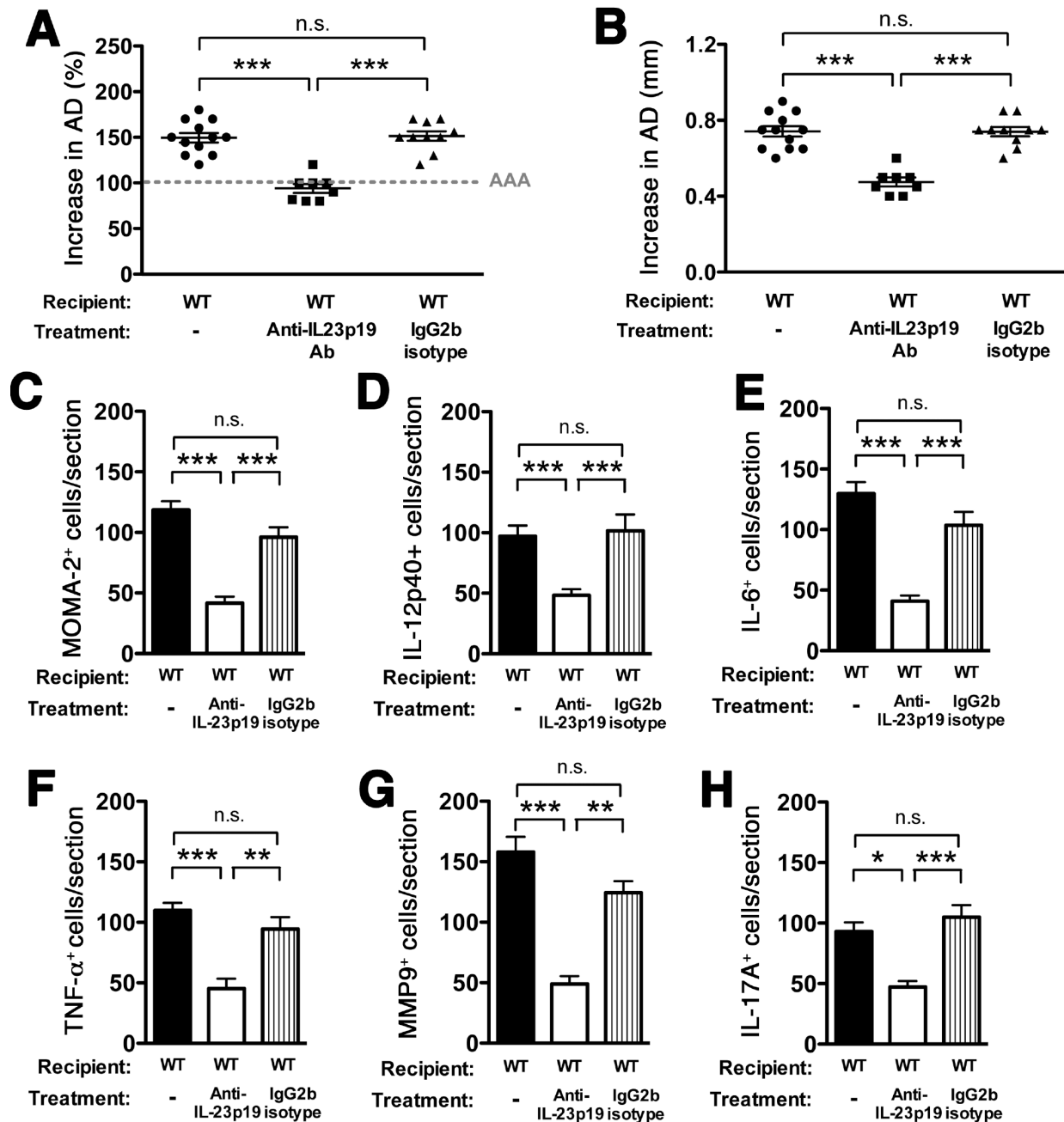
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**A****B**

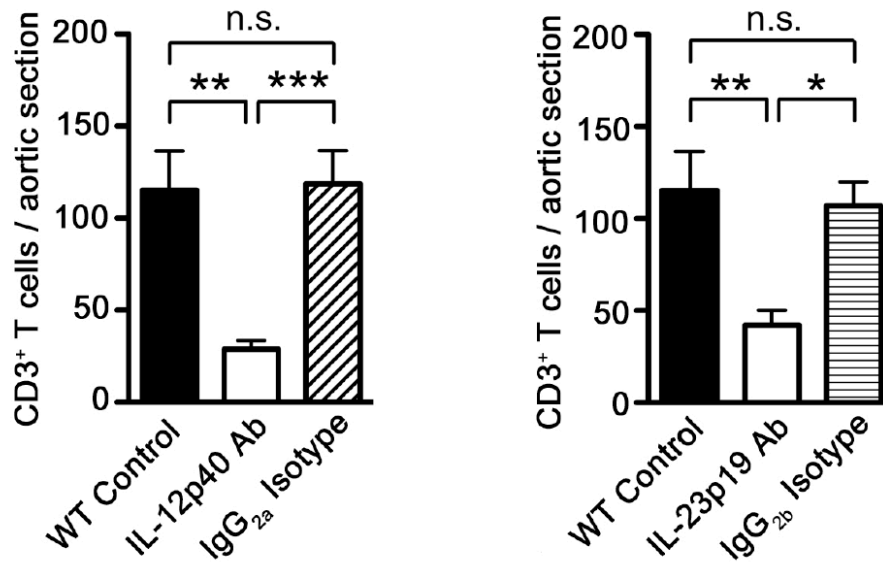
**Figure S1.** Macrophages represent the main source of IL-12p40. **(A)** Aortic tissue obtained from WT mice on day 14-post elastase perfusion were stained for IL-12p40 (green) in MOMA-2+ (red, upper row) or CD8+ cells (red, lower row). Scale bar = 50  $\mu$ m. L = Lumen. DAPI (blue) stained nuclei. **(B)** Percent of MOMA-2+IL-12p40+ vs CD8+IL-12p40+ cells were calculated from 3-4 nonoverlapping fields per aortic cross-section, 6-9 sections per aorta, n=6-8 aortas. \*\*\*p < 0.001



**Figure S2.** Antagonism of IL-12p40 attenuates AAA development. Mice were perfused with elastase on day 0 and injected with anti-IL-12p40 or isotype control (250ug) on days 3 and 8. AD was assessed on day 14. AAA is expressed as the % increase in AD (**A**) or the change in AD in mm (**B**). Antagonism of IL-12p40 attenuated macrophage expansion (**C**) and the expression of IL12p40, IL-6, and TNF- $\alpha$ , and MMP9 (**D-G**). IL-12p40 antagonism also attenuated the expression of IL-17A (**H**). Values represent mean  $\pm$  SEM,  $n = 7-8$  mice per treatment. \*\* $p < 0.01$ , \*\*\* $p < 0.001$



**Figure S3.** Antagonism of IL-23p19 attenuates AAA development. Mice were perfused with elastase on day 0 and injected with anti-IL-23p19 or isotype control (250ug) on days 3 and 8. AD was assessed on day 14. AAA is expressed as the % increase in AD (**A**) or the change in AD in mm (**B**). Antagonism of IL-23p19 attenuated macrophage expansion (**C**) and the expression of IL12p40, IL-6, TNF- $\alpha$ , and MMP9 and IL-17A expression (**D-H**). Values represent mean  $\pm$  SEM,  $n = 8-10$  mice per treatment. \*\* $p < 0.01$ , \*\*\* $p < 0.001$



**Figure S4.** Antagonism of IL-12p40 and IL-23p19 suppresses T cell proliferation. Mice were perfused with elastase on day 0 and injected with anti-IL-12p40 or IL-23p19 or isotype control (250ug) on days 3 and 8. CD3<sup>+</sup> T cells were enumerated on day 14. Values represent mean  $\pm$  SEM, 6-9 sections per aorta, n=6-8 aortas. \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001