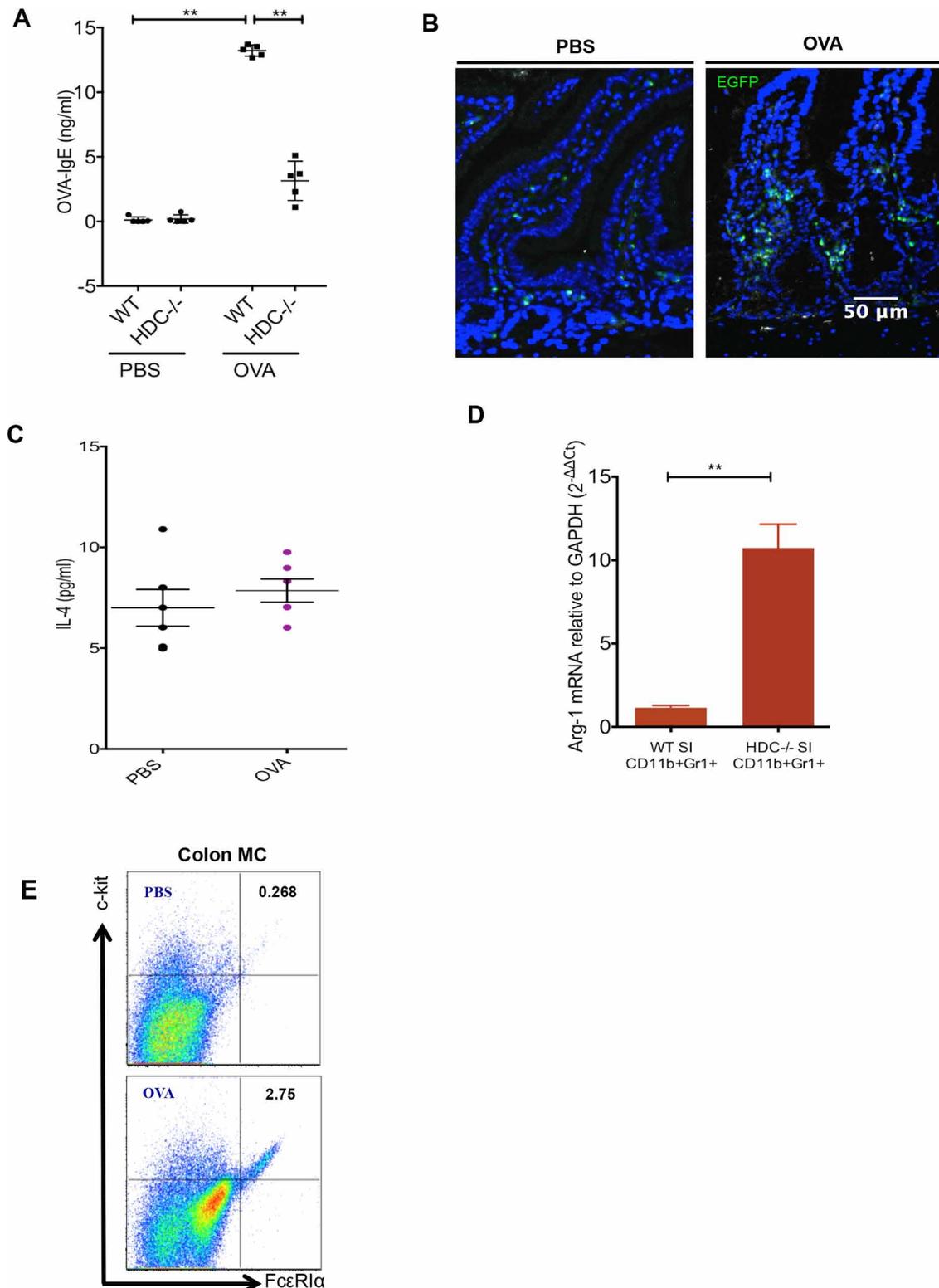
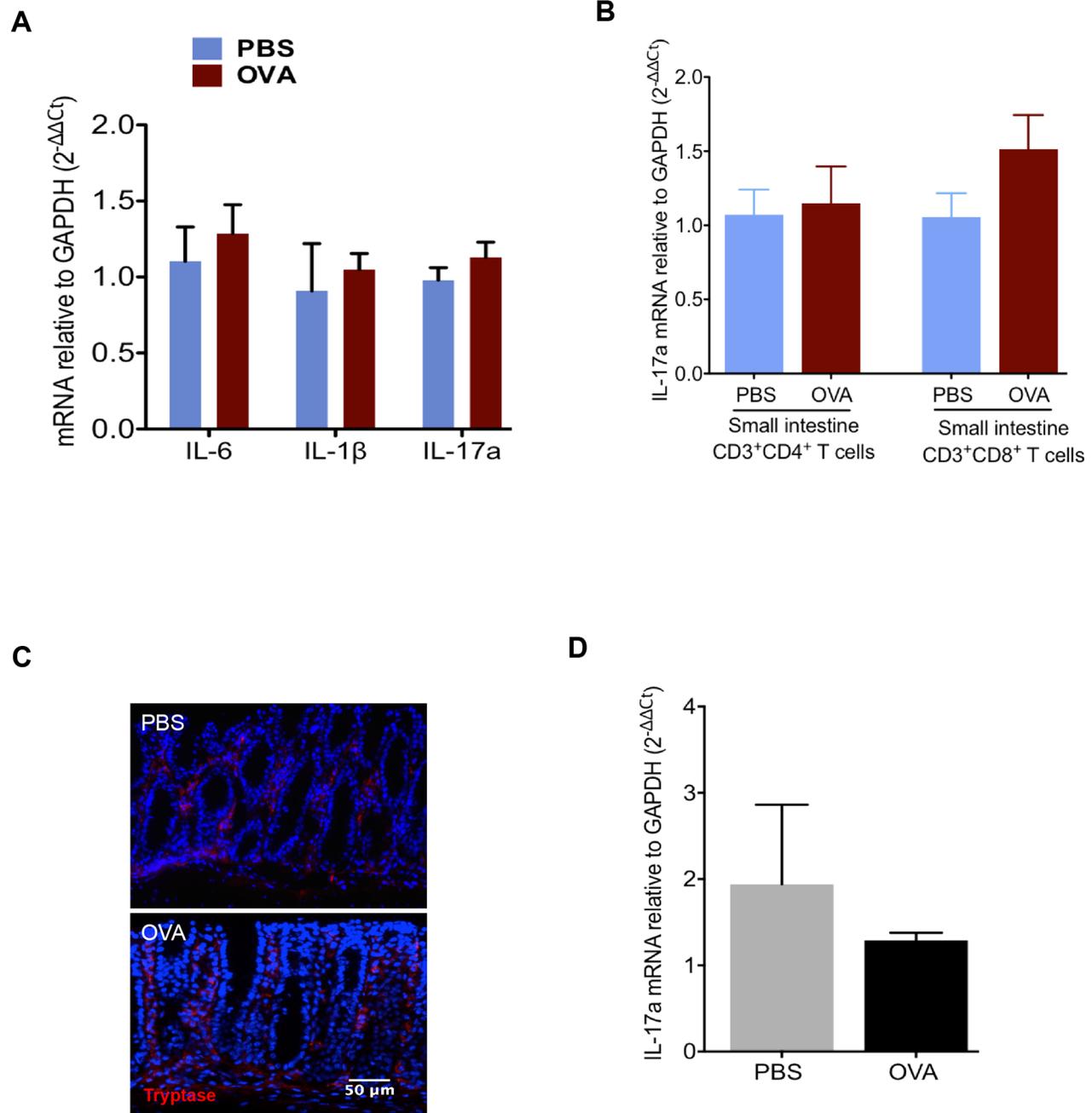


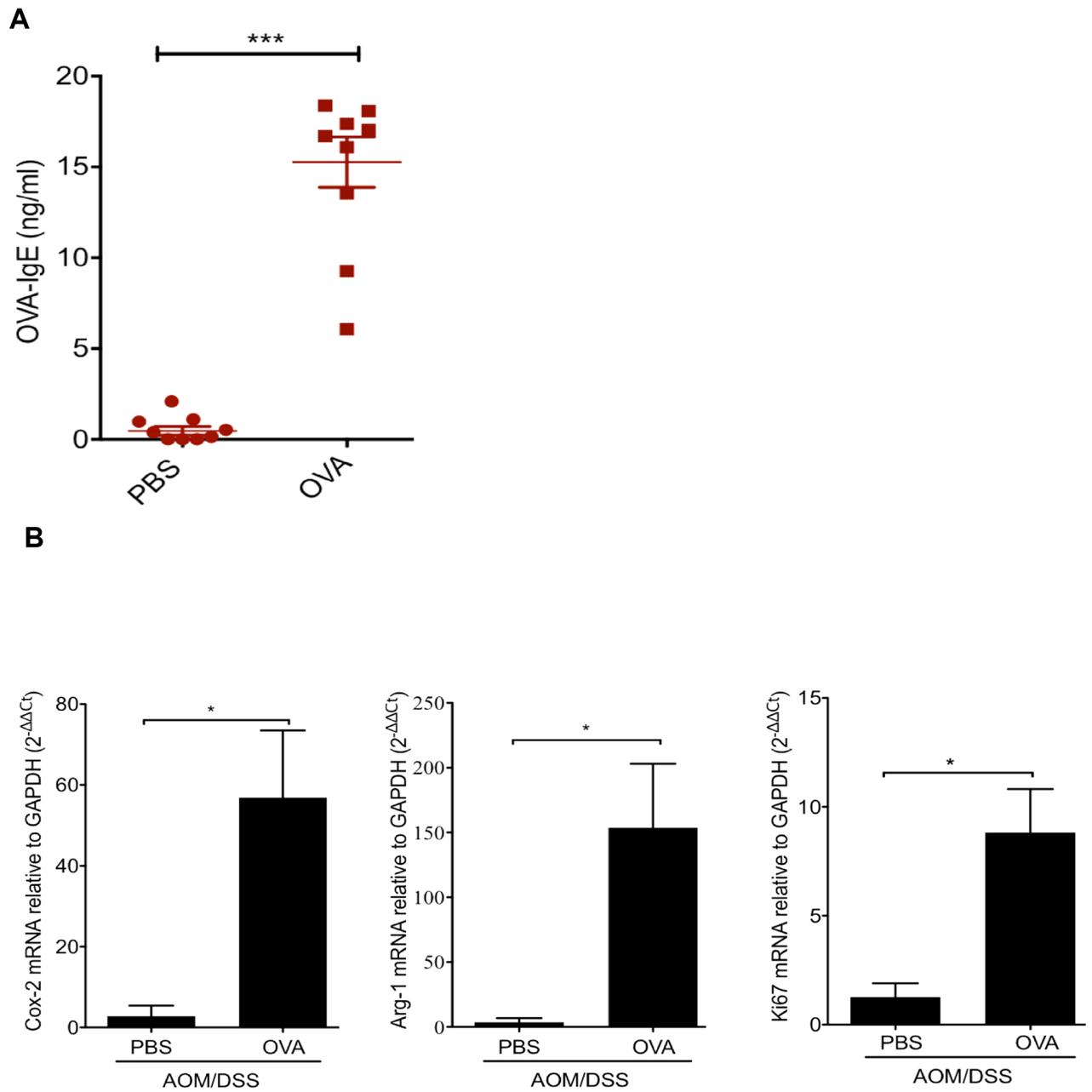
SUPPLEMENTARY FIGURES AND TABLE



Supplementary Figure S1: Accumulation of MCs and Arg-1 hi HDC-expressed myeloid cells in HDC^{-/-} OVA intestinal allergy. **A.** Serum OVA IgE levels in HDC^{-/-} and WT mice. **B.** Accumulation of HDC⁺ cells in OVA treated HDC^{-/-} mice small intestine. **C.** No elevation of serum IL-4 in HDC^{-/-} OVA allergy mice compared to PBS controls. **D.** OVA allergy HDC^{-/-} mice intestinal CD11b⁺Gr1⁺ cells express higher Arg-1 gene compared to WT controls. **E.** Increase of colon MCs in HDC^{-/-} OVA allergy.



Supplementary Figure S2: MC is the IL-17 producing cell in *HDC*^{-/-} OVA allergy mice intestine. **A.** Expression of IL-6, IL-1 β , and IL-17 in WT colon MCs, compared PBS and OVA treatment. **B.** IL-17a mRNA levels in sorted CD3⁺CD4⁺ or CD3⁺CD8⁺ from PBS or OVA treated *HDC*^{-/-} mice small colon. **C.** Tryptase staining on colon frozen sections from WT mice treated with PBS or OVA. **D.** IL-17a mRNA expression in WT colon MCs, compared OVA and PBS treatments.



Supplementary Figure S3: MC-IL-17 augments MDSC immunosuppression in CRC. **A.** Presence of OVA-IgE in HDC^{-/-} OVA allergy AOM/DSS tumor-bearing mice sera. **B.** Cox-2, Arg-1, and Ki67 expression in OVA allergy AOM/DSS tumor-bearing mice colon MDSCs.

Supplementary Table S1: Sequences of SYBR green qRT-PCR primers used in this study

Gene	Forward	Reverse
IL-1 β	CGGACCCCAAAAGATGAAG	TTCTCCACAGCCACAATGAG
IL-23a	CCCGTATCCAGTGTGAAGATG	GGCTCCCCTTTGAAGATGTC
IL-6	CAAAGCCAGAGTCCTTCAGAG	GTCCTTAGCCACTCCTTCTG
INF- γ	GGCCATCAGCAACATAAGCGT	TGGGTTGTTGACCTCAAACCTTGGC
IL-12p40	ACCTGTGACACGCCTGAAGAAGAT	TCTTGTGGAGCAGCAGATGTGAGT
TNF- α	TTCATGCACCACCATCAAGGACT	ACCACTCTCCCTTTGCAGAACTCA
IL-4	AGCCATATCCACGGATGCGACAAA	AATATGCGAAGCACCTTGGAAGCC
IL-5	TGCATCAGGGTCTCAAGTATTC	GGATGCTAAGGTTGGGTATGT
IL-10	AGCCGGAAGACAATAACTG	GGAGTCGGTTAGCAGTATGTTG
IL-13	CAGCCCTCAGCCATGAAATA	CTTGAGTGTAACAGGCCATTCT
TGF- β	GTGCGGCAGCTGTA-CATTGACTTT	TGTAAGTGGTAACCGCTCAGGTGT
Cox-2	AGTGTGCGACATACTCAAGCAGGA	TTGAAGTGGTAACCGCTCAGGTGT
Arg-1	AAGAATGGAAGAGTCAGTGTGG	GGGAGTGTTGATGTCAGTGTG
GAPDH	CTTTGTCAAGCTCATTTCCTGG	TCTTGCTCAGTGTCTTGC