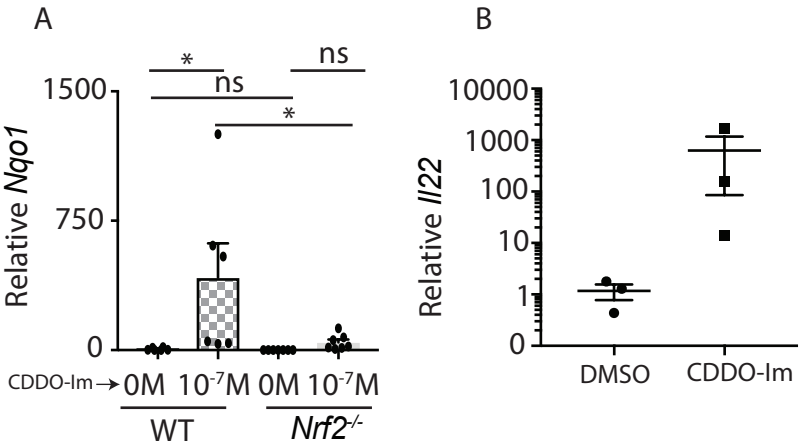
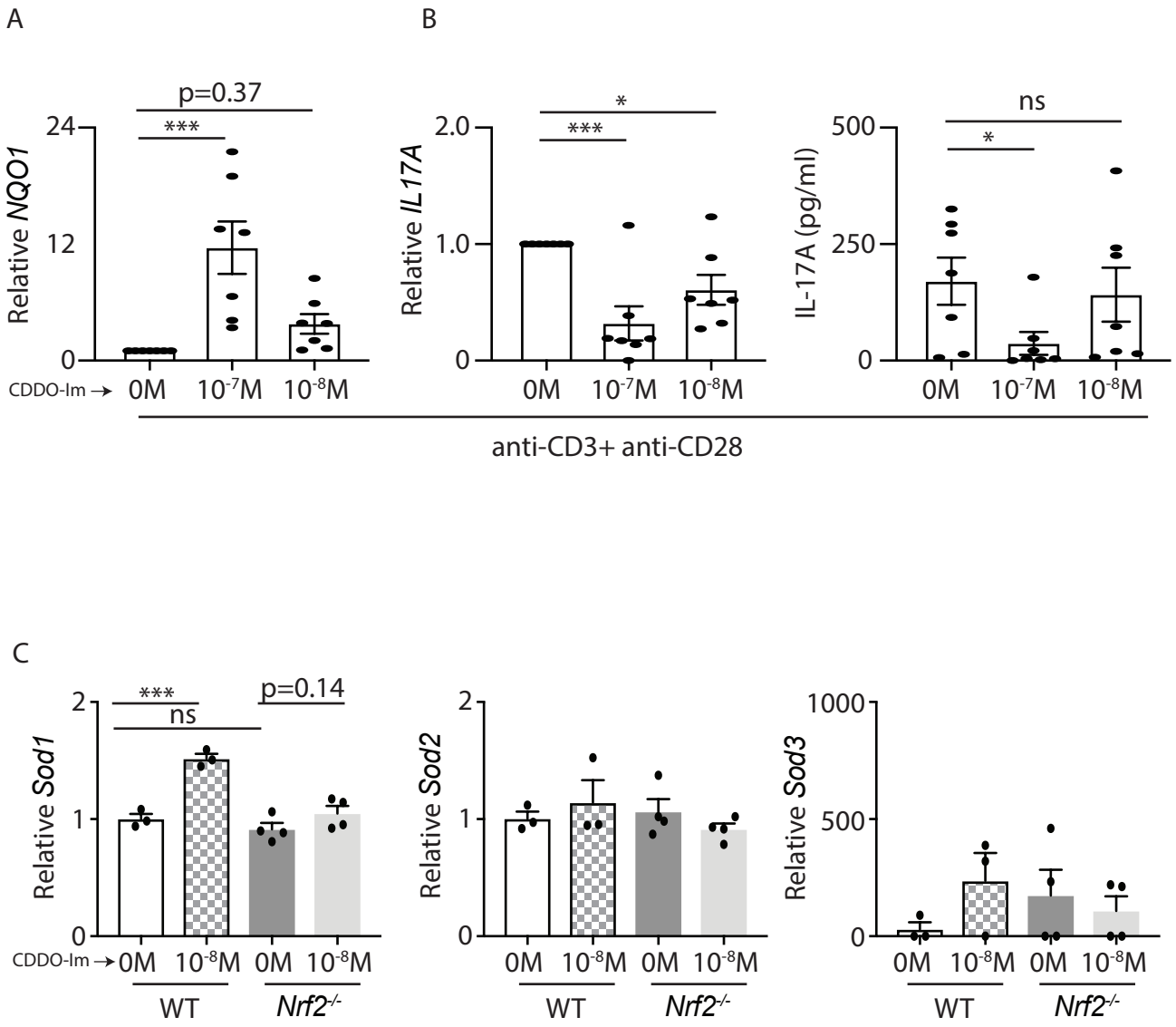


Supplemental Figure 1: CDDO-Im induced *Nqo1* and *Il22*.

A) Naive $CD4^+$ T cells from WT and $Nrf2^{-/-}$ mice were cultured under Th17 polarization conditions and treated with CDDO-Im or DMSO. Real-time PCR data revealed the *Nqo1* expression in differentiated Th17 cells on day 4.
B) C57BL/6 mice were infected with *Citrobacter rodentium*. Distal colon was harvested and *Il22* expression was examined by Real-time PCR.

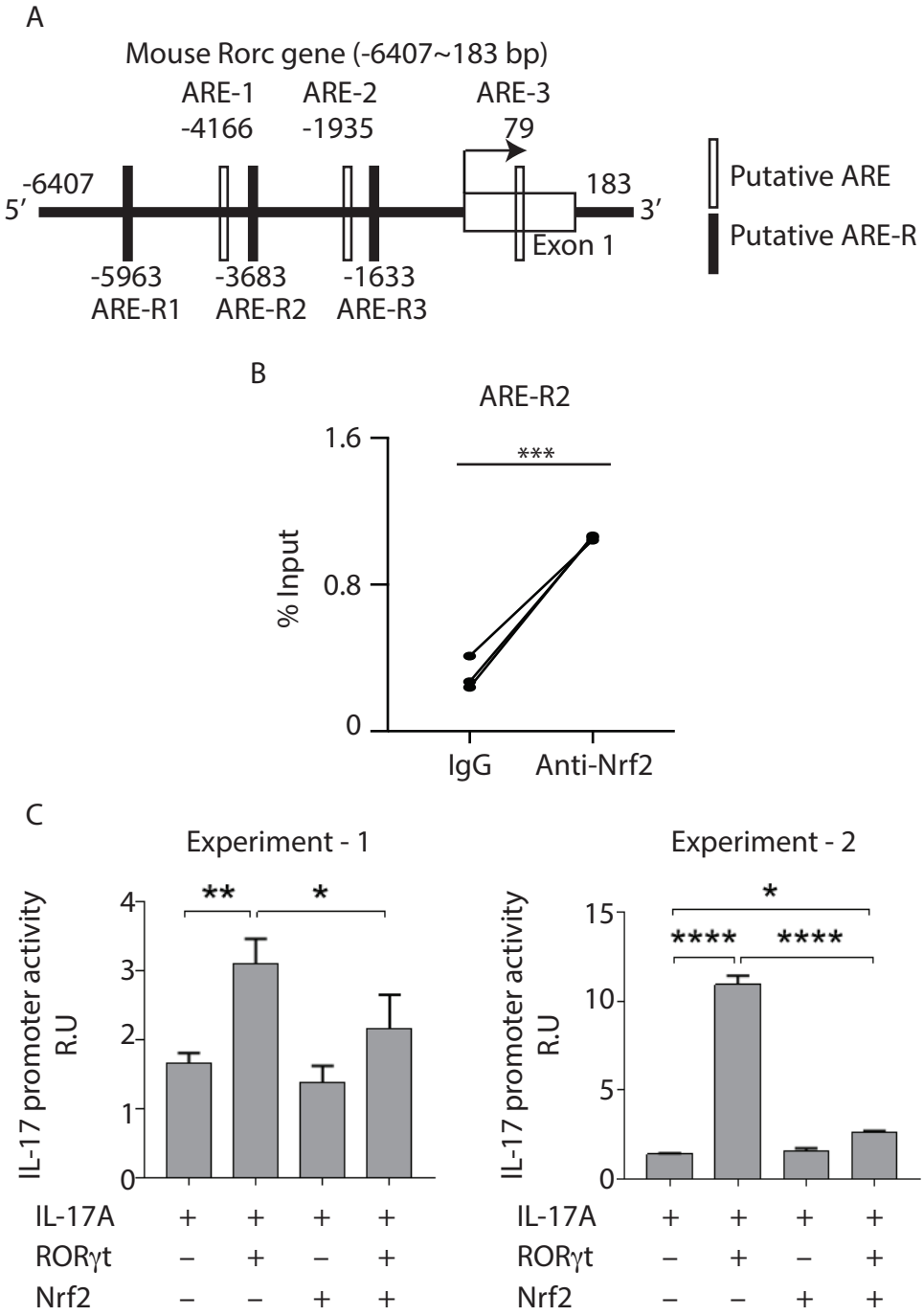
Data shown in S1A were generated from 2 independent experiments. *P ≤ 0.05 (One-way ANOVA).



Supplemental Figure 2: Nrf2 inhibits the IL-17A production of RRMS PBMCs.

A and B) PBMCs of MS patients were stimulated with anti-CD3 and anti-CD28 in presence of CDDO-Im or vehicle control. qPCR data showed that CDDO-Im regulated *NQO1* and *IL17A* expression (B left panel). After 5 days of culture, cell culture medium was used to analyze IL-17A production by ELISA (B right panel).
C) Naïve $CD4^+$ T cells from C57BL/6 (WT) and Nrf2 mice were polarized to Th17 cells in presence of CDDO-Im or vehicle control. After 24 hours, cells were processed for qPCR to examine the expression of *Sod1*, *Sod2* and *Sod3*.

Data shown in S2A and S2B were generated from 2 independent experiments. *P ≤ 0.05; ***P ≤ 0.001 (One-way ANOVA).



Supplemental Figure 3: Nrf2 binds to ARE-R2 of *Rorc* gene and inhibits RORγt-induced IL-17A promoter activity

A) Schematic diagram shows putative ARE binding motifs in mouse Rorc gene.
B) Naïve CD4$^+$ T cells isolated from the spleens and lymph nodes of C57BL/6 mice were cultured under the Th17 differentiation condition for 4 days. Cells were harvested and processed for CHIP with anti-Nrf2 antibody. The Nrf2-binding DNA was utilized for qPCR analysis to examine the interaction between the ARE-R2 motif of *Rorc* gene and Nrf2.
C) HEK293 cells were transiently transfected with IL-17A luciferase reporter vector and various concentrations of Nrf2 plasmid. After 48 hours, the luciferase activity was quantified by Dual-Glo Luciferase Assay system.

Data shown in S3B is a representative graph from 2 independent experiments. Data shown in S3D were generated from 2 independent experiments (set up in triplicate). Data presented as mean ± SEM on relevant graphs. *P ≤ 0.05; **P ≤ 0.01; ****P ≤ 0.0001. (Paired student t test and One-way ANOVA)

Supplemental Table 1: Primer sequences for CHIP-qPCR.

Primers	Gene	Forward primer	Reverse primer
ARE-1	*Rorc*	5'-GGGAGGAGCTGTGTTAGGGAGGC-3'	5'-GGCGGAGAGTCACCCTTCCAG -3'
ARE-2	*Rorc*	5'-GCAGAGCCAGGTTTGGTGTTC-3'	5'-ATTTCGGGTTCCTGTCCACTC-3'
ARE-3	*Rorc*	5'-TAAACCCCCCTGCCCAGAAAC-3'	5'-TGCCCCCATTCACTTACTTCT-3'
ARE-R1	*Rorc*	5'-GGTAAAAGGTAATTGAGGCAGAC-3'	5'-AGTGTAGGGGTGTAGGGTGAC-3'
ARE-R2	*Rorc*	5'-GAGTGTCCCCATGCAAGACTG-3'	5'-AGAGAGGGTGTGGCTTCATGC-3'
ARE-R3	*Rorc*	5'-TATTCCCCTACAAAATGTGCCC-3'	5'-AACCAATGAGTATGTGATGGAAGAG-3'
ARE	*Ahr*	5'-TTTTGAGGCTGGAAAACAGGTACT-3'	5'-ACGTGATGACGCAGGACGTA-3'