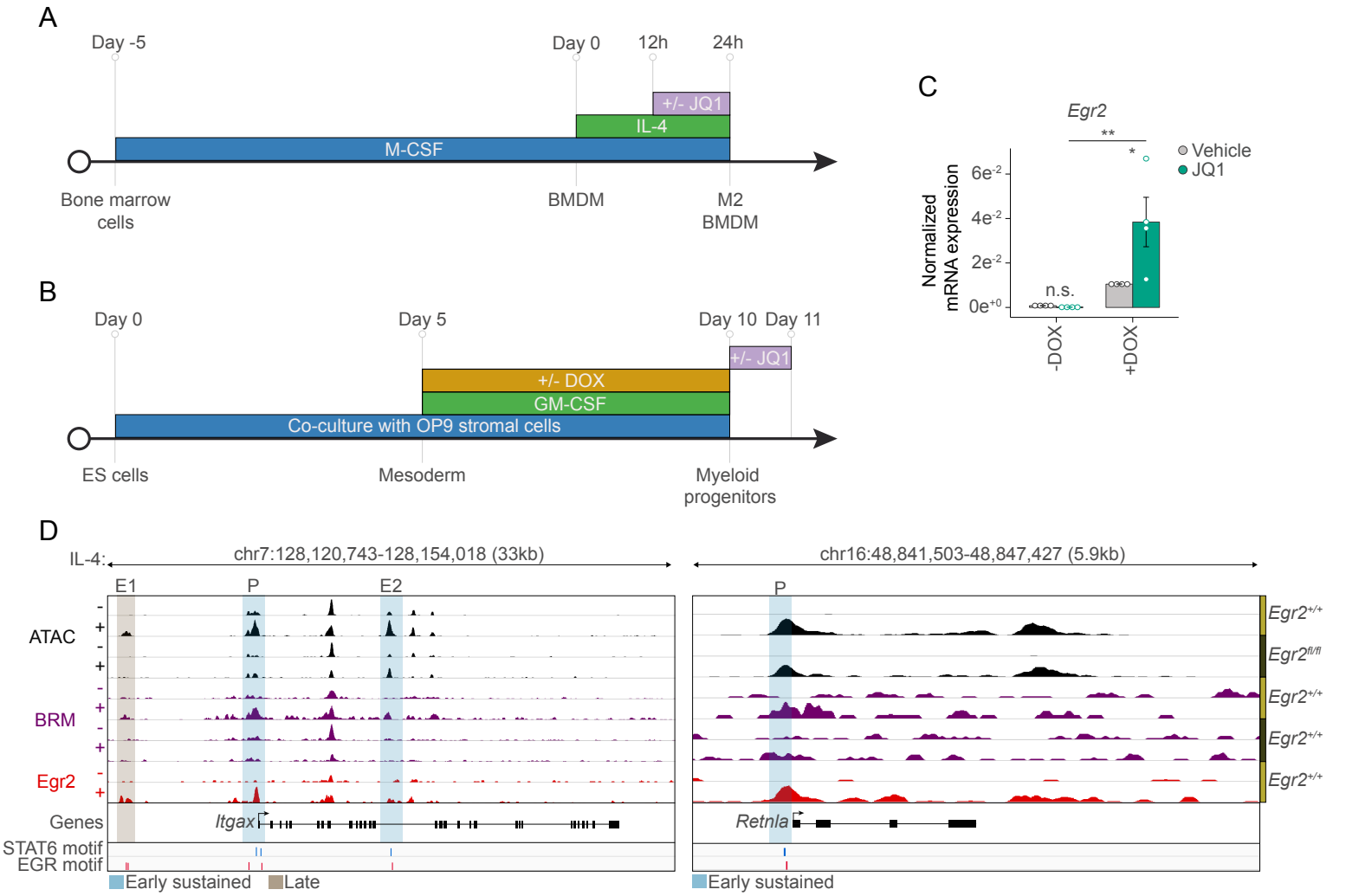
Supplemental Fig. S5



Supplemental Fig. S5. Experimental systems to study the requirement of BRD4 in EGR2 mediated transcription. Related to Fig. 5.

A, Experimental scheme for the gene expression experiments using JQ1 (BRD4 inhibitor) in mouse bone marrow-derived macrophages (BMDMs).

B, Experimental scheme for the gene expression experiments using JQ1 (BRD4 inhibitor) in the EGR2 gain of function model in embryonic stem cell-derived myeloid cells.

C, RT-qPCR measurements of *Egr2* mRNA in the myeloid gain of function experimental setup, using the JQ1 inhibitor. Experiments were performed in the absence (-) and presence (+) of doxycycline (DOX). Vehicle indicates solvent control for the JQ1 treatment. The level of mRNA is normalized to the expression of *Ppia*. Experiments were repeated four times, and significant changes between groups were calculated by, two-way analysis of variance (ANOVA).

D, Genome browser view on the *Itgax* and *Retnla* gene loci. ATAC-seq and ChIP-seq results for EGR2 in wild type macrophages ($Egr2^{+/+}$) and BRM in both $Egr2^{+/+}$ and $Egr2^{fl/fl}$ macrophages are shown. Polarized (24 hours of IL-4 treatment) and control conditions are depicted for each track. Regulatory regions with Early sustained and Late genome activity patterns are highlighted and the motifs of STAT6 and EGR are indicated as well.