

## **Myeloid Trem2 dynamically regulates the induction and resolution of hepatic ischemia-reperfusion injury inflammation**

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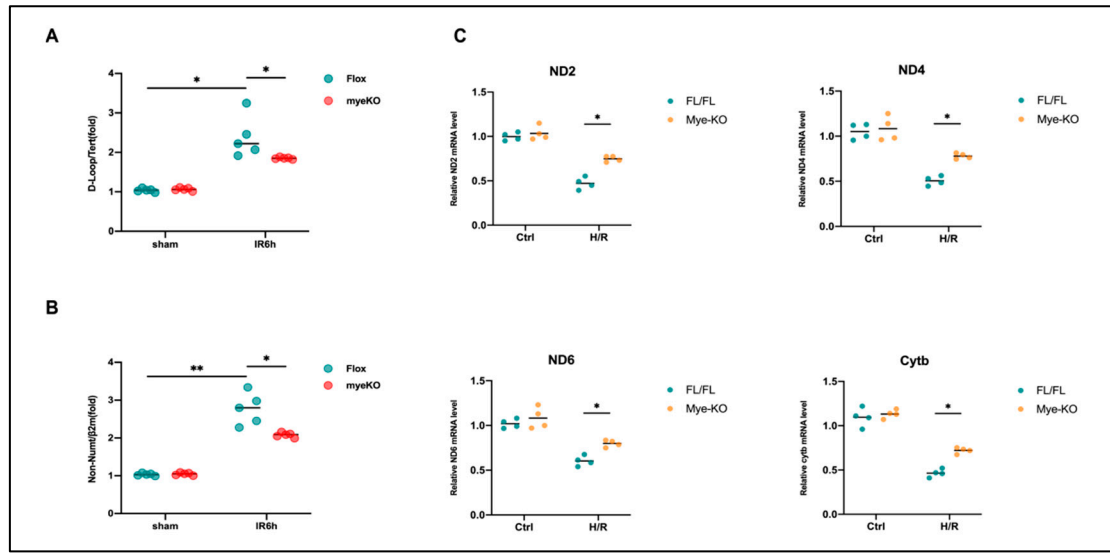
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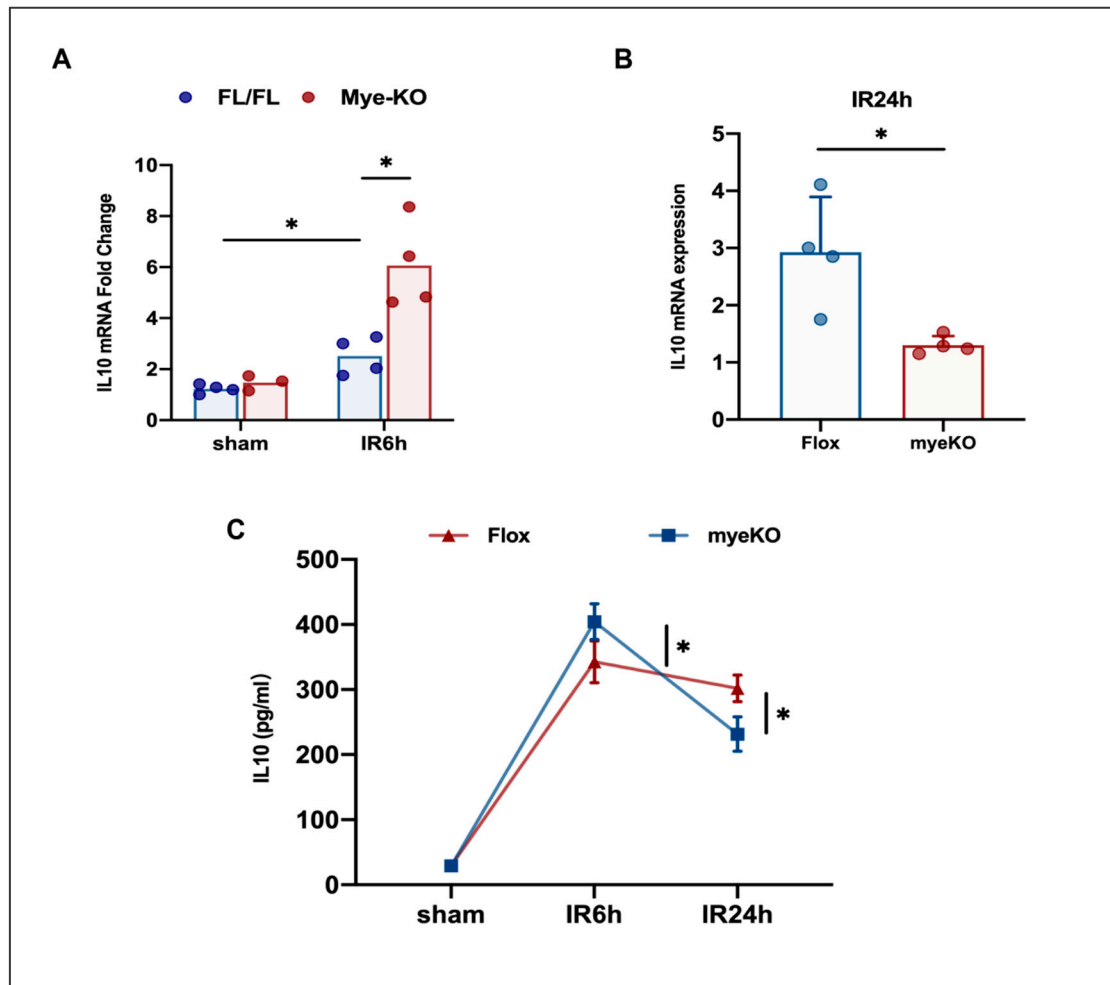
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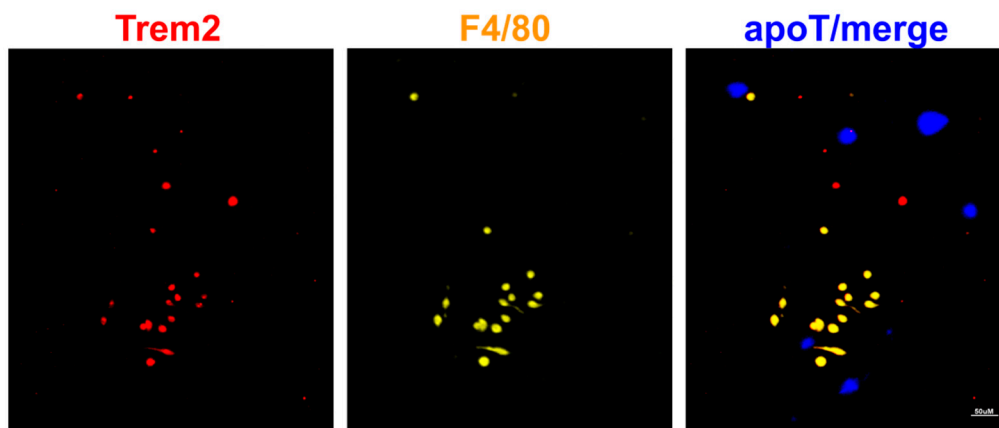
***Figure S1: Absence of Trem2 alleviates accumulation of mtDNA in BMDMs in response to oxidative stress.***

(A) The mtDNA content detection was shown as the ratio of D-loop mtDNA to Tert nuclear (n) DNA or (B) mtDNA that is not inserted into nuclear DNA (non-NUMT) to B2m nDNA (n = 4-5 / group, \*P < 0.05, \*\* P < 0.01). (C) Detection of H/R-BMDM mitochondria-related genes ND2, ND4, ND6 and cytb by qRT-PCR;



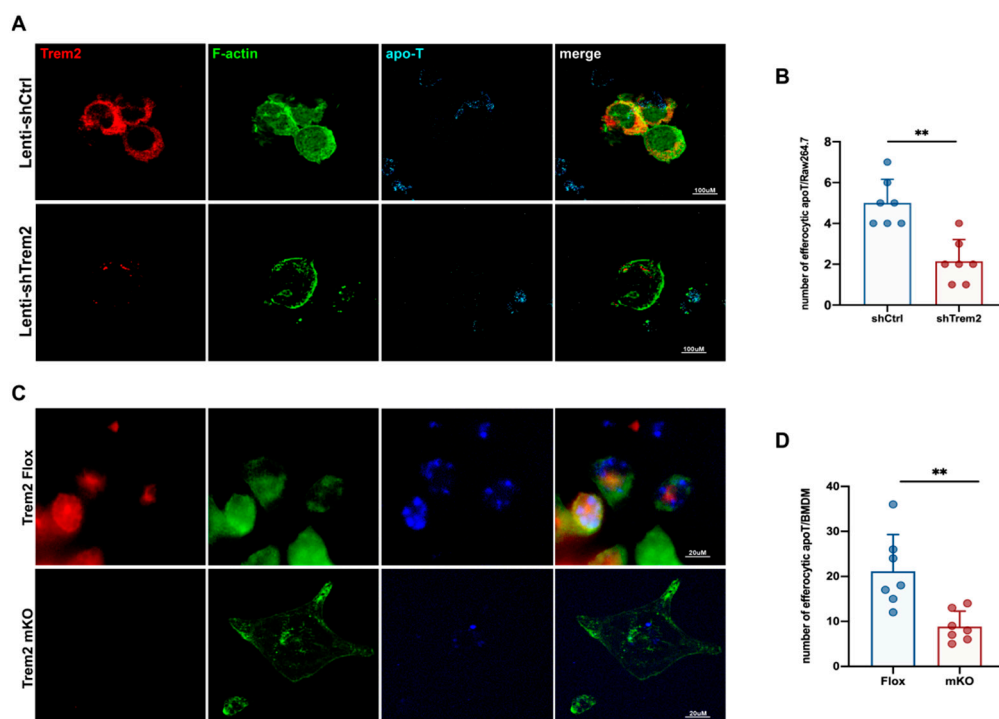
**Figure S2: myeloid TREM2 differentially regulates IL10 at different stages of IR.**

The effect of bone marrow TREM2 on IL10 expression at IR6h (A) and IR24h (B) was detected by qPCR; The IL10 content in the serum of mice at IR6h and IR24h was detected by ELISA (C) (\*  $P < 0.05$ ).



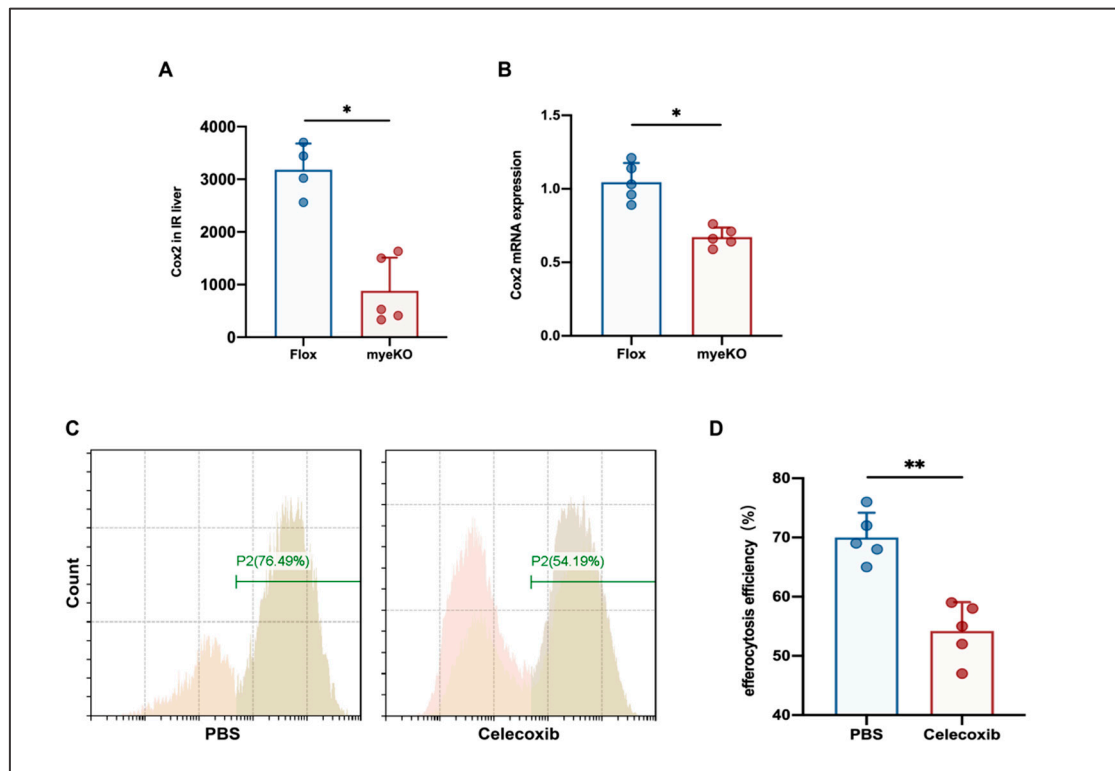
**Figure S3: BMDM co-cultured with apoT at 4°C expressed TREM2.**

The expression of TREM2 on BMDM co-cultured with apoT at 37 ° C or 4 ° C was detected by ICC;



**Figure S4: myeloid TREM2 drives actin remodeling of efferocytotic macrophages.**

The efferocytosis program was started for RAW264.7 infected with shTrem2 or shCtrl1 lentivirus, and then actin remodeling was judged by phalloidin staining (**A**) and the number of apoptotic cells phagocytized by each RAW264.7 was detected (**B**) (\*\* P < 0.01); The efferocytosis program was initiated for BMDM of Trem2<sup>FL/FL</sup> or Trem2<sup>mKO</sup>, respectively, and then actin remodeling was judged by phalloidin staining (**C**) and the number of apoptotic cells phagocytized by each bmdm was detected (**D**) (\*\* P < 0.01)



**Figure S5. myeloid TREM2 determines the activation of macrophages COX2 that perform efferocytosis.**

Abundance of COX2 (**A**) or mRNA transcription (**B**) the liver 24 h after IR was analyzed by mass spectrometry or qPCR (\* P < 0.05); When BMDM of Trem2<sup>FL/FL</sup> or Trem2<sup>mKO</sup> started efferocytosis program, the efficiency of efferocytosis was detected after adding celecoxib (**C** and **D**) (\*\* P < 0.01).