

## Supplemental Figures

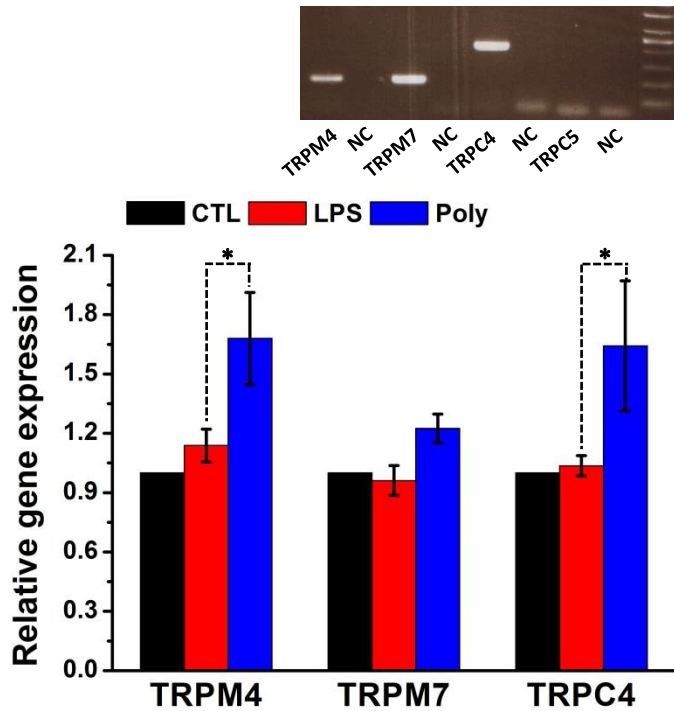
### **TLR3-/4-Priming Differentially Promote Ca<sup>2+</sup> Signaling and Cytokine Expression and Ca<sup>2+</sup>-Dependently Augment Cytokine Release in hMSCs**

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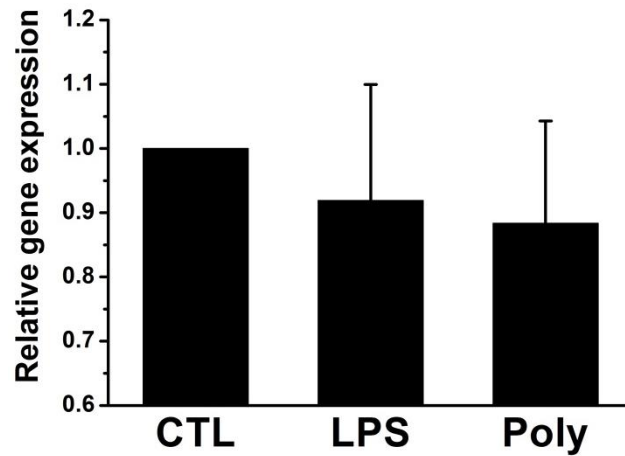
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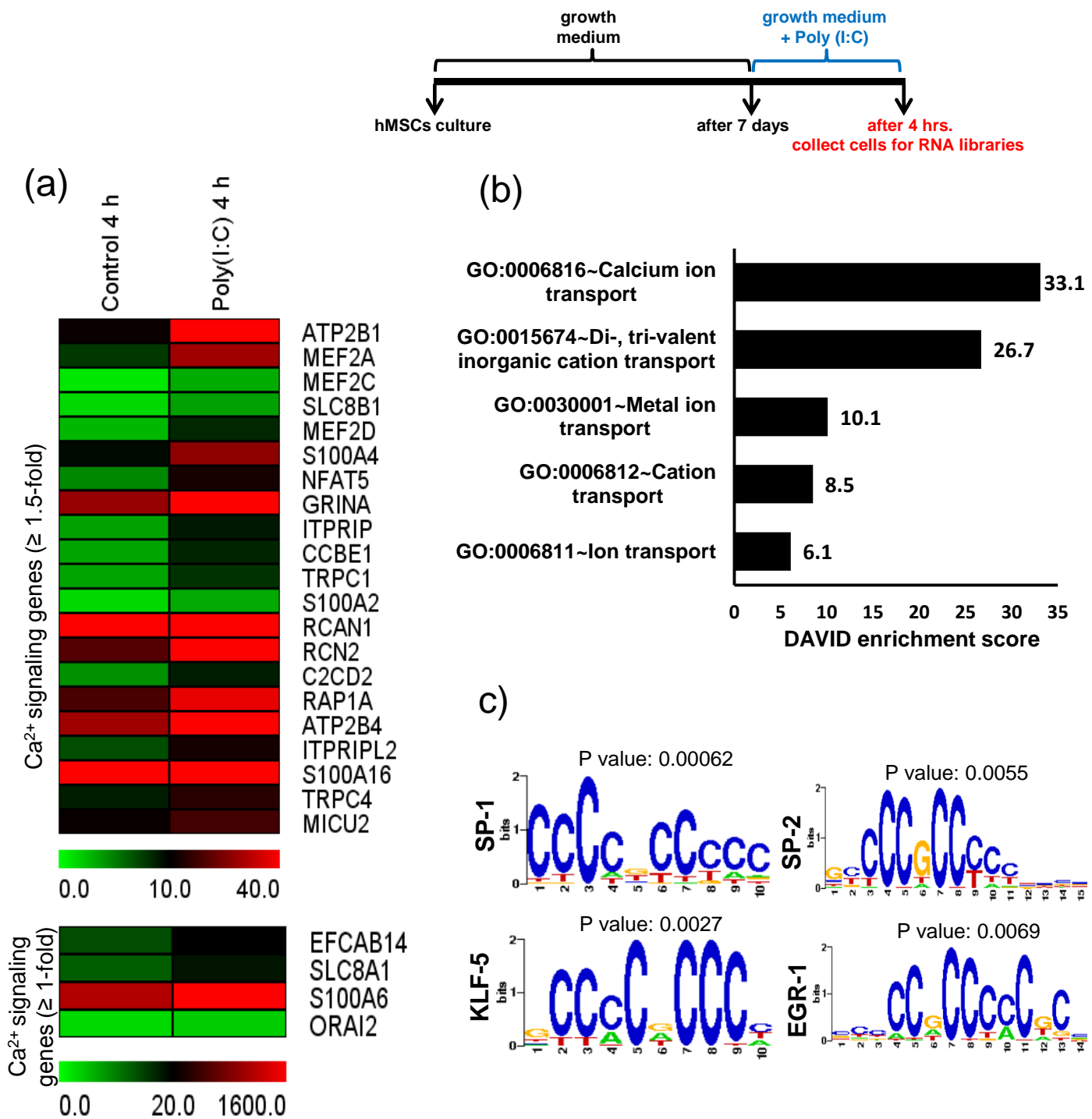
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**Figure S1.** Representative RT-PCR blot illustrating mRNA expression of TRPM4, TRPM7 and TRPC4 in control hMSCs. NC denotes negative control with distilled water. Real time RT-PCR quantification showing relative mRNA expression levels of TRPM4, TRPM7 and TRPC4 in control (CTL; n = 5), LPS- (n = 5) and poly (I:C)-treated hMSCs (n = 5).

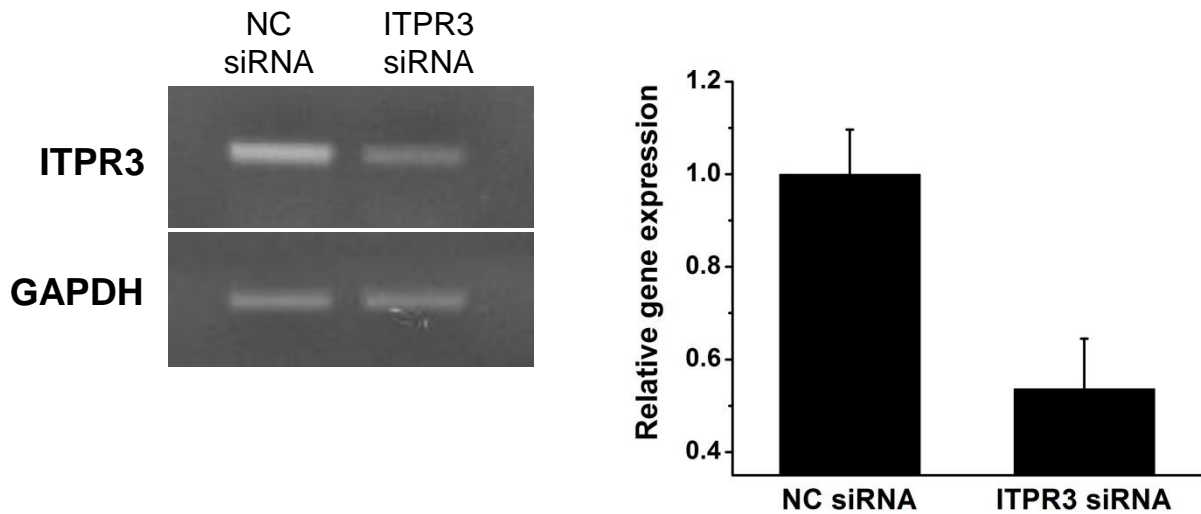


**Figure S2.** Real time RT-PCR quantification showing relative mRNA expression levels of MaxiK in control (CTL; n = 3), LPS- (n = 3) and poly (I:C)-treated hMSCs (n = 3).



**Figure S3. Transcriptomic analysis of the Poly (I:C)-stimulated Ca<sup>2+</sup> signaling gene expression in hMSCs**

(a) A heat map represents differential expression of Ca<sup>2+</sup> signaling gene expression at 4 h after Poly (I:C) stimulation in hMSCs. (b) Gene ontology analysis of the functional annotations that were associated with Ca<sup>2+</sup> signaling gene expression at 4 h after Poly (I:C) stimulation in hMSCs. (c) Patterns of transcription factor motif enrichments within the promoters of the Ca<sup>2+</sup> signaling genes in Poly (I:C)-stimulated hMSCs.



**Figure S4.** Representative RT-PCR blot and real time RT-PCR quantification showing relative mRNA expression levels of ITPR3 in scrambled siRNA control (NC, n = 2) and ITPR3 siRNA treated hMSCs for 48 hours (n = 2).