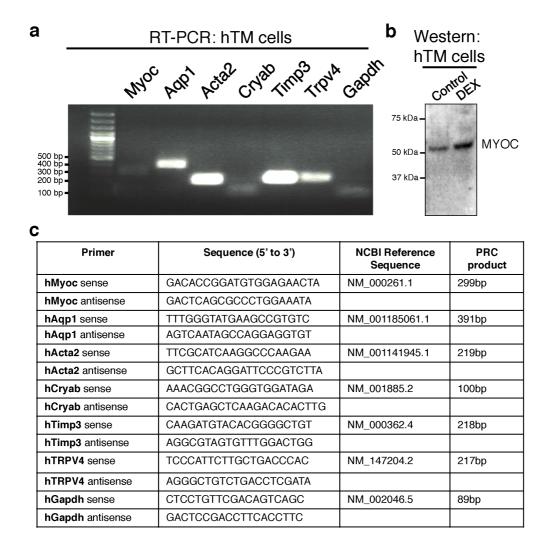
## **Supplementary Information**

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**Supplementary Figure 1.** Validation of cultured TM cells. (*A*) Expression of transcripts for TM-specific marker genes in cultured hTM cells. Expression of mRNAs coding for *Myoc*, *Aqp1*, *Acta2*, *Timp3*, *Trpv4* and *Gapdh* was at the expected amplicon sizes. (*B*) Western blot

with an anti-myocilin antibody. Exposure of cell cultures to 100 nM DEX for 2 days upregulated myocilin expression in hTM cells. (*C*) PCR primer information.

**Supplementary Video 1.** Simultaneous imaging of GSK101-induced mApple:actin remodeling and  $[Ca^{2+}]_i$  dynamics in a representative time-lapse of a Fura-2 loaded hTM cells.