



Supplementary Figure 8. (a-b) GTP_{γ}S-induced capacitance changes in Trpm4^{+/+} and Trpm4^{-/-} BMMCs. (a) Representative traces for membrane capacitance changes of Trpm4^{+/+} and Trpm4^{-/-} BMMCs after break-in with 100μM GTPγS containing pipette solution. (b) Averaged ratio of membrane capacitance 10 min after break-in and at the start of the recording (n=6 per genotype, P > 0.05).(c-e) Stimulation of Trpm4^{+/+} and Trpm4^{-/-} BMMCs with LPS. BMMCs express TLR4 which serves as a receptor for bacterially derived LPS⁴. (c) Averaged $[Ca^{2+}]_{cvt}$ during stimulation of *Trpm4*^{+/+} (*n*=119) and Trpm4^{-/-} (n=138) BMMCs with 100ng/ml and 3µg/ml LPS (E. coli 055:B5, identical results were obtained with E. coli 0111:B4 LPS) in standard extracellular medium. Identical results were obtained when $3\mu g/ml$ LPS was applied first. (d) Averaged $[Ca^{2+}]_{cvt}$ during stimulation of BMMCs with 100ng/ml DNP-HSA (DNP; $Trpm4^{++}$ n=111, $Trpm4^{--}$ n=142) and $3\mu g/ml LPS + 100 ng/ml DNP-HSA (LPS+DNP;$ $Trpm4^{+/+}$ n=169, $Trpm4^{-/-}$ n=174). Arrow indicates addition of stimuli. (e) TNF release from $Trpm4^{+/+}$ and Trpm4^{-/-} BMMCs prior to (bckgr) and after stimulation with 3µg/ml LPS (LPS), 100ng/ml DNP-HSA (DNP) or 3µg/ml LPS + 100ng/ml DNP-HSA (LPS+DNP) for 3 h. Mean values are obtained from 4 independent experiments, n values represents number of cells, P < 0.01. (f) Mean difference in TNF released from $Trpm4^{+/+}$ and $Trpm4^{-/-}$ BMMCs stimulated by LPS+DNP and DNP alone, as in panel **c**. Mean values are obtained from 4 independent experiments; P > 0.1.