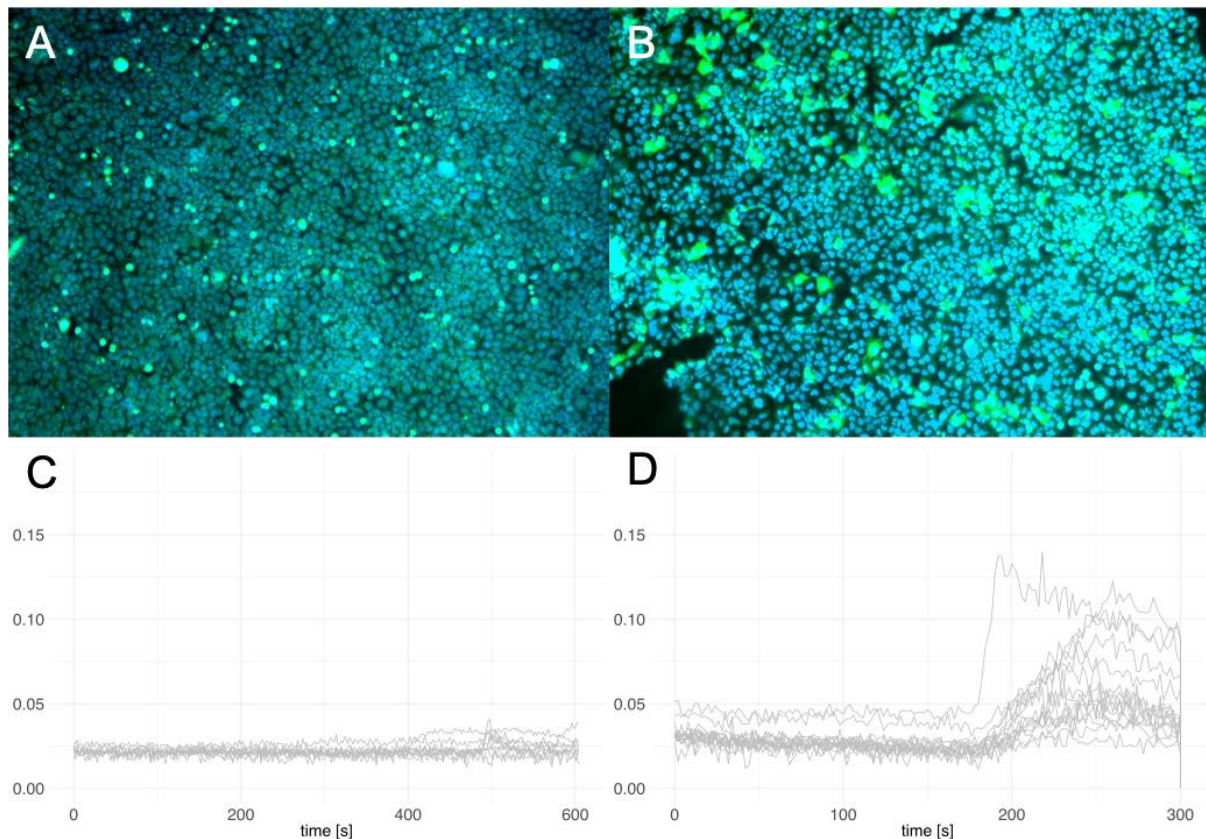


Supplementary information



Supplementary Figure 1: TRPM8 antibody validation control. Immunofluorescence staining with A) untransfected and B) hTRPM8-transfected HEK-cells. Antibody sheep-transient receptor potential M8 antibody (TRPM8, OST00038W, Thermo Fisher, USA) was used as primary antibody, as secondary antibody (green staining) Alexa-Fluor 488-conjugated donkey anti-sheep IgG (A11015, Thermo Fisher, USA) was used. Nuclei were stained with DAPI (blue staining). To verify TRPM8 activity after transfection, cells were incubated with menthol (150 μ M for 30 – 60s) in calcium imaging experiments with C) untransfected and D) hTRPM8-transfected HEK-cells. In brief, cells were loaded with 5 μ M Fura-2-AM-ester (Biotium) and incubated for 30 min at 37 °C. Baseline measurements were performed in external solution at a flow rate of 1–2 mL/min. Calcium-free solutions were generated by removal of CaCl_2 and addition of EGTA (2 mM) and they were osmotically controlled by increasing NaCl concentrations to 150 mM. Stock solution of menthol was diluted in external solution to achieve its final concentration.