



Supplementary Figure S1. A) The gene encoding the TRPV1 ion channel is located on chromosome 17, indicated by a red box. This channel is expressed as multiple isoforms, with their respective Ensembl transcript IDs listed on the right. The isoform that includes the 33-base-pair exon (ENST00000425167) is marked with red arrows. B) GTEx analysis showing RNA-seq reads specifically mapping to exon 6 across various tissues. The genomic sequence corresponding to this region is displayed above the graph. C) PeptideAtlas results for the query "E7Q78," which corresponds to the isoform incorporating the 33-base-pair exon. Proteomic analyses confirm the expression of this isoform across multiple cell types and tissues, as illustrated in the accompanying pie chart.