Contents of supplemental material:

Supplemental Table 1. Primer sequences for RT-PCR.

Supplemental Figure 1. Immunocytochemistry of CK14 expression by cultured esophageal keratinocytes .

Supplemental Figure 2. Keratinocyte sensitivity to camphor measured with  $Ca^{2+}$ -imaging.

Supplemental Table 1. Primer sequences for RT-PCR.

mMHC2-F	CTAACAGACAGGGAGAATCAGTCAATC
mMHC2-R	TATAGATGAGACTTTTTCATCATTTGTAA
mCK14-F	AGAATAACCTGGAGGAGACCAAAG
mCK14-R	TTTTGTGCAACTCAGAAAAAGAAG
mTRPV2-F	ACCGCATGGTGGTTTTAGAG
mTRPV2-R	CTACAGCAAAGCCGAAAAGG
mTRPV3-F	CCCCATCCTCTTTCTCTTCC
mTRPV3-R	CGACGTTTCTGGGAATTCAT
mTRPV4-F	ACAACACCCGAGAGAACACC
mTRPV4-R	CCCAAACTTACGCCACTTGT
mVNUT-F	GCCCTCTCAGGTTCAGTG
mVNUT-R	ACCTTGTTCTGGGGTCTGTG
mGAPDH-F	TGAAGGGTGGAGCCAAAAGG
mGAPDH-R	GGAAGAGTGGGAGTTGCTGTTG
(MHC2: skeltal	muscle marker, CK14: keratinocyte marker, VNUT; vesicular

nucleotide transporter)

## Supplemental Figure 1. legend

CK14 immunoreactivity of cultured mouse esophageal keratinocytes.

Nearly all keratinocytes had CK14 immunoreactivity, indicating a high purity of

cultured keratinocytes. Bars indicate 50 µM.

## Supplemental Figure 2. legend

Keratinocyte sensitivity to camphor as measured by a Ca<sup>2+</sup>-imaging system. A. Traces for  $[Ca^{2+}]_i$  changes in response to the TRPV3 agonist camphor (5 mM) in WT and TRPV3KO keratinocytes (mean ± SEM). Black bar indicates duration of camphor application. B.  $[Ca^{2+}]_i$  increases in the presence of camphor were significantly larger in WT keratinocytes compared with TRPV3KO cells (p < 0.05).

## **Supplemental Figure 1**

## Mihara et al.



