### **ERRATUM**

# Erratum to: Isoform- and receptor-specific channel property of canonical transient receptor potential (TRPC)1/4 channels

d

30-

-30

 $C1\alpha$ ,  $M_2R$ 

-150 -100 -50

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The authors would like to apologize for inadvertently using Fig. 1d also for Fig. 5 h in the printed version of this paper. The correct versions of Fig. 1d and Fig. 5 h are given below.

> CCh (100 M) -60 **Fig. 1**  $G_{q/11}$ -coupled receptor stimulation and TRPC1 $\alpha$ , TRPC1 $\alpha/4$ , TRPC4 channel activity. From **a** to **h**, all *left panels* indicate I-Vrelationship and *right panels* indicate corresponding current traces. *Inset* legends at upper left area of I-V curves demonstrate heterologously expressed proteins. a, b In cells expressing M1 or M3 receptor, receptor stimulation by extracellular carbachol (100 µM) did not induced significant whole-cell current.  $\mathbf{c}$ ,  $\mathbf{d}$  Cells expressing TRPC1 $\alpha$  channels showed indistinguishable current increment in response to M1 or M3 stimulation achieved by extracellular carbachol (CCh, 100 µM). e, f Heteromeric TRPC1 $\alpha$ /4 channel showed typical outward-rectifying I–V curves in

V (mV)

response to M1 or M3 stimulation. **g**, **h** Genuine TRPC4 homomeric currents (without co-expression of TRPC1 $\alpha$ ) in response to M1 or M3 receptor stimulation. **i** Left panel indicates summarized current density measured above and right panel indicates rectification factor ( $I_{+80 \text{ mV}}/I$  $_{-60 \text{ mV}}$ ) analysis which was devised in order to show the sheer difference in I-V curve signature. **j** *Left panel* compares double-rectifying I-V curves of CCh-activated TRPC4 (*light gray*) and outward-rectifying I-V curves of CCh-activated TRPC1 $\alpha/4$  (*black*). In order to quantify the order of outward rectification, another rectification factor ρ (Rho) was devised which parameterizes two different slope conductance:  $\rho \equiv |\mathbf{g}_{+}|$  $_{10 \sim +50 \mathrm{mV}} |/|g_{-120 \sim -80 \mathrm{mV}}|$ . Two different I-V curves show stark difference

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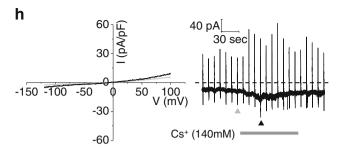
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50 pA

30 sec



**Fig. 5.** TRPC1α, TRPC1α/4, and TRPC4 channel activities in response to  $G_{io}$ -coupled receptor (M2) stimulation and overexpression of  $G\alpha_{12}^{\text{Q205L}}$  protein. **a**, **b** Genuine TRPC4 homomeric channel activity in response to M2 receptor stimulation and overexpression of  $G\alpha_{12}^{\text{Q205L}}$  (intrinsic GTPase activity deficient mutant) protein. Extracellular carbachol (*CCh*, 100 μM) and  $Cs^+$ -rich solution ( $[Cs^+]_0$  = 140 mM) was treated for each activation systems, respectively. TRPC4 channels activated by each condition showed typical double-rectifying I-V curves. **c**, **d** TRPC1α homomeric channel activities in response to M2 receptor and  $G\alpha_{12}^{\text{Q205L}}$  protein. Neither M2 receptor stimulation nor  $G\alpha_{12}^{\text{Q205L}}$  protein activated TRPC1α channels. **e**, **f** TRPC1α/4 heteromeric channel activities in response to M2 receptor and  $G\alpha_{12}^{\text{Q205L}}$  protein. Each activation system was insufficient to induce TRPC1α/4 channel currents but selectively activated TRPC4 homomeric channels. **g**, **h** TRPC1β/4 heteromeric channel activities in response to M2 receptor and  $G\alpha_{12}^{\text{Q205L}}$  protein. Both systems could not induce channel activation. **i**, **j** TRPC1β/4 heteromeric channel activities in response to M2 receptor and  $G\alpha_{12}^{\text{Q205L}}$  protein. Like TRPC1α/4, TRPC1β/4 did not permit their activation to those stimulators but only TRPC4 did permit their activation

