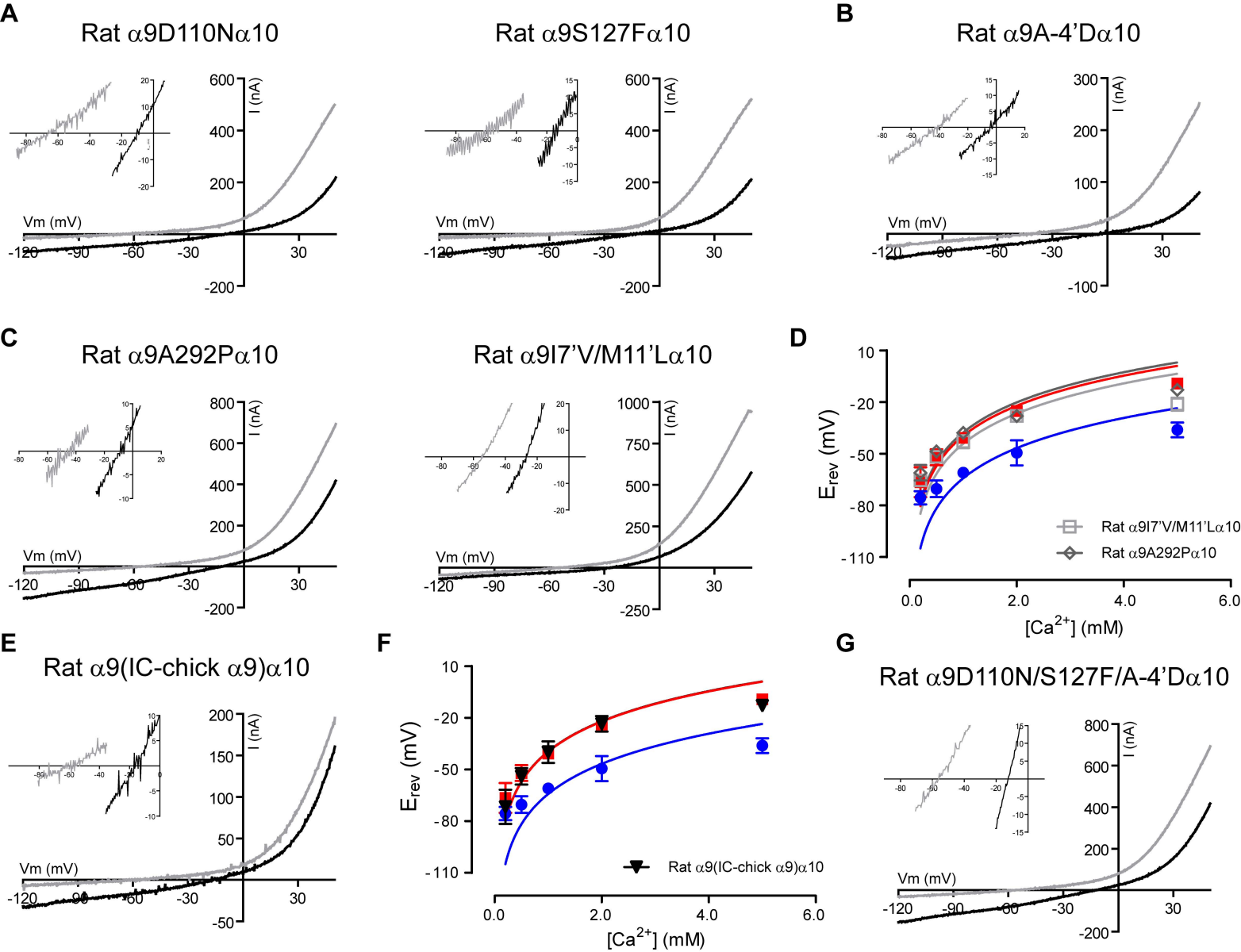
A
Rat α9D110Nα10
Rat α9S127Fα10
B
Rat α9A-4'Dα10
C
Rat α9A292Pα10
Rat α9I7'V/M11'Lα10
D
Rat α9I7'V/M11'Lα10
Rat α9A292Pα10
E
Rat α9(IC-chick α9)α10
F
Rat α9(IC-chick α9)α10
G
Rat α9D110N/S127F/A-4'Dα10
I (nA)
Vm (mV)
Erev (mV)
[Ca2+] (mM)

Supplementary fig. 3. *Rat mutant and chimeric receptors. Relative calcium permeability*. (A, B, C, E and G) Representative I-V curves obtained by application of voltage ramps (−120 to +50 mV, 2 s) at the plateau of the response to 100 µM ACh in oocytes superfused with N-methyl glucamine–based solutions containing different Ca^{2+} concentrations (0.5 and 5 mM) for oocytes expressing rat α9α10 mutant or chimeric receptors. Insets: magnification near the E_{rev}. (A) Extracellular vestibule mutant receptors: rat α9D110Nα10 (left) and rat α9S127Fα10 (right). (B) Rat α9A-4'Dα10 mutant receptor. (C) TM2 domain mutant receptors: rat α9A24'Pα10 (left) and rat α9I7'V/M11'Lα10 (right). (E) Rat α9(IC-chick α9)α10 chimeric receptor. (G) Rat α9D110N/S127F/A-4'Dα10 triple mutant receptor. (D and F) Plots of E_{rev} values as a function of extracellular Ca^{2+} concentration for rat α9α10 mutant or chimeric receptors. E_{rev} values for rat α9α10 (red) and chicken α9α10 (blue) are shown for comparison. Values are mean ± S.E.M. of 5-11 experiments per group. Solid lines are fit to the GHK equation (see Methods). (D) TM2 domain mutant receptors: rat α9A24'Pα10 and rat α9I7'V/M11'Lα10 . (F). Rat α9(IC-chick α9)α10 chimeric receptor.