



**Fig. S4.** Agonist binding to  $\beta_1$ AR was unaffected by the  $\text{Na}^+$  ion concentration. Competition binding assays were performed on wild type  $\beta_1$ AR in insect cell membranes using  $^3\text{H}$ -DHA and the agonist isoprenaline in different solution conditions ( $n = 4$  of duplicate measurements).  $K_i$  values (mean  $\pm$  SEM) were as follows: 0 mM (blue circles),  $K_i = 16.1 \pm 3.7$  nM; 150 mM NaCl (purple squares),  $K_i = 24.8 \pm 6.1$  nM; 150 mM choline chloride (green triangles),  $K_i = 30.6 \pm 2.9$  nM; 1 M NaCl (cyan hexagons),  $K_i = 89.1 \pm 8.0$  nM; 1 M choline chloride (red diamonds),  $K_i = 111 \pm 7.0$  nM. The data are plotted as histograms in Figure 3.