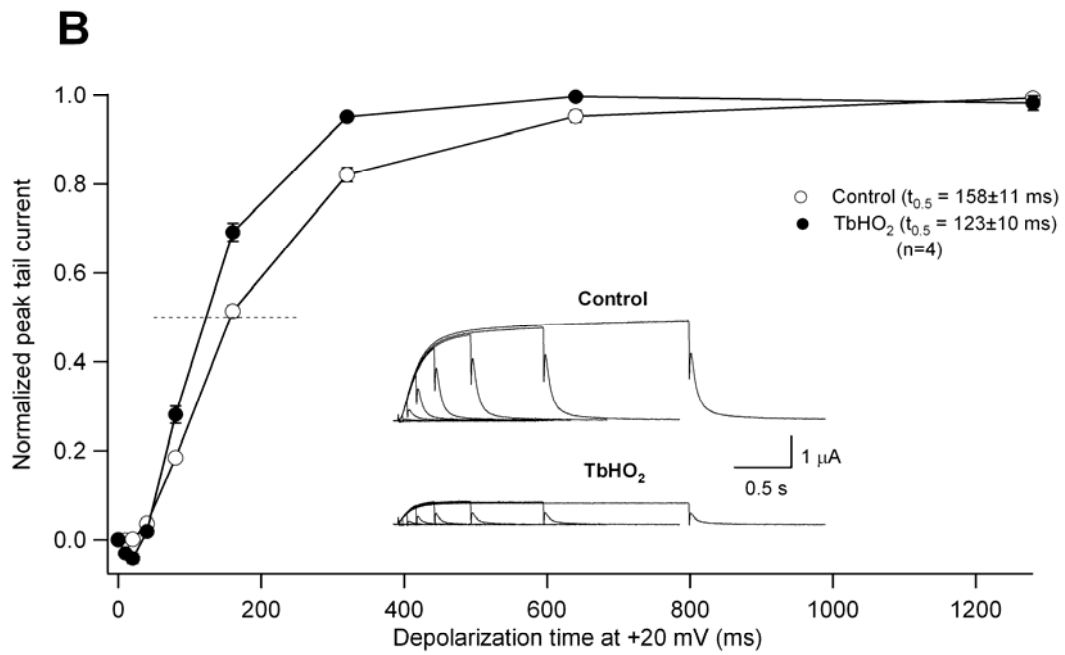
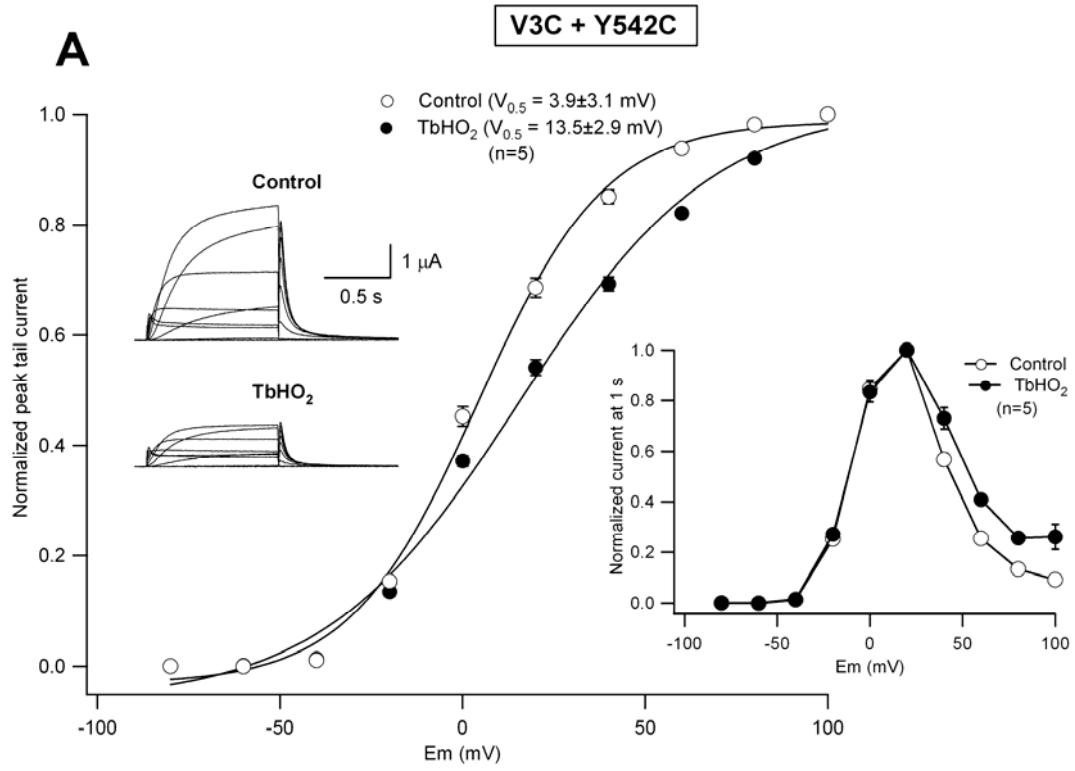


Supplementary Fig. 1. Effect of oxidation on activation kinetics of the V3C+Y542C channels. *A.* Fractional activation curves were obtained from tail current data at -50 mV after 1 s depolarizations between -80 and +100 mV in 20 mV increments from a holding potential of -80 mV. The I/V curves were generated in the absence (open symbols) or the presence (closed symbols) of 2 mM $TbHO_2$, following a 3 min treatment with the oxidizing agent. The continuous lines correspond to Boltzmann curves $h(V) = I_{max} [1/(1 + \exp((V - V_{0.5})/k))]$, which best fitted the data. Current-voltage relationships normalized to maximum for currents at the end of the depolarization step in the same cells are shown in the right inset. Families of currents from a representative cell before and after $TbHO_2$ and the averaged value of the $V_{0.5}$ are also shown. *B.* Comparison of activation rates at +20 mV. The activation time course was studied by an envelope-of-tails protocol varying the duration of a depolarization prepulse to +20 mV and measuring the magnitude of the tail current peak at the end of every conditioning prepulse upon repolarization to -50 mV. Open and closed symbols correspond to control and 3 min $TbHO_2$ treatment, respectively. Families of currents from a representative cell before and after $TbHO_2$ are shown in the inset. The time necessary to reach a half-maximal tail current magnitude ($t_{0.5}$, dashed line) is also indicated in the graph.



Supp. Fig 1