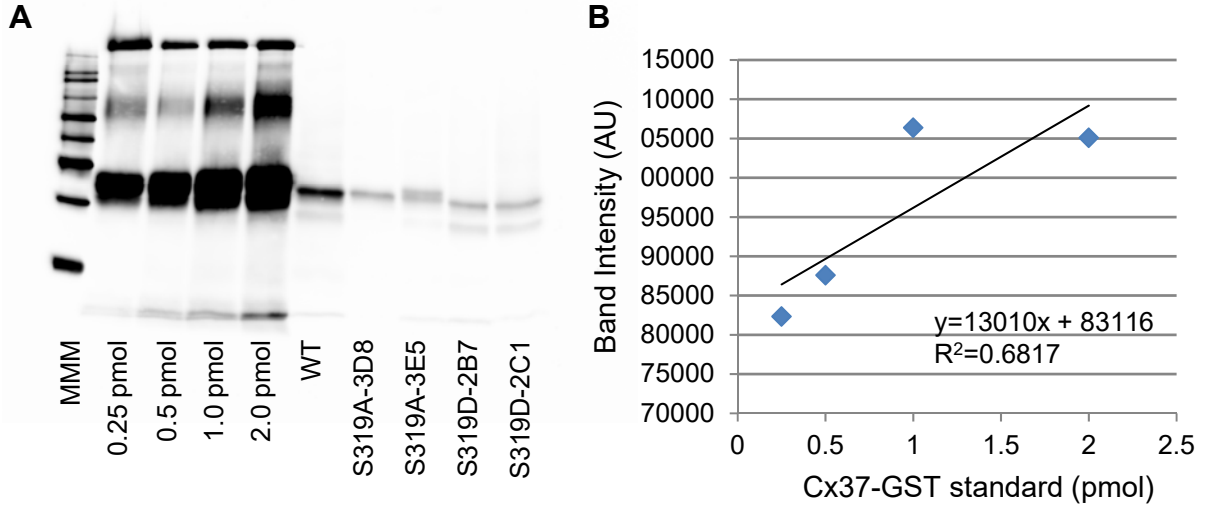


Supplement 1



C 05/26/17 37Ab (50ug)

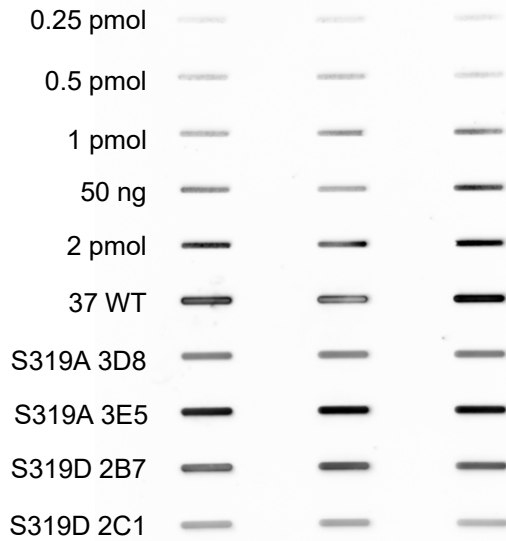


Fig S1. Relative expression of clones as determined by western blotting (A/B) and slot blot (C). Standards were imaged for signal intensity and plotted as shown in (B) for the illustrated Western blot.. Linear regression was then used to determine sample content.

Supplement 2

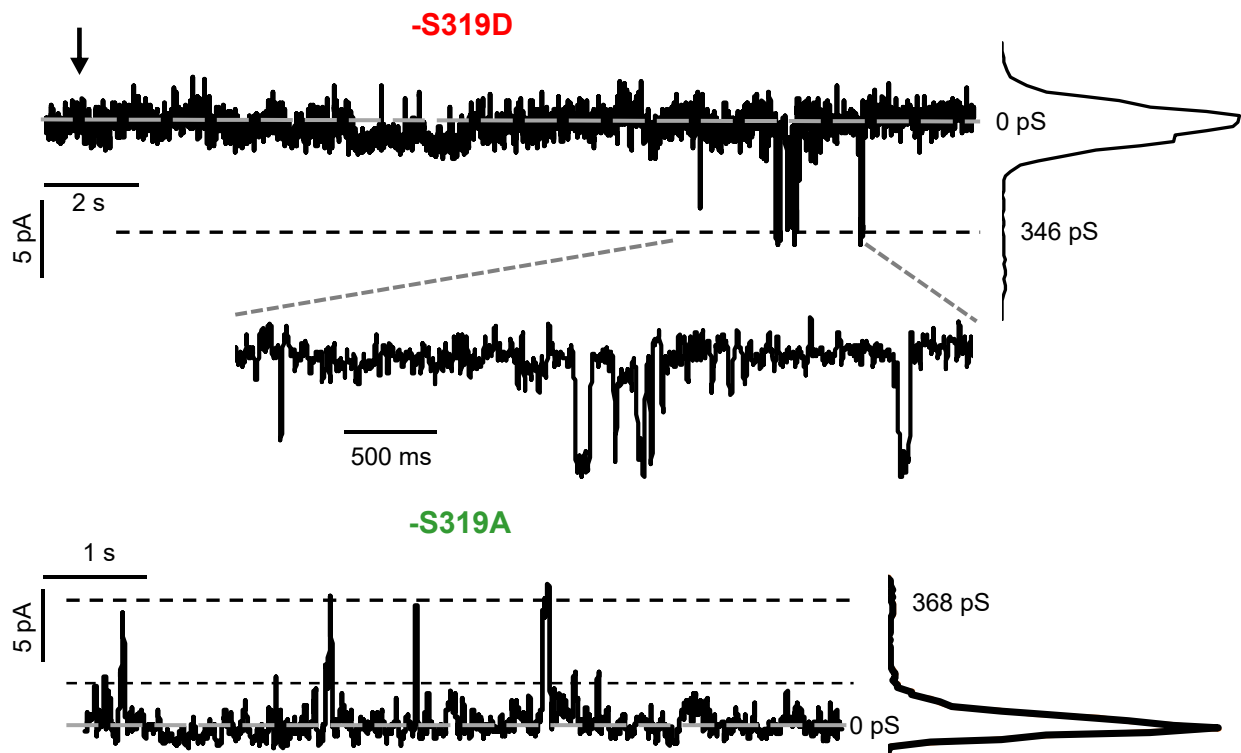


Fig. S2. Full open states of Cx37-S319D and -319A GJCHs do not differ from WT, at approximately 350 pS. In both records, the gray long-dash lines mark zero current and the dashed line marks the current level corresponding to 350 pS. In the -S319A record the short dash line corresponds to an ~160 pS substate. For both isoforms, halothane was present to reveal the zero current level and channel events originating from the zero current level (corresponding to 0 pS). In the -319D record, all channels were closed at the onset of $V_j = 25$ mV (indicated by the arrow near the beginning of the record). Note that in the presence of halothane, the dwell time in the full open state is sufficiently short that this current level is not detected as a peak in the all-points histograms shown to the right of each record.

Supplement 3

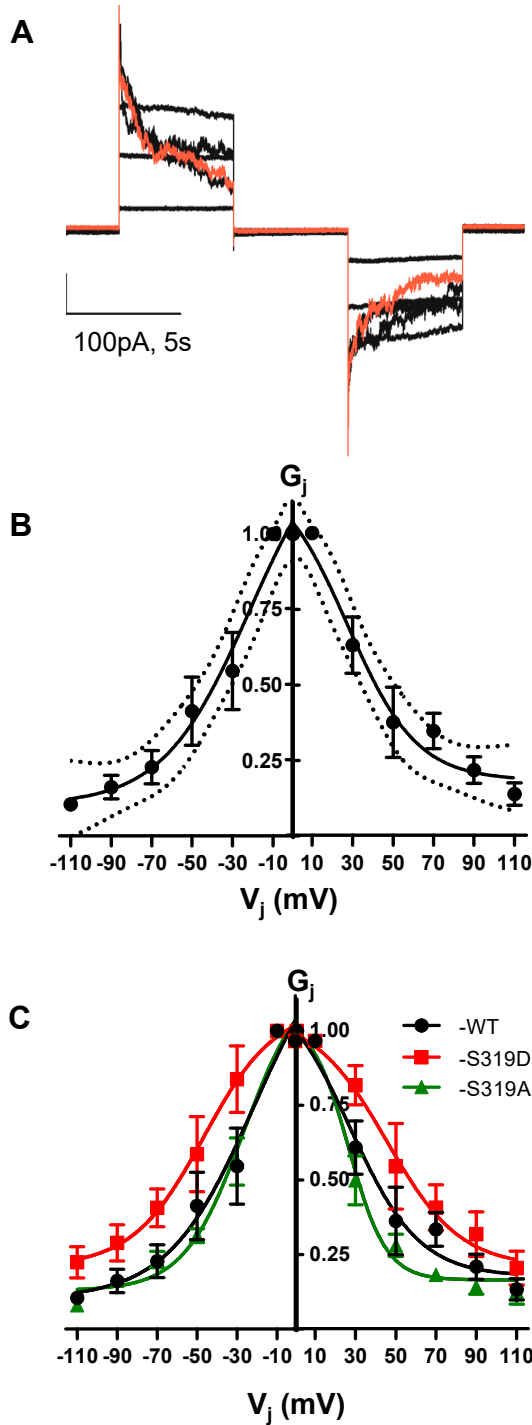


Fig S3. Voltage-dependent gating of Cx37-WT . A) One cell of a pair was stepped in 20 mV steps beginning at ± 10 mV, illustrated current traces were derived from the cell clamped at 0 mV. Red trace shows response to ± 110 mV pulses. B) Boltzmann fits for the WT data, showing error and confidence intervals. Data from 7 cell pairs. C) Boltzmann fits for all three isoforms displayed.