

Supporting Information

Two regions of ryanodine receptor calcium channel are involved in Ca^{2+} -dependent inactivation

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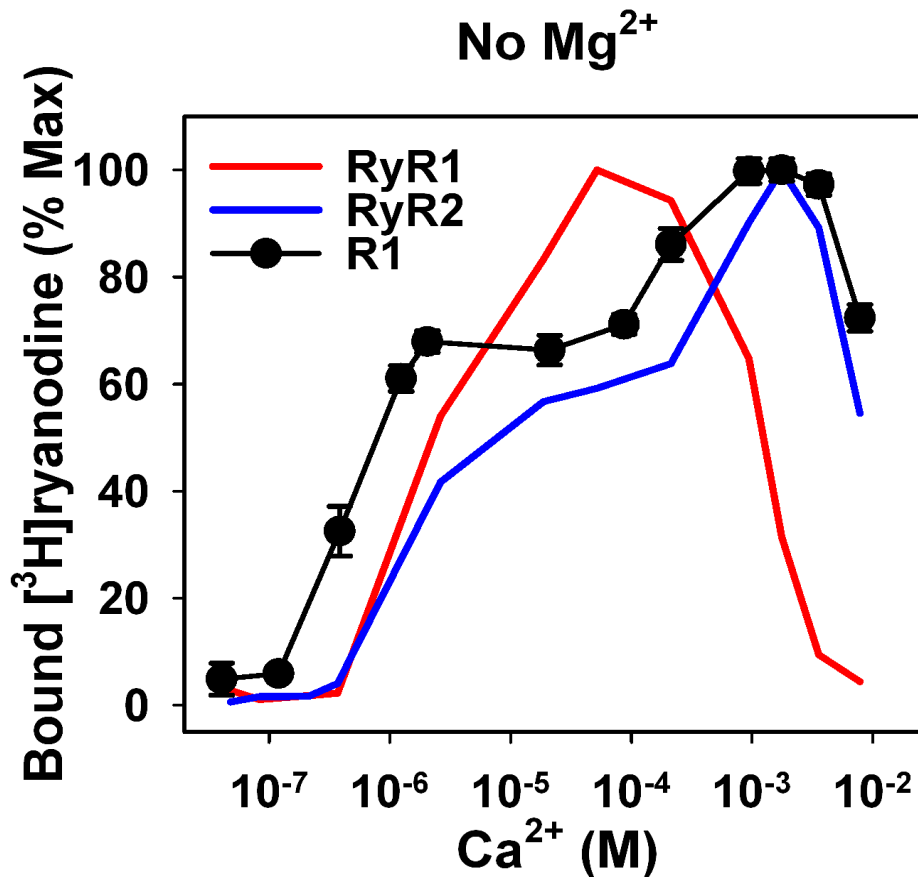


FIGURE S1. Ca^{2+} dependent regulation of R1 chimera. Ca^{2+} dependent channel activity of R1 chimera (filled circle) was determined by $[^3\text{H}]$ ryanodine binding assays in the absence of Mg^{2+} . Solid red and blue lines represent mean values of WT-RyR1 and WT-RyR2 from Fig.1A, respectively. EC_{50} and IC_{50} values are $0.8 \pm 0.1 \mu\text{M}$ and $15.7 \pm 1.7 \text{ mM}$, respectively. Data are mean \pm S.E. (n=6).

Chimeras	$B_{\text{peak}}/B_{\text{max}}$ (%)
WT-RyR1	35 ± 5
R0	36 ± 4
R21	51 ± 7
R41	47 ± 3
R51	48 ± 7
R41'	76 ± 12
R51'	33 ± 3
R61	38 ± 9
R71	56 ± 13
R81a	39 ± 7
R81b	57 ± 9
R81c	29 ± 7
R81d	45 ± 6
R91a	58 ± 4
R91b	48 ± 5
R101a	46 ± 3
R101b	40 ± 3
R121b	71 ± 13
R131b	66 ± 8
WT-RyR2	53 ± 6

TABLE S1. Activities of RyR chimeras. Activities of wild type and chimera RyRs were obtained by normalizing the peak values of Ca^{2+} dependent activity to the B_{max} values ($B_{\text{peak}}/B_{\text{max}}$). Data are mean \pm S.E. (n=4-9)