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| --- | --- | --- | --- |
| **Effects of NALT and NAL-Phe on IKs Channel Mutations removing hydrogen bonding residues in the S3-S4 loop** | | | |
| **Effects of NALT on WT IKs (n=4)** | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | 3.575 | 0.38379 |
| 0.7 μM | 4.4 | 0.55827 |
| 2 μM | -4.95 | 2.75605 |
| 7 μM | -20.075 | 2.73538 |
| 20 μM | -56.125 | 3.58733 |
| **Effects of NAL-Phe on WT IKs (n=4)** | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | 1.23454 | 0.35356 |
| 0.7 μM | 0.90146 | 0.20057 |
| 2 μM | -1.6853 | 1.21466 |
| 7 μM | -7.5297 | 3.02791 |
| 20 μM | -12.527 | 3.76753 |
| **Effects of NALT on S217A IKs (n=5)** | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | -0.57916 | 0.345061 |
| 0.7 μM | -4.15906 | 0.546143 |
| 2 μM | -11.4304 | 1.576021 |
| 7 μM | -34.8116 | 2.07221 |
| 20 μM | -65.9443 | 3.749217 |
| **Effects of NALT on Q220L IKs (n=3)** | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | -1.52122 | 1.515092 |
| 0.7 μM | -4.35308 | 0.736832 |
| 2 μM | -8.23543 | 5.241416 |
| 7 μM | -31.6237 | 6.375108 |
| 20 μM | -59.5385 | 11.10041 |
| **Effects of NALT on T224V IKs (n=4)** | | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | 2.591954 | 3.26478 |
| 0.7 μM | 0.98816 | 4.440905 |
| 2 μM | 1.9982 | 2.919261 |
| 7 μM | -13.5565 | 4.524764 |
| 20 μM | -32.1606 | 6.970673 |
| **Effects of NALT on S225A IKs (n=7)** | | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | 0.485872 | 1.303365 |
| 0.7 μM | -2.1039 | 1.703382 |
| 2 μM | -6.20795 | 2.586843 |
| 7 μM | -32.5378 | 3.063233 |
| 20 μM | -52.3833 | 3.742495 |
| **Effects of NAL-Phe on T224V IKs (n=7)** | | | | |
| Concentration | ΔV0.5 (mV) Mean | ΔV0.5 (mV) SEM |
| 0.2 μM | -3.38759 | 2.55998 |
| 0.7 μM | -1.93549 | 2.00388 |
| 2 μM | -1.8096 | 2.10132 |
| 7 μM | -4.62585 | 1.98088 |
| 20 μM | -13.1987 | 2.57089 |
| Table containing source data for the application of the PUFA analogues NALT on the WT cardiac Kv7.1/KCNE1 and with mutations S217A, Q220L,T224V and S225A and NAL-Phe on WT cardiac Kv7.1/KCNE1 and with the mutation T224V at every concentration (0.2, 0.7, 2, 7, and 20 μM). | | | |