# Figure 3-1

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|   | **Nex-Cre+**  | **Nex-Cre- (SNc)**  |   |
| **Property**  | **Mean**  | **SEM**  | **n** **(cells)**  | **n** **(mice)**  | **Mean**  | **SEM**  | **n** **(cells)**  | **n** **(mice)**  | ***p* value**  |
| **Holding current at -70mV** (pA)  | -15.21  | 2.09  | 22  | 7 M 7 F  | -134.5  | 18.68  | 11  | 4 M 1 F  | **<0.0001**  |
| **Series resistance** (mOhms)  | 13.46  | 1.48  | 22  | 7 M 7 F  | 11.53  | 1.69  | 11  | 4 M 1 F  | 0.4313  |
| **Membrane resistance** (mOhms)  | 1189  | 83.59  | 22  | 7 M 7 F  | 213.4  | 28.47  | 11  | 4 M 1 F  | **<0.0001**  |
| **Membrane capacitance** (pF)  | 30.66  | 2.479  | 22  | 7 M 7 F  | 64.49  | 5.05  | 11  | 4 M 1 F  | **<0.0001**  |
| **Resting membrane potential** (mV)  | -48.54  | 1.01  | 22  | 7 M 7 F  | -53.88  | 1.71  | 11  | 4 M 1 F  | **0.0075**  |
| **Action potential threshold** (mV)  | -33.58  | 1.31  | 21  | 7 M 7 F  | -30.0  | 1.41  | 11  | 4 M 1 F  | 0.0956  |
| **Action potential width at threshold** (ms)  | 5.04  | 0.54  | 21  | 7 M 7 F  | 3.64  | 0.35  | 11  | 4 M 1 F  | 0.0895  |
| **Action potential peak** (maximum membrane potential, mV)  | 21.95  | 1.17  | 21  | 7 M 7 F  | 31.55  | 1.55  | 11  | 4 M 1 F  | **<0.0001**  |
| **Action potential height** (change in membrane potential from the start of the spike to maximum depolarization, mV)  | 62.58  | 1.5  | 21  | 7 M 7 F  | 79.17  | 2.16  | 11  | 4 M 1 F  | **<0.0001**  |
| **Afterhyperpolarization** (minimum membrane potential, mV)  | -55.76  | 1.08  | 21  | 7 M 7 F  | -59.02  | 2.17  | 11  | 4 M 1 F  | 0.1407  |
| **Afterhyperpolarization** (change in membrane potential from the start of the spike to maximum hyperpolarization, mV)  | 15.13  | 0.72  | 21  | 7 M 7 F  | 21.58  | 1.57  | 11  | 4 M 1 F  | **0.0002**  |
| **Sag component when** **hyperpolarized to -100 +/-** **7mV** (mV)  | 1.7  | 0.37  | 20  | 7 M 7 F  | 10.22  | 1.12  | 11  | 4 M 1 F  | **<0.0001**  |
| **Rebound depolarization when hyperpolarized to -****100 +/- 7mV** (mV)  | 0.63  | 0.3  | 20  | 7 M 7 F  | 6.67  | 1.21  | 4  | 2 M  | **<0.0001**  |