

Supplementary Table 6. Action potential (AP) characteristics from the sinoatrial node, atrium, and ventricle with and without blebbistatin.

Sinoatrial Node (SAN)					
AP Parameter	Control (n impalements= 10) [†]	Blebbistatin (n impalements= 11) [†]	p-value vs Control	p-value vs Atrium	p-value vs Ventricle
Heart Rate (bpm)	140 ± 4	133 ± 8	0.463	-	-
Slope of DD (mV/s)	28 ± 4	17 ± 2*	0.028	-	-
MDP (mV)	-46 ± 3 ^{A,V}	-42 ± 2	0.285	0.049	0.008
dV/dt _{max} (mV/ms)	9.6 ± 1.4 ^{A,V}	10.1 ± 1.3	0.782	<0.001	0.020
AP Amplitude (mV)	59 ± 5 ^{A,V}	53 ± 3	0.295	0.001	<0.001
Max V _m	14 ± 3 ^{A,V}	12 ± 2	0.542	<0.001	<0.001
APD ₅₀ (ms)	63 ± 3 ^{A,V}	62 ± 3	0.799	0.005	<0.001
APD ₈₀ (ms)	78 ± 3 ^{A,V}	76 ± 3	0.711	0.032	<0.001

Atrium					
AP Parameter	Control (n impalements= 14) [†]	Blebbistatin (n impalements= 17) [†]	p-value vs Control	p-value vs SAN	p-value vs Ventricle
Resting V _m (mV)	-65 ± 2 ^S	-60 ± 2	0.149	0.049	0.930
dV/dt _{max} (mV/ms)	19.6 ± 0.9 ^{S,V}	18.2 ± 1.0	0.329	<0.001	0.020 [#]
AP Amplitude (mV)	92 ± 3 ^S	88 ± 5	0.475	0.001	0.925
Max V _m	28 ± 2 ^S	28 ± 2	0.891	<0.001	0.958
APD ₅₀ (ms)	87 ± 3 ^{S,V}	99 ± 3*	0.006	0.005	<0.001
APD ₈₀ (ms)	108 ± 2 ^{S,V}	117 ± 3*	0.012	0.032	<0.001

Ventricle					
AP Parameter	Control (n impalements= 21) [†]	Blebbistatin (n impalements= 24) [†]	p-value vs Control	p-value vs SAN	p-value vs Atrium
Resting V _m (mV)	-66 ± 2 ^S	-64 ± 1	0.451	0.008	0.930
dV/dt _{max} (mV/ms)	16.8 ± 1.0 ^{S,A}	17.3 ± 0.7	0.684	0.020	0.020
AP Amplitude (mV)	94 ± 3 ^S	92 ± 3	0.585	<0.001	0.925
Max V _m	28 ± 1 ^S	27 ± 2	0.746	<0.001	0.958
APD ₅₀ (ms)	234 ± 4 ^{S,A}	221 ± 6	0.072	<0.001	<0.001
APD ₈₀ (ms)	271 ± 5 ^{S,A}	248 ± 5*	0.003	<0.001	<0.001

Data is shown as mean ± standard error of the mean (SEM), and compared by unpaired, one-way ANOVA and Tukey post hoc tests (^Ap<0.05 vs atrium; ^Vp<0.05 vs ventricle; ^Sp<0.05 vs SAN) or unpaired, two-tailed, Student's T-tests (*p<0.05 vs control). [†]All data acquired in N = 6 hearts.

APD₅₀ and APD₈₀, AP duration at 50% and 80% repolarisation; DD, diastolic depolarisation; dV/dt_{max}, maximum rate of change of V_m during the AP upstroke; MDP, maximum diastolic potential; V_m, membrane potential.