

## SUPPLEMENTAL MATERIAL

Gusev et al., <http://www.jgp.org/cgi/content/full/jgp.200810119/DC1>

Table S1. Summary of the Univariable and Bivariable Regression Analysis

(A) Univariable				
SparkF	Coeff	P	low 95% conf	high 95% conf
Mg	−0.45	0.001	−0.68	−0.22
ATP	0.38	0.098	−0.08	0.83
MgATP	−0.17	0.047	−0.35	0.00
(B) Bivariable				
SparkF	Coeff	P	low 95% conf	high 95% conf
Mg	−0.43	0.005	−0.69	−0.16
ATP	0.12	0.473	−0.22	0.46
SparkF	Coeff	P	low 95% conf	high 95% conf
Mg	−0.47	0.010	−0.79	−0.14
MgATP	0.00	0.996	−0.16	0.16
SparkF	Coeff	P	low 95% conf	high 95% conf
ATP	0.46	0.018	0.09	0.82
MgATP	−0.20	0.011	−0.34	−0.05

Shown are the coefficient of correlation (Coeff), the p-value (P), and the lower and upper 95% confidence limits. (A) The univariable analysis shows a strong negative correlation with  $[Mg^{2+}]_{free}$ , a positive correlation with [ATP], and a weak positive correlation with [MgATP]. But in each case, the contribution of the confounding other variables is not clear in the univariable analysis. (B) The bivariable analysis reveals a strong negative correlation between  $Ca^{2+}$  spark frequency and  $[Mg^{2+}]_{free}$  and a weak and insignificant positive correlation with  $[ATP]_{free}$ . When comparing the influence of  $[Mg^{2+}]_{free}$  and [MgATP], the latter has a negligible effect on the spark frequency.