

Supplementary Table S2. p values for statistical comparisons in Figures 1, 2, 4 and S1-6; p values highlighted in bold text have values < 0.05.

Figure	Panel	Comparison	p/corrected p
1	a	Hypoxia vs control	0.00044
		Hypotonicity vs control	0.046
		EGTA-AM vs control	11
		Hypoxia EGTA-AM vs control	6.4
		Hypotonicity EGTA-AM vs control	0.43
		TFP vs control	8.8
		Hypoxia TFP vs control	7.9
		Hypotonicity TFP vs control	2.1
		TRPV _{4i} vs control	11
		Hypoxia TRPV _{4i} vs control	4.4
		Hypotonicity TRPV _{4i} vs control	13
		TRPV _{4a} vs control	0.0016
		Hypoxia TRPV _{4a} vs control	0.00024
		Hypotonicity TRPV _{4a} vs control	2.5×10⁻⁵
	b	1 h vs normoxia	0.25
		3 h vs normoxia	0.96
		6 h vs normoxia	0.035
		6+1 h vs normoxia	0.0036
		6+3 h vs normoxia	0.041
		6+6 h vs normoxia	0.15
	c	TFP vs normoxia	0.074
		EGTA-AM vs normoxia	0.056
		Hypoxia vs normoxia	0.015
		Hypoxia TFP vs normoxia	0.96
		Hypoxia EGTA-AM vs normoxia	0.13
	d	Hypoxia vs normoxia RM 2-way ANOVA hypoxia×time interaction	0.00070
	f	cAMP control vs forskolin	0.018
		cAMP control vs hypotonicity	0.015
		cAMP control vs hypotonicity Ca ²⁺ free	1.2
		cAMP control vs hypotonicity + W-7	0.67
		cAMP control vs hypotonicity + TFP	0.20
		cAMP control vs CALP-3	0.028
		PKA control vs forskolin	9.1×10⁻⁵
		PKA control vs hypotonicity	0.0023
		PKA control vs hypotonicity Ca ²⁺ free	0.99
		PKA control vs hypotonicity + W-7	0.80
		PKA control vs hypotonicity + TFP	3.3
		PKA control vs CALP-3	0.0024
2	a	3 day sham vs DC+Vehicle	3.7×10⁻⁵
		3 day sham vs DC+CaMi	0.0060
		3 day sham vs DC+PKAi	0.0050
		7 day sham vs DC+Vehicle	0.024
		7 day sham vs DC+CaMi	0.021
		7 day sham vs DC+PKAi	0.019
		28 day sham vs DC+Vehicle	0.56
		28 day sham vs DC+CaMi	0.16
		28 day sham vs DC+PKAi	1.0
	b	Sham vs DC+Vehicle	5.0×10⁻⁶
		Vehicle vs TFP	0.032
		Vehicle vs W-7	4.3×10⁻⁵
		Vehicle vs PKA _i	0.00029
		Vehicle vs AR1 _i	0.75
Vehicle vs D2R _i		0.038	
Vehicle vs PKC _i	0.038		
g	Sham vs DC+Vehicle	3.2×10⁻⁷	
	Vehicle vs CaM _i	1.3×10⁻⁶	
	Vehicle vs PKA _i	9.0×10⁻⁶	
h	Sham vs DC+Vehicle	0.0020	
	Vehicle vs CaMi	0.022	
	Vehicle vs PKAi	0.0090	

4	b	Vehicle vs CaM _i	0.00012
		Vehicle vs PKA _i	0.00011
		Vehicle vs PKC _i	3.8
	c	Vehicle vs CaM _i	0.00013
		Vehicle vs PKA _i	0.00014
		Vehicle vs PKC _i	2.1
	d	Sham vs DC+Vehicle	0.00010
Vehicle vs CaM _i		0.00010	
Vehicle vs PKA _i		0.00011	
e	Vehicle vs PKC _i	4.2	
	Sham vs DC+Vehicle	0.0010	
	Vehicle vs CaM _i	0.0013	
f	Vehicle vs PKA _i	0.0014	
	Vehicle vs PKC _i	1.8	
	Sham vs DC+Vehicle	6.0×10⁻⁵	
g	Vehicle vs CaM _i	0.0015	
	Vehicle vs PKA _i	0.00089	
	DC+Vehicle vs DC+CaM _i	4.0×10⁻¹⁰	
S1	c	Control vs shAQP4 3 dpi	0.00012
		Control vs shAQP4 28 dpi	9.0×10⁻⁵
d	Vehicle vs control 3dpi	4.4	
	Vehicle vs shAQP4 3dpi	0.00011	
	Vehicle vs control 28 dpi	4.2	
	Vehicle vs shAQP4 28 dpi	9.0×10⁻⁵	
S2		Sham vs injury contra	0.00011
		Injury vs injury+CaM _i ipsi	0.00010
		Injury vs injury+PKA _i ipsi	0.00011
		Injury vs injury+PKC _i ipsi	2.3
		Sham vs injury ipsi	2.3
		Injury vs injury+CaM _i contra	3.1
		Injury vs injury+PKA _i contra	2.8
		Injury vs injury+PKC _i contra	2.8
S3	d	Sham vs DC+Vehicle	2.9×10⁻⁵
		Sham vs DC+Vehicle (away)	1.0
		DC+Vehicle vs DC+Vehicle (away)	0.00010
e	Sham vs DC+Vehicle	0.0080	
	Sham vs DC+Vehicle (away)	1.0	
	DC+Vehicle vs DC+Vehicle (away)	0.010	
S4	e	PKA control vs forskolin	0.00050
		PKA control vs hypotonicity	0.014
		PKA control vs hypotonicity+TFP	3.4
		Akt control vs forskolin	0.038
	h	Akt control vs hypotonicity	0.044
		Akt control vs hypotonicity+TFP	2.8
		Nuclear FOXO3A control vs forskolin 10 min	0.078
		Nuclear FOXO3A control vs hypotonicity 10 min	2.9
Nuclear FOXO3A control vs forskolin 1 h	0.00060		
Nuclear FOXO3A control vs hypotonicity 1 h	0.11		
Nuclear FOXO3A control vs forskolin 6 h	0.0047		
Nuclear FOXO3A control vs hypotonicity 6 h	0.0066		
S5	g	AQP4 translocation WT vs F258/262/266A	0.00040
		AQP4 translocation WT vs F258A	1.4
		AQP4 translocation WT vs F262A	3.3
		AQP4 translocation WT vs F266A	0.72
S6	b	AQP4 vs control	0.0015