

Supplemental Data

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Neural Activity Correlates with Behavior Effects of Anti-Seizure Drugs Efficacy Using the Zebrafish Pentylentetrazol Seizure Model

Table S5. Statistical Results for behavioral profile of zebrafish larvae exposed to GS967

The table displays the results of both the two-way ANOVA (Fig 5A) and one-way ANOVA (Fig 5B) performed for Figures 5 (A and B) and the resulting post-hoc Tukey comparisons and accompanying p-values for groups marked for significance within the Figure 5 graphs.

Table S5: Statistical Results for GS967 Assay

Two-way ANOVA table results			
	DF	F (DFn, Dfd)	P value
Time x Column Factor	30	F (30, 2065) = 3.372	P<0.0001
Time	5	F (3,665, 1514) = 1.920	P=0.1109
Column Factor	6	F (6, 413) = 48.42	P<0.0001
Subject	413	F (413, 2065) = 4.931	P<0.0001
Residual	2065		
Two-way ANOVA Tukey's Post-hoc Results			
Tukey's multiple comparisons test	Adjusted P Value	Tukey's multiple comparisons test	Adjusted P Value
Time period: 0 -15 minutes		Time period: 45 - 60 minutes	
EM vs. 0.1 % DMSO	0.4063	EM vs. 0.1 % DMSO	>0.9999
EM vs. 10 mM PTZ	0.0298	EM vs. 10 mM PTZ	<0.0001
EM vs. 0.05 µm GS967 - pretreatment	0.0016	EM vs. 0.05 µm GS967 - pretreatment	0.003
EM vs. 0.05 µm GS967 acute	0.3709	EM vs. 0.05 µm GS967 acute	0.0572
EM vs. 0.05 µm GS967 - pretreatment	0.9989	EM vs. 0.05 µm GS967 - pretreatment	0.638
EM vs. 10 mM PTZ / 0.05 µm GS967 acute	0.0192	EM vs. 10 mM PTZ / 0.05 µm GS967 acute	0.9644
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	0.0007	10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	0.001
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	<0.0001	10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	<0.0001
Time period: 15 - 30 minutes		Time period: 60 - 75 minutes	
EM vs. 0.1 % DMSO	0.995	EM vs. 0.1 % DMSO	0.9993
EM vs. 10 mM PTZ	0.031	EM vs. 10 mM PTZ	<0.0001
EM vs. 0.05 µm GS967 - pretreatment	0.0077	EM vs. 0.05 µm GS967 - pretreatment	0.0999
EM vs. 0.05 µm GS967 acute	0.0196	EM vs. 0.05 µm GS967 acute	0.0323
EM vs. 0.05 µm GS967 - pretreatment	0.9275	EM vs. 0.05 µm GS967 - pretreatment	0.0933
EM vs. 10 mM PTZ / 0.05 µm GS967 acute	0.9614	EM vs. 10 mM PTZ / 0.05 µm GS967 acute	0.0556
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	0.2035	10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	0.0002
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	0.0006	10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	<0.0001
Time period: 30 - 45 minutes		Time period: 75 - 90 minutes	
EM vs. 0.1 % DMSO	>0.9999	EM vs. 0.1 % DMSO	0.9999
EM vs. 10 mM PTZ	<0.0001	EM vs. 10 mM PTZ	<0.0001
EM vs. 0.05 µm GS967 - pretreatment	0.0029	EM vs. 0.05 µm GS967 - pretreatment	0.0025
EM vs. 0.05 µm GS967 acute	0.0031	EM vs. 0.05 µm GS967 acute	0.0537
EM vs. 0.05 µm GS967 - pretreatment	0.3629	EM vs. 0.05 µm GS967 - pretreatment	0.0246
EM vs. 10 mM PTZ / 0.05 µm GS967 acute	0.9993	EM vs. 10 mM PTZ / 0.05 µm GS967 acute	0.0161
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	0.0162	10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	0.0008
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	<0.0001	10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	0.0002
One-way ANOVA table results			
	DF	F (DFn, Dfd)	P value
Treatment (between columns)	6	F (DFn, Dfd)	P value
Residual (within columns)	413	F (6, 413) = 48.42	P<0.0001
Total	419		
One-way ANOVA Tukey's Post-hoc Results			
Tukey's multiple comparisons test	Adjusted P Value		
EM vs. 0.1 % DMSO	0.9955		
EM vs. 10 mM PTZ	<0.0001		
EM vs. 0.05 µm GS967 - pretreatment	0.0025		
EM vs. 0.05 µm GS967 acute	0.0234		
EM vs. 0.05 µm GS967 - pretreatment	0.2294		
EM vs. 10 mM PTZ / 0.05 µm GS967 acute	>0.9999		
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 - pretreatment	<0.0001		
10 mM PTZ vs. 10 mM PTZ / 0.05 µm GS967 acute	<0.0001		