

Supplementary Material

**Tail Coiling Assay in Zebrafish (*Danio rerio*)
Embryos: Stage of Development, Promising Positive
Control Candidates, and Selection of an Appropriate
Organic Solvent for Screening of Developmental
Neurotoxicity (DNT)**

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Table S1: Results from ANOVA on ranks (Kruskall–Wallis Test) for significant differences in percentage (%) of burst activity of embryos monitored from 18 to 54 hours post-fertilization (hpf) at 2 hours intervals (n = 40 embryos per group):

ANOVA on ranks (Kruskall–Wallis Test) results – Burst activity (%)																			
hpf	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
18	-	*	*	*	*	*	*	*	ns	ns	ns	ns	ns	ns	ns	ns	*	*	ns
20		-	ns	*	*	ns	ns	ns	*	*	*	*	*	*	*	*	ns	ns	*
22			-	ns	ns	ns	ns	*	*	*	*	*	*	*	*	*	*	*	*
24				-	ns	ns	ns	*	*	*	*	*	*	*	*	*	*	*	*
26					-	ns	ns	*	*	*	*	*	*	*	*	*	*	*	*
28						-	ns	*	*	*	*	*	*	*	*	*	*	*	*
30							-	ns	*	*	*	*	*	*	*	*	*	ns	*
32								-	ns	*	*	*	*	*	*	*	ns	ns	ns
34									-	ns	ns	ns	ns	*	ns	ns	ns	*	ns
36										-	ns	ns	ns	ns	ns	ns	ns	*	ns
38											-	ns	ns	ns	ns	ns	ns	*	ns
40												-	ns	ns	ns	ns	*	*	ns
42													-	ns	ns	ns	*	*	ns
44														-	ns	ns	*	*	ns
46															-	ns	*	*	ns
48																-	ns	*	ns
50																	-	ns	ns
52																		-	ns
54																			-

Notes: hpf, hours post-fertilization; ns, non-significant; - not evaluated. Significant differences ($p < 0.05$) are represented by *.

Table S2: Results from ANOVA on ranks (Kruskall–Wallis Test) for significant differences in mean burst duration of embryos monitored from 18 to 54 hours post-fertilization (hpf) at 2 hours intervals (n = 40 embryos per group):

ANOVA on ranks (Kruskall–Wallis Test) results – Mean burst duration																			
hpf	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
18	-	*	*	*	*	*	*	*	*	ns	ns	ns	ns	ns	ns	ns	ns	*	ns
20		-	ns	*	*	*	ns	ns	ns	*	*	*	*	*	*	*	ns	ns	*
22			-	ns	ns	ns	ns	ns	*	*	*	*	*	*	*	*	*	*	*
24				-	ns	ns	*	*	*	*	*	*	*	*	*	*	*	*	*
26					-	ns	*	*	*	*	*	*	*	*	*	*	*	*	*
28						-	ns	*	*	*	*	*	*	*	*	*	*	*	*
30							-	ns	*	*	*	*	*	*	*	*	*	*	*
32								-	ns	*	*	*	*	*	*	*	*	*	ns
34									-	ns	ns	ns	ns	*	*	*	ns	ns	ns
36										-	ns	ns	ns	ns	ns	ns	ns	ns	ns
38											-	ns	ns	ns	ns	ns	ns	ns	ns
40												-	ns	ns	ns	ns	ns	ns	ns
42													-	ns	ns	ns	ns	ns	ns
44														-	ns	ns	*	*	ns
46															-	ns	ns	*	ns
48																-	ns	ns	ns
50																	-	ns	ns
52																		-	ns
54																			-

Notes: hpf, hours post-fertilization; ns, non-significant; - not evaluated. Significant differences ($p < 0.05$) are represented by *.

Table S3: Results from ANOVA on ranks (Kruskall–Wallis Test) for significant differences in burst counts per minute of embryos monitored from 18 to 54 hours post-fertilization (hpf) at 2 hours intervals (n = 40 embryos per group):

ANOVA on ranks (Kruskall–Wallis Test) results – Burst Counts per minute																			
hpf	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
18	-	*	*	*	*	*	*	*	ns	ns	ns	ns	ns	ns	ns	ns	*	*	ns
20		-	ns	ns	ns	ns	ns	ns	*	*	*	*	*	*	*	*	ns	ns	ns
22			-	ns	ns	ns	ns	*	*	*	*	*	*	*	*	*	*	ns	*
24				-	ns	ns	ns	*	*	*	*	*	*	*	*	*	*	ns	*
26					-	ns	ns	*	*	*	*	*	*	*	*	*	*	ns	*
28						-	ns	*	*	*	*	*	*	*	*	*	*	ns	*
30							-	ns	*	*	*	*	*	*	*	*	*	ns	*
32								-	ns	*	ns	*	*	*	*	ns	ns	ns	ns
34									-	ns	ns	ns	ns	ns	ns	ns	ns	*	ns
36										-	ns	ns	ns	ns	ns	ns	*	*	ns
38											-	ns	ns	ns	ns	ns	ns	*	ns
40												-	ns	ns	ns	ns	*	*	ns
42													-	ns	ns	ns	*	*	ns
44														-	ns	ns	*	*	*
46															-	ns	*	*	ns
48																-	ns	*	ns
50																	-	ns	ns
52																		-	*
54																			-

Notes: hpf, hours post-fertilization; ns, non-significant; - not evaluated. Significant differences ($p < 0.05$) are represented by *.