SUPPORTING INFORMATION

As (III, V), In (III), and Ga (II) toxicity to zebrafish embryos using a high-throughput multi-endpoint *in vivo* developmental and behavioral assay

Christopher I. Olivares[1], Jim A. Field[1], Michael Simonich[2], Robert Tanguay[2],

Reyes Sierra-Alvarez[1*]

[1] Department of Chemical and Environmental Engineering, University of Arizona, P.O. Box 210011, Tucson, AZ, USA 85721

[2] Department of Environmental and Molecular Toxicology, the Sinnhuber Aquatic Research Laboratory and the Environmental Health Sciences Center at Oregon State University, Corvallis, OR, USA 97333

Corresponding author:

*Reyes Sierra-Alvarez (rsierra@email.arizona.edu)

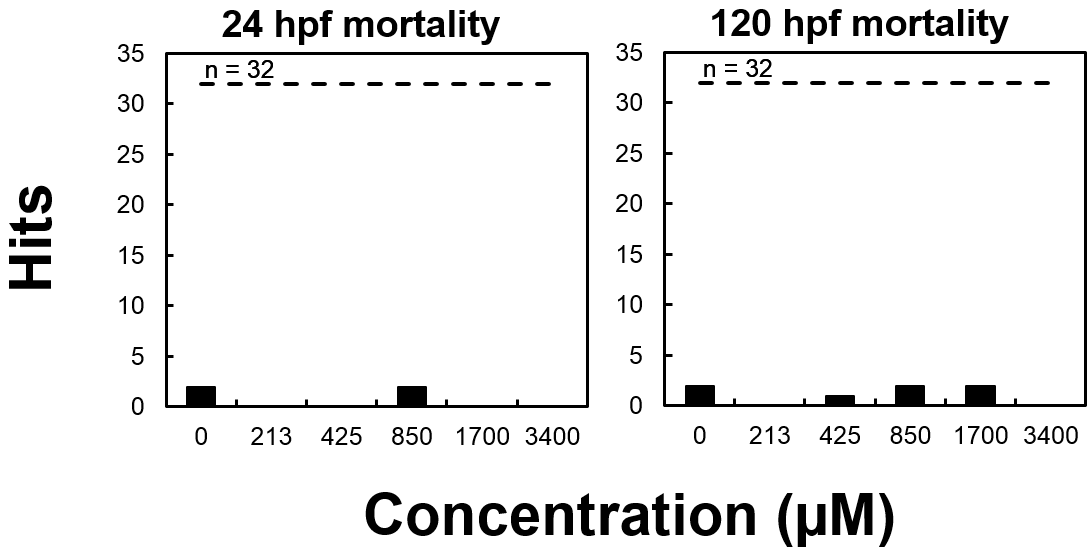

Fig. S-1. 24 and 120 hpf mortality incidence in zebrafish embryos (out of 32 replicates) for sodium citrate. All hits below statistical significance. In all treatments and controls, the total number of embryos assayed was 32.

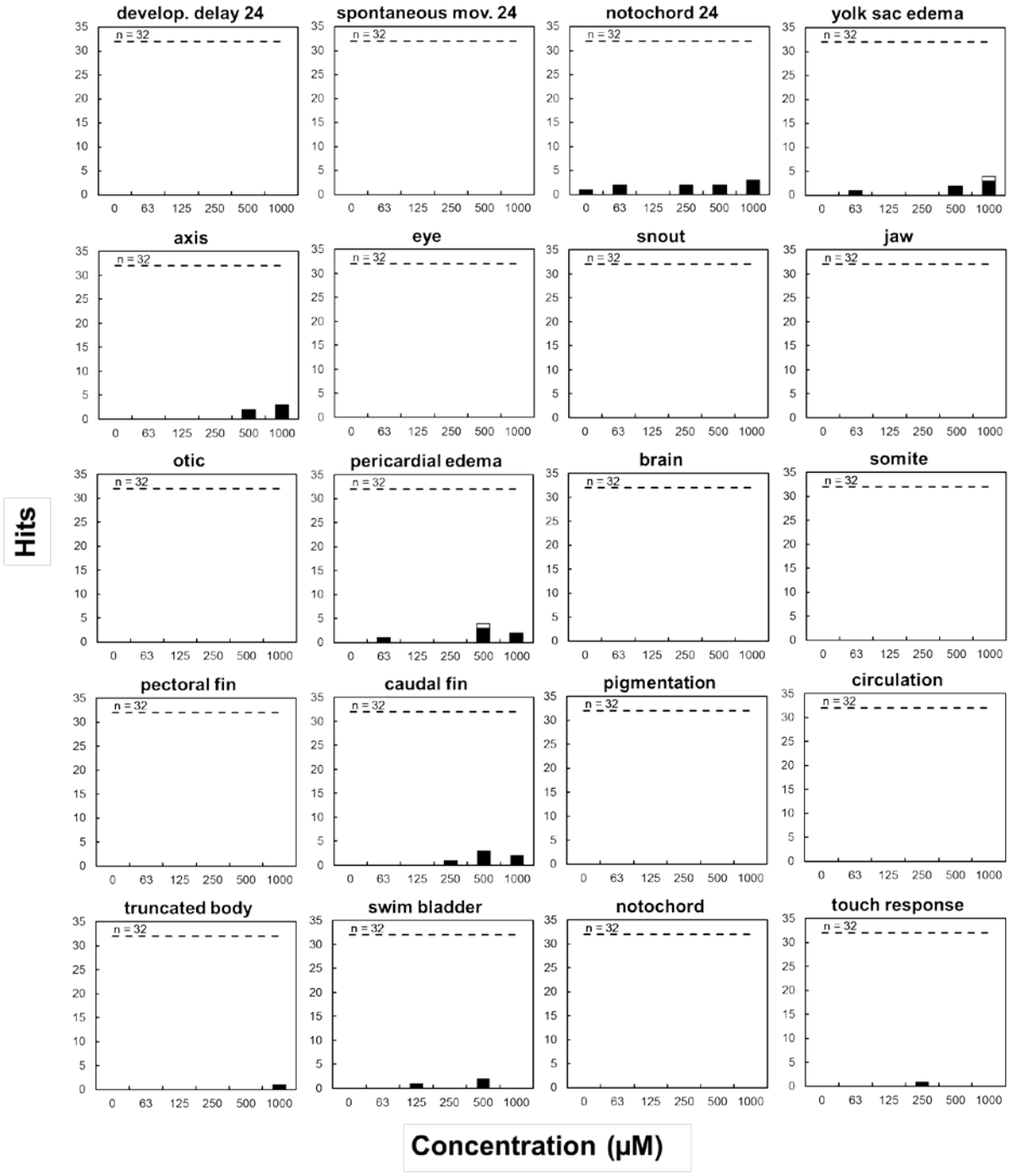

Fig. S-2. Activity of developmental endpoints in zebrafish embryo assay for As(III). Hits above statistical significance are shown in white. In all treatments and controls, the total number of embryos assayed was 32.

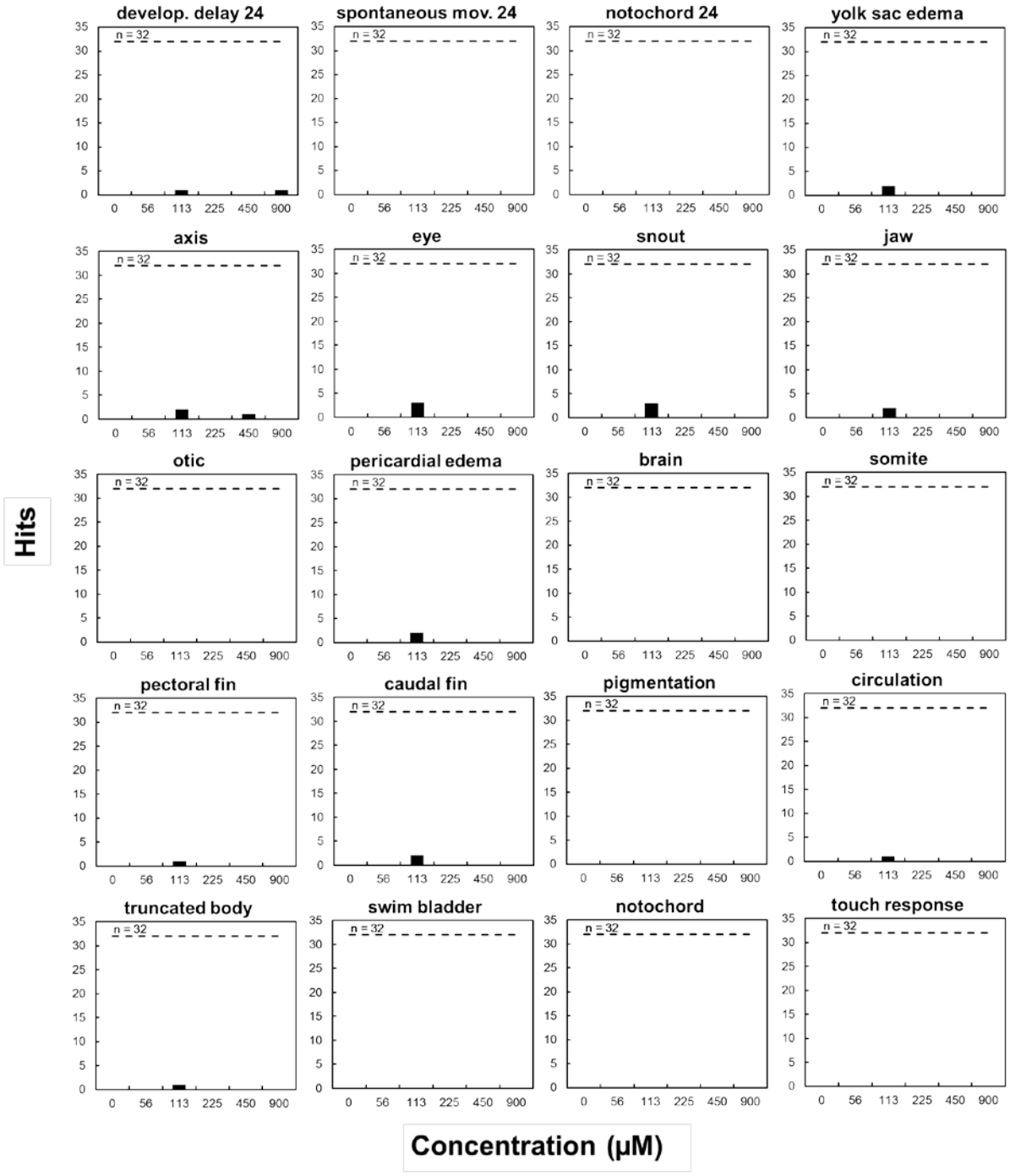

Fig. S-3. Activity of developmental endpoints in zebrafish embryo assay for Ga(III)-citrate. All hits below statistical significance. In all treatments and controls, the total number of embryos assayed was 32.

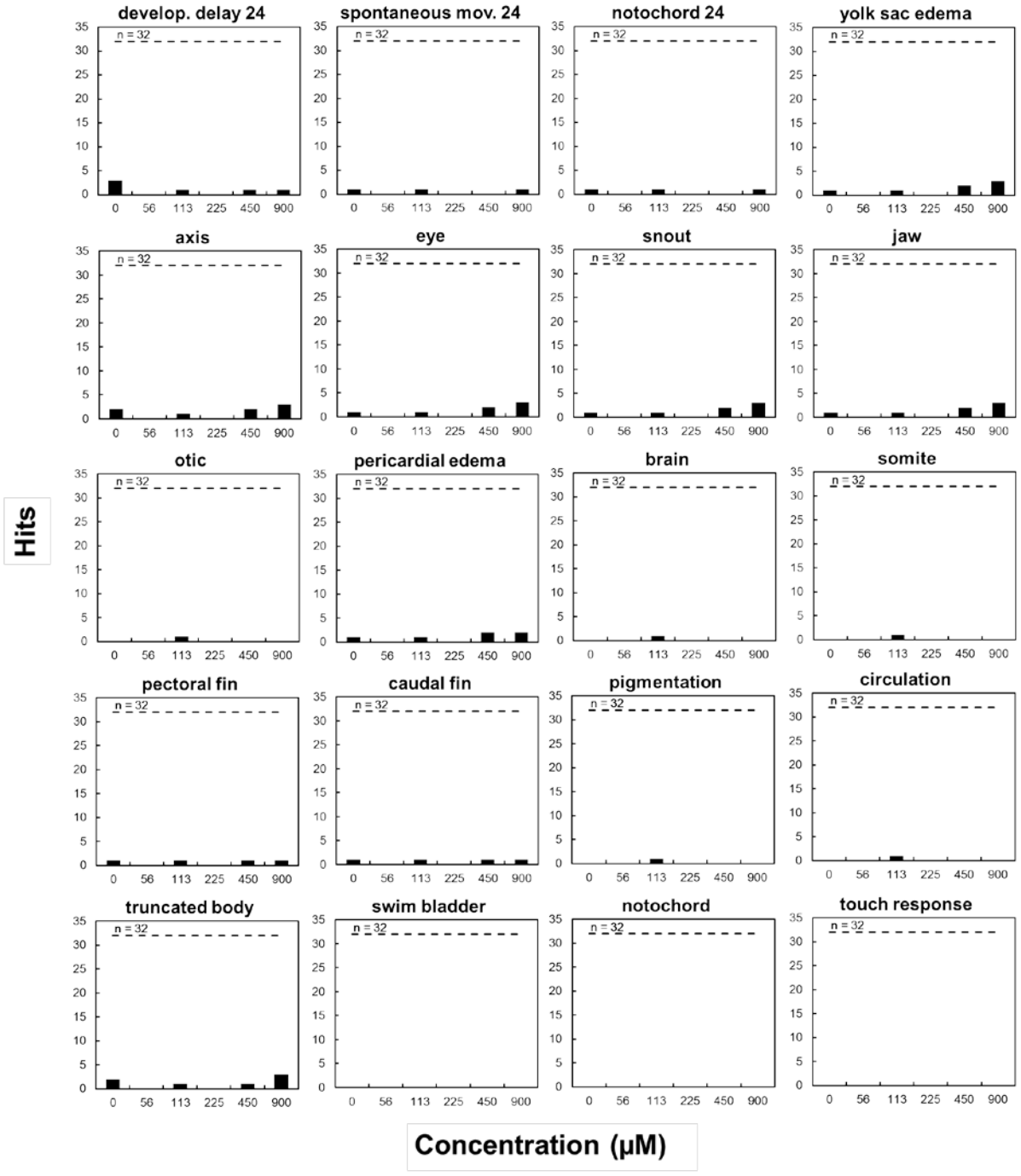

Fig. S-4. Activity of developmental endpoints in zebrafish embryo assay for In(III)-citrate. All hits below statistical significance. In all treatments and controls, the total number of embryos assayed was 32.

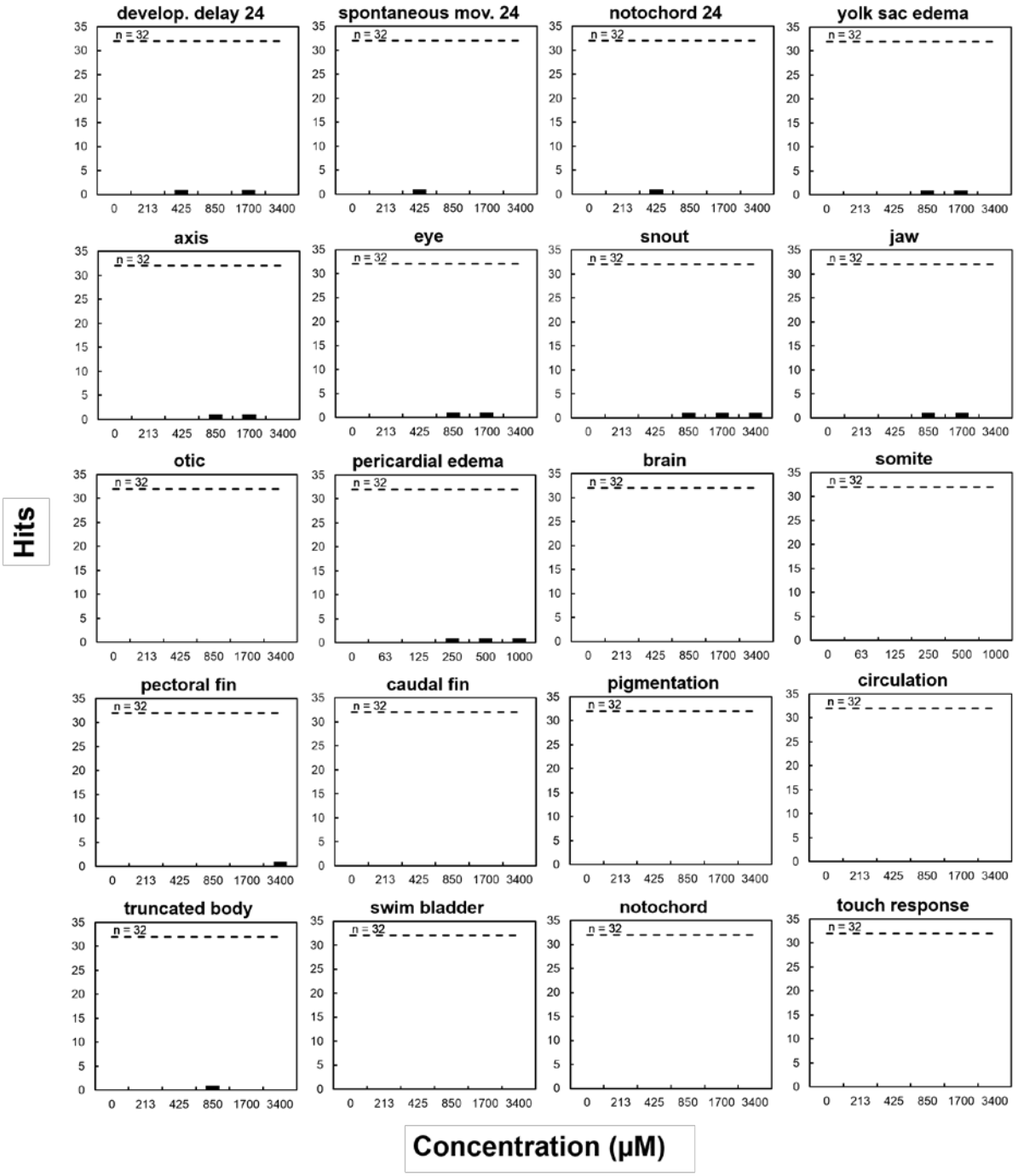

Fig. S-5. Activity of developmental toxicity and mortality endpoints in zebrafish embryo assay for sodium citrate. All hits below statistical significance. In all treatments and controls, the total number of embryos assayed was 32.

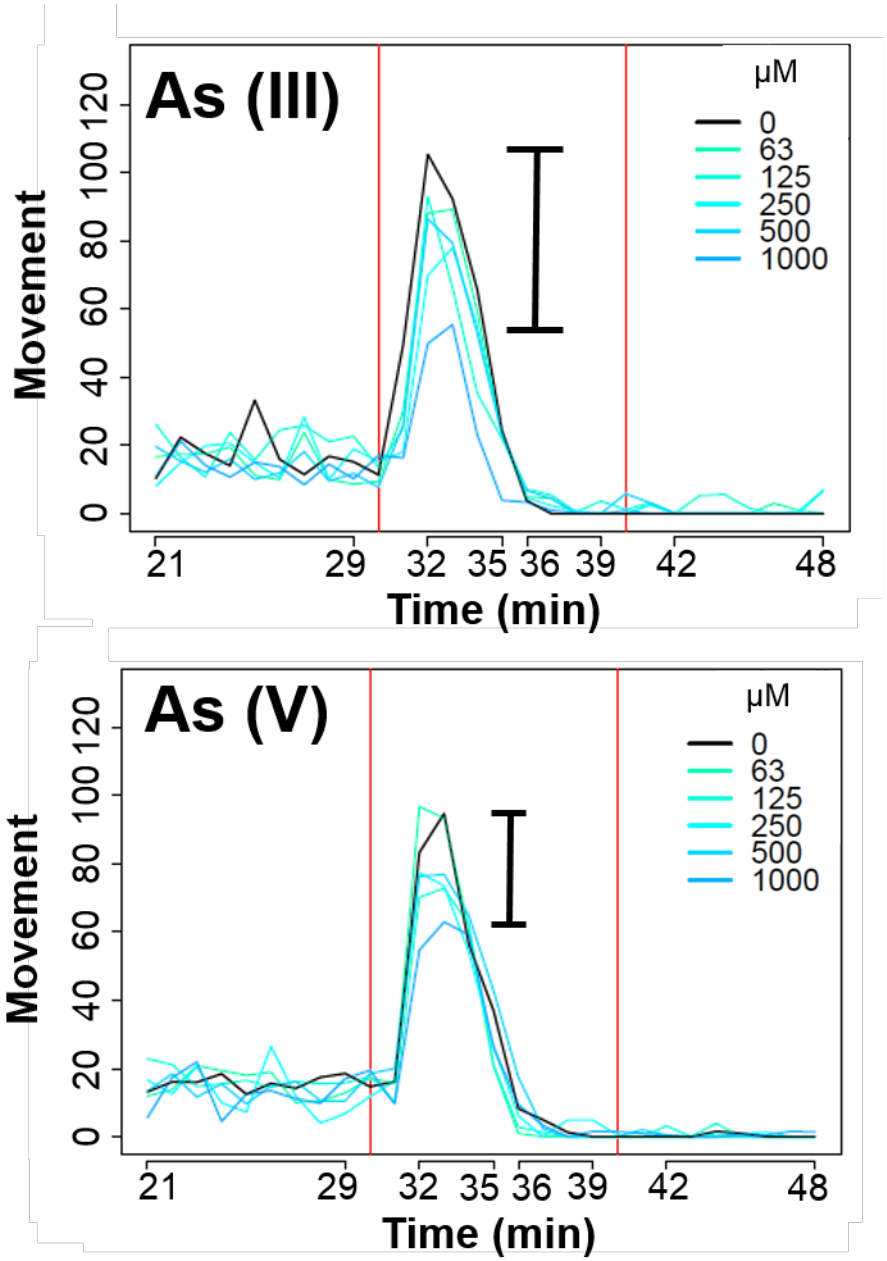

Fig. S-6. Photomotor behavioral assay: Average movement index for surviving embryos exposed to chemicals causing hypoactivity of the highest concentration tested with respect to the control (black tick line). Red line indicates a light pulse.

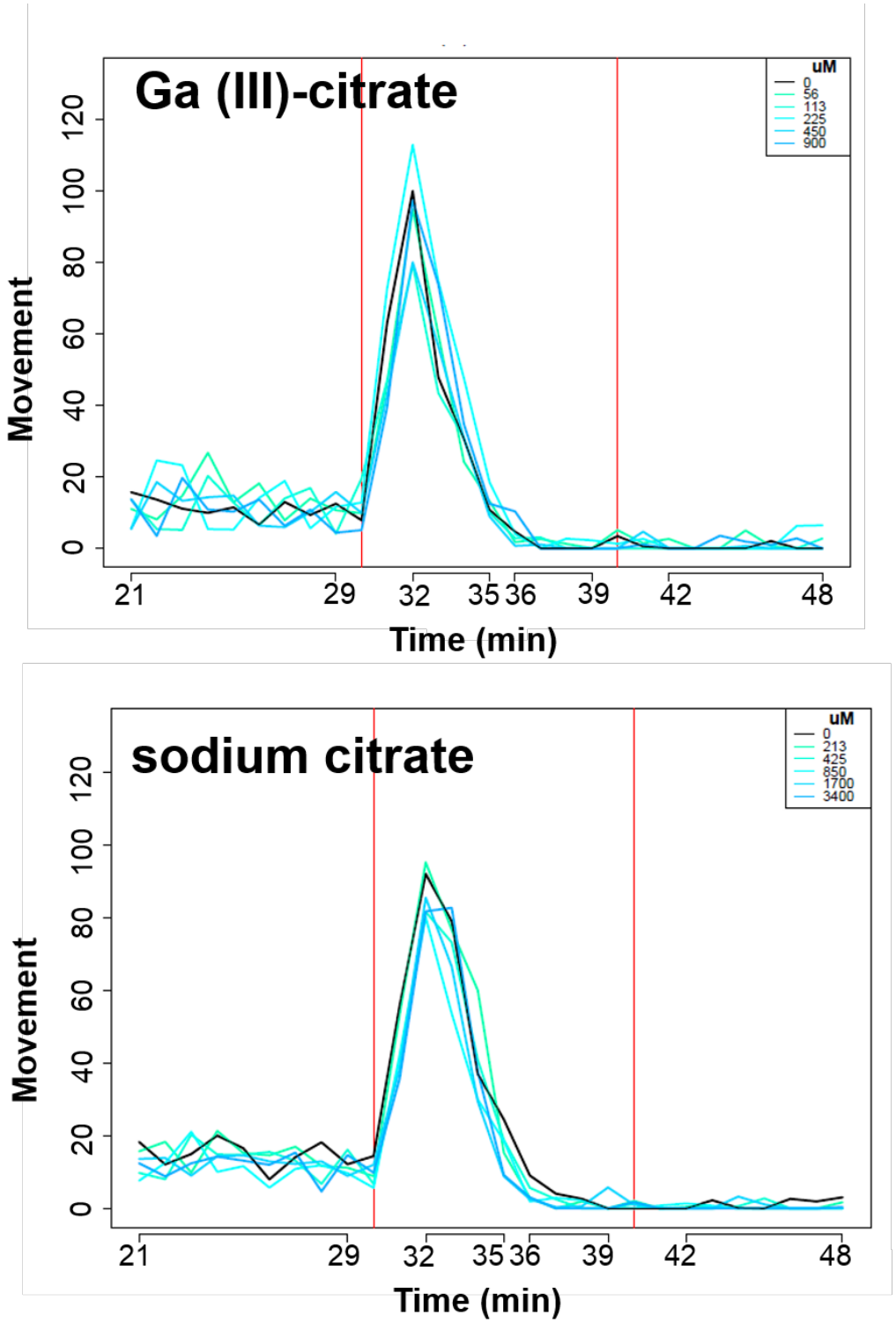

Fig. S-7. Photomotor behavioral assay: Average movement index for surviving embryos at 24 hpf exposed to chemicals tested for chemicals without significant difference response to toxicant-free controls.