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Seizures – like behavior assay for D. melanogaster

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We use this protocol and it's working

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Abstract

This protocol allows to assess the susceptibility of flies to seizure-like behavior based on mechanically hyper-stimulating sensory inputs and assessing seizure-like activity.

Seizures – like behavior assay

30m

1 prepare groups of 5 ± 1 flies and transfer them to transparent empty vials

2 let them rest for at least 00:30:00 after CO2 anesthesia

30m

3 mechanically stimulate the flies by vortexing the vial for 10 s at maximum intensity

4 move the vial immediatly on an even surface before a white background and start recording the behavior

5 Numbers of resistant flies and flies with seizure-like behavior are counted within 10 s post stimulation

Protocol references

Kuebler, D., and M. A. Tanouye. 2000. “Modifications of Seizure Susceptibility in Drosophila.” *Journal of Neurophysiology* 83 (2): 998–1009. https://doi.org/10.1152/jn.2000.83.2.998.