

Materials List for:

# An Automated Rapid Iterative Negative Geotaxis Assay for Analyzing Adult Climbing Behavior in a *Drosophila* Model of Neurodegeneration

Wenze Cao<sup>\*1,2,3</sup>, Li Song<sup>\*1,2,3</sup>, Jingjing Cheng<sup>1,2,3</sup>, Na Yi<sup>1,2,3</sup>, Luyi Cai<sup>1,2,3</sup>, Fu-de Huang<sup>4,5</sup>, Margaret Ho<sup>1,2,3</sup>

<sup>1</sup>Research Center for Translational Medicine, Tongji University School of Medicine

<sup>2</sup>Key Laboratory of Arrhythmias of the Ministry of Education of China, Shanghai East Hospital, Tongji University School of Medicine

<sup>3</sup>Department of Anatomy and Neurobiology, Tongji University School of Medicine

<sup>4</sup>Shanghai Advanced Research Institute, University of Chinese Academy of Sciences, Chinese Academy of Sciences

<sup>5</sup>Sino-Danish College, University of Chinese Academy of Sciences, Chinese Academy of Sciences

\* These authors contributed equally

Correspondence to: Margaret Ho at [margaret.mho@gmail.com](mailto:margaret.mho@gmail.com)

URL: <https://www.jove.com/video/56507>

DOI: [doi:10.3791/56507](https://doi.org/10.3791/56507)

## Materials

| Name                        | Company               | Catalog Number | Comments                |
|-----------------------------|-----------------------|----------------|-------------------------|
| Forma Environmental Chamber | Thermo                | 3949           |                         |
| Carbon dioxide cylinders    | FuLian GAS Technology | GB/T6052       |                         |
| HDR-Camcorder               | SONY                  | HDR-CX220E     |                         |
| Binocular stereomicroscope  | Xin Zhen              | SMZ-168BL      |                         |
| Electronic scales           | MinQiao               | SL1002N        |                         |
| Refrigerator                | Haier                 | SC-350         |                         |
| Agar-agar powder            | Sinopharm             | 10000561       |                         |
| Glucose                     | Sinopharm             | 10010518       |                         |
| Corn meal                   | Sinopharm             | 5464654        |                         |
| Brown sugar                 | LiuCaiYuan            | 45467936       |                         |
| Instant dry yeast           | AB MAURI              | 20886          |                         |
| AuxR <sup>16182</sup>       | VDRC                  | 7187           |                         |
| UAS-Dicer2                  | Bloomington           | 24650          |                         |
| UAS-mCD8GFP                 | Bloomington           | 32185          |                         |
| DDC-Gal4                    |                       |                | A gift from Fude Huang  |
| AuxGFP                      |                       |                | A gift from Henry Chang |