

Materials List for:

# In Vivo Functional Study of Disease-associated Rare Human Variants using *Drosophila*

J. Michael Harnish<sup>\*1</sup>, Samantha L. Deal<sup>\*2</sup>, Hsiao-Tuan Chao<sup>1,3,4,5</sup>, Michael F. Wangler<sup>1,2,4</sup>, Shinya Yamamoto<sup>1,2,4,5</sup>

<sup>1</sup>Department of Molecular and Human Genetics, Baylor College of Medicine

<sup>2</sup>Program in Developmental Biology, Baylor College of Medicine

<sup>3</sup>Department of Pediatrics, Section of Neurology and Developmental Neuroscience, Baylor College of Medicine

<sup>4</sup>Jan and Dan Duncan Neurological Research Institute, Texas Children's Hospital

<sup>5</sup>Department of Neuroscience, Baylor College of Medicine

\*These authors contributed equally

Correspondence to: Shinya Yamamoto at [yamamoto@bcm.edu](mailto:yamamoto@bcm.edu)

URL: <https://www.jove.com/video/59658>

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## Materials

| Name  | Company   | Catalog Number | Comments   |
|---|---|----------------|--|
| <b><i>Drosophila</i> Stocks for UAS-human cDNA transgenesis</b> |   |                |  |
| Injection strains for transgenesis ( <i>D. melanogaster</i> )   | BDSC  | #24871         | Specific Reagent: VK33 (3rd chromosome) Injection line |
| Injection strains for transgenesis ( <i>D. melanogaster</i> )   | BDSC  | #24872         | Specific Reagent: VK37 (2nd chromosome) Injection line |
| <b>Plasmid DNA</b>  |   |                |  |
| Cloning vector  | Thermo Fisher   | #12536-017     | Specific Reagent: pDONR221                             |
| <i>Drosophila</i> transgenesis vector                           | Gift from Drs. Johannes Bischof and Konrad Basler (Bischof et al., 2013 PNAS) |                | Specific Reagent: pGW-HA.attB                          |
| <b>Molecular biology kits and reagents</b>                      |   |                |  |
| Agarose   | Sigma-Aldrich   | #A2790         | Specific Reagent: Agarose (molecular biology grade)    |
| Chemically Competent Cells ( <i>E. coli</i> )                   | Thermo Fisher   | #18265017      | Specific Reagent: DH5α                                 |
| DNA Gel Extraction kit  | Thermo Fisher   | #K210012       | Specific Reagent: PureLink Gel Extraction Kit          |
| DNA Isolation and purification kit                              | Qiagen  | #27104         | Specific Reagent: QIAprep Spin Miniprep Kit            |
| High Fidelity Polymerase  | NEB   | #M0491         | Specific Reagent: Q5 Polymerase kit                    |
| Recombinase mediated cloning system                             | Thermo Fisher   | #11789020      | Specific Reagent: Gateway BP Clonase kit               |
| Recombinase mediated cloning system                             | Thermo Fisher   | #11791100      | Specific Reagent: Gateway LR Clonase II Enzyme kit     |
| Site Directed Mutagenesis kit                                   | Agilent   | #200523        | Specific Reagent: Quick Change II Mutagenesis kit      |
| <b>Electroretinogram Rig related equipment</b>                  |   |                |  |
| ERG Analysis  | Molecular Devices   | N/A            | Specific Reagent: Axon pCLAMP 10 Data Software Package |
| ERG Data Collection   | LabX  | #R150358       | Specific Reagent: ISO-DAM Isolated Biologic Amplifier  |

|                |           |      |   |
|----------------|-----------|------|---|
| ERG Stimulator | Astro-Med | #S48 | Specific Reagent: Square Pulse Stimulator |
|----------------|-----------|------|---|