## **Resource Summary Report**

Generated by <u>NIF</u> on May 24, 2025

# **Bloomington Drosophila Stock Center**

RRID:SCR\_006457 Type: Tool

#### **Proper Citation**

Bloomington Drosophila Stock Center (RRID:SCR\_006457)

#### **Resource Information**

URL: https://bdsc.indiana.edu/

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**Description:** Collects, maintains and distributes Drosophila melanogaster strains for research. Emphasis is placed on genetic tools that are useful to a broad range of investigations. These include basic stocks of flies used in genetic analysis such as marker, balancer, mapping, and transposon-tagging strains; mutant alleles of identified genes, including a large set of transposable element insertion alleles; defined sets of deficiencies and a variety of other chromosomal aberrations; engineered lines for somatic and germline clonal analysis; GAL4 and UAS lines for targeted gene expression; enhancer trap and lacZ-reporter strains with defined expression patterns for marking tissues; and a collection of transposon-induced lethal mutations.

Abbreviations: BDSC

Synonyms: Bloomington Drosophila Stock Center at Indiana University

Resource Type: material resource, biomaterial supply resource, organism supplier

**Keywords:** RIN, Resource Information Network, disease model, deficiency, deletion, transposon insertion, sequenced strain, duplication, protein trap, human disease model, transposon, fly, gene, genetic, genetic analysis, database, deficiency, germline, insertion, invertebrate, scientist, somatic, stock, transposon, mutation, genetic construct, FASEB list

Related Condition: Human disease model

Funding: NIH Office of the Director P40 OD018537

Availability: Public

Resource Name: Bloomington Drosophila Stock Center

Resource ID: SCR\_006457

Alternate IDs: nif-0000-00241

Alternate URLs: https://orip.nih.gov/comparative-medicine/programs/invertebrate-models

Old URLs: http://flystocks.bio.indiana.edu/bloomhome.htm

Record Creation Time: 20220129T080236+0000

Record Last Update: 20250524T060126+0000

#### **Ratings and Alerts**

No rating or validation information has been found for Bloomington Drosophila Stock Center.

No alerts have been found for Bloomington Drosophila Stock Center.

#### Data and Source Information

Source: <u>SciCrunch Registry</u>

### **Usage and Citation Metrics**

We found 2317 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Stavrovskaya I, et al. (2025) Mitochondrial ROS modulate presynaptic plasticity in the drosophila neuromuscular junction. Redox biology, 79, 103474.

Li H, et al. (2024) Dynamic encoding of temperature in the central circadian circuit coordinates physiological activities. Nature communications, 15(1), 2834.

Sember E, et al. (2024) Dietary restriction fails to extend lifespan of Drosophila model of Werner syndrome. G3 (Bethesda, Md.), 14(5).

Sutton DC, et al. (2024) Comparative exploration of mammalian deafness gene homologues in the Drosophila auditory organ shows genetic correlation between insect and vertebrate hearing. PloS one, 19(2), e0297846.

Ott RK, et al. (2024) Improved whole-mount immunofluorescence protocol for consistent and

robust labeling of adult Drosophila melanogaster adipose tissue. Biology open, 13(8).

Blanchard GB, et al. (2024) Mechanical stress combines with planar polarised patterning during metaphase to orient embryonic epithelial cell divisions. Development (Cambridge, England), 151(10).

Santinello B, et al. (2024) A centromere-derived retroelement RNA localizes in cis and is a core element of the transcriptional landscape of Drosophila centromeres. bioRxiv : the preprint server for biology.

Gardeux V, et al. (2024) DGRPool, a web tool leveraging harmonized Drosophila Genetic Reference Panel phenotyping data for the study of complex traits. eLife, 12.

Chabot BJ, et al. (2024) Transcription of a centromere-enriched retroelement and local retention of its RNA are significant features of the CENP-A chromatin landscape. Genome biology, 25(1), 295.

Brantley SE, et al. (2024) Host JAK-STAT activity is a target of parasitoid wasp virulence strategies. PLoS pathogens, 20(7), e1012349.

Poidevin M, et al. (2024) A fatty acid anabolic pathway in specialized-cells sustains a remote signal that controls egg activation in Drosophila. PLoS genetics, 20(3), e1011186.

Goyal M, et al. (2024) Maternally-Activated Lineage Tracing (Raeppli) To Determine Anlagen Size in Drosophila. microPublication biology, 2024.

Zheng X, et al. (2024) An Introductory Guide to Using Bloomington Drosophila Stock Center and FlyBase for Aging Research. Cells, 13(14).

Shrestha B, et al. (2024) Pharyngeal neuronal mechanisms governing sour taste perception in Drosophila melanogaster. eLife, 13.

Nagai H, et al. (2024) Highly regenerative species-specific genes improve age-associated features in the adult Drosophila midgut. BMC biology, 22(1), 157.

Lye CM, et al. (2024) Polarised cell intercalation during Drosophila axis extension is robust to an orthogonal pull by the invaginating mesoderm. PLoS biology, 22(4), e3002611.

Martinez A, et al. (2024) Mitochondrial CISD1/Cisd accumulation blocks mitophagy and genetic or pharmacological inhibition rescues neurodegenerative phenotypes in Pink1/parkin models. Molecular neurodegeneration, 19(1), 12.

González C, et al. (2024) Dysfunction of Drosophila mitochondrial carrier homolog (Mtch) alters apoptosis and disturbs development. FEBS open bio, 14(2), 276.

Fleck SA, et al. (2024) Auxin exposure disrupts feeding behavior and fatty acid metabolism in adult Drosophila. eLife, 12.

Pipkin HJJ, et al. (2024) An accessible digital imaging workflow for multiplexed quantitative analysis of adult eye phenotypes in Drosophila melanogaster. bioRxiv : the preprint server

for biology.