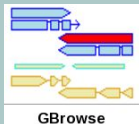
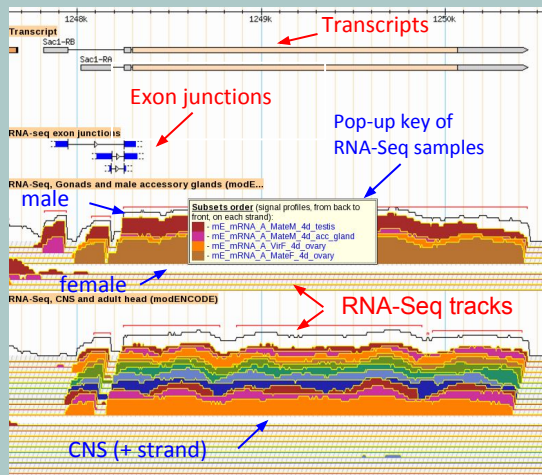


# Genomic Data: GBrowse



~100 tracks of diverse genomic data displayed in GBrowse genome viewer including gene models, TSS data, protein domains, regulatory features, and much more...

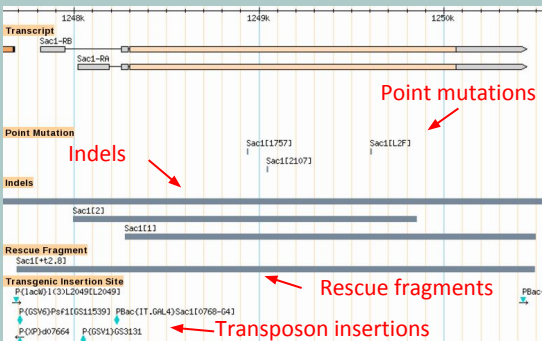
## RNA-Seq expression and exon junctions



FlyBase's unique "topview" display allows many RNA-Seq samples to be viewed at once. Click on wrench icon to change from log2 to linear scale.



## Mapped Mutations



Point mutations, indels, rescue fragments, insertions shown and linked to FlyBase reports.

# Data Downloads

## Precomputed Files

- Gene Data
- Genetic Interactions
- FBgn ↔ CG
- Genome Sequences
- Transgenic Insertions
- FASTA by feature
- ...and much more!

Downloads	Links
Overview	
Current release	
Archived releases	
Map Conversion	
<b>FTP site:</b>	
Releases (FTP)	
Genomes (FTP)	

## Batch Download by ID

Tools	Downloads	Links
Tools Overview		
Query Tools and Portals		Generate <b>custom</b> data files
Genomic/Map Tools		or web page displays.
RNA-Seq		
Retrieve/Convert Tools	Batch Download	
Data Submission	Coordinates Converter	
People	Upload/Convert IDs	

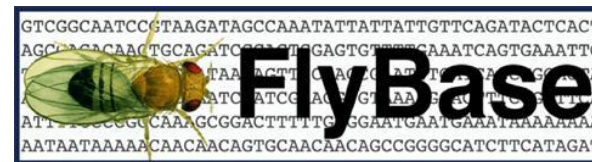
Batch Download

Output Format	Output Options
<input type="radio"/> FASTA Sequence	Gene region
<input type="radio"/> Database Format Full Data Only	Chado XML
<input checked="" type="radio"/> Field Data Selected Fields Only	As HTML table

Send results to:  Enter IDs, Symbols or Sequence Coordinates:  or Upload File of IDs:  No file chosen

Allow synonyms

1. Choose output data type.
2. Input FB identifiers.
3. Choose fields for display.



A Database of *Drosophila* Genes and Genomes

# General Information

Quick Search

Report Pages

Obtaining Fly Reagents

Genomic Data

Data Downloads

[www.flybase.org](http://www.flybase.org)

FlyBase is supported by a grant from the National Human Genome Research Institute at the U.S. National Institutes of Health #U41 HG000739. Support is also provided by the British Medical Research Council and the Indiana Genomics Initiative.

# Quick Search

## Simple Search

QuickSearch

Human Disease Expression GO Phenotype References

Simple Orthologs **NEW** Protein Domains Gene Groups Data Class

Species:  include non-Dmel species

Enter text:

Note: Wild cards (\*) can be added to your search term

- Searches text in all report sections.
- Access to **all** report pages.
- Search is of text string; beware of false positives!

## Data Class Search

QuickSearch

Human Disease Expression GO Phenotype References

Simple Orthologs **NEW** Protein Domains Gene Groups **Data Class**

Species:  include non-Dmel species

Search:  ID/Symbol/Name  All text

Data Class:

Enter text:

QuickSearch autocomplete:

Note: Wild cards (\*) can be added to your search term

**FlyBase Data Classes**

All data classes

aberrations

alleles

balancers

cell lines

clones

genes

insertions

physical interactions

large dataset metadata

natural transposons

polypeptides

recombinant constructs

sequence features

stocks

transcripts

**Other**

- Search main data classes.
- Search any single data class, or all data classes.
- Robust autocomplete.
- Precise results.

## Specialized Search Tabs

QuickSearch

Human Disease Expression GO Phenotype **References** Data Class

Simple Orthologs **NEW** Protein Domains Gene Groups Data Class

\*Author(s)

Year(s)

Title/Abstract

\*Journal

QuickSearch autocomplete:

Note: Wild cards (\*) can be added to your search term

\*Author(s)

Year(s)

Title/Abstract

\*Journal

All report fields

\*Publication type

FBrf/PMID/PMCID/DOI

- Search very specific data.
- Includes our newest data classes.
- Allows complex searches of some data classes.

# Report Pages

## Example Report Page

- Report pages are available for **every** object in FlyBase, e.g. Genes, Alleles, Controlled Vocabulary terms, etc.
- Use 'Open all' to see all the information available and 'Close all' to minimize the page.
- Click **Help** to learn about different fields.

FlyBase Gene Dmelrut

Home Tools Downloads Links Community Species About Help Archives **Run to Gene**

FlyGene Wiki

**General Information**

Symbol	Dmelrut	Species	D. melanogaster
Name	rutabaga	Annotation symbol	CG9533
Feature type	protein_coding_gene	FlyBase ID	FBgn003301
Gene Model Status	Current	Stock availability	14 publicly available

**Genomic Location**

Cytogenetic map	12F4-12F5	Sequence location	X:14,767,478..14,826,073 [ ]
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**Genomic Maps**

GBrowse

**Families, Domains and Molecular Function**

Gene Group Membership (FlyBase)  
Contains 2 guanylate cyclase domains. (P32870)

Protein Family (UniProt, Sequence Similarities)  
UniProt (Sequence Similarities)  
Contains 2 guanylate cyclase domains. (P32870)

Protein Domains/Motifs  
UniProt (Sequence Similarities)  
Contains 2 guanylate cyclase domains. (P32870)

InterPro  
Adenylyl cyclase class-3/4/guanylyl cyclase; Adenylyl cyclase, conserved domain; Adenylyl cyclase class-4/guanylyl cyclase, conserved site; Nucleotide cyclase; Adenylyl cyclase, N-terminal

Molecular Function (see GO section for details)  
Experimental Evidence  
calcium- and calmodulin-responsive adenylyl cyclase activity

Predictions/Assertions  
adenylyl cyclase activity; calcium- and calmodulin-responsive adenylyl cyclase activity

Gene Ontology (GO): (31 terms)

- Molecular Function (2 terms)
- Biological Process (26 terms)
- Cellular Component (3 terms)
- Summaries
- Recent Updates

Expand any individual section by clicking the plus icon located to the left of the title.

- Summaries
- Recent Updates
- Interactions and Pathways
- Expression Data
- Alleles and Phenotypes

**Recent Updates**

Description	What does this section display?
	This section contains items that were added between this FlyBase report and other FlyBase reports. It includes new vocabulary terms (e.g. GO, anatomy terms).
	<b>What does this section not display?</b>
	This section does not currently display items that were added to other FlyBase reports.

# Obtaining Fly Reagents

## Stocks and Reagents

Scroll down on any Gene Report for the Stocks and Reagents table.

- Stocks and Reagents
- Stocks Listed in FlyBase ( 146 )
- Genomic Clones ( 18 )
- cDNA Clones ( 68 )
- RNAi and Array Information
- Antibody Information

Expand any section for links and additional information.

**Stocks and Reagents**

- Stocks Listed in FlyBase ( 14 )
- Genomic Clones ( 25 )
- cDNA Clones ( 220 )

List GenBank IDs

Please Note  
This section lists cDNAs and ESTs that fall within the genomic extent and ESTs of genes within introns, or of overlapping genes. Please see ESTs to the gene model.

cDNA Clones, Fully Sequenced  
BDGP DGC clones

For example, follow the BDGP DGC clone link to order this clone from the DGRC (via the "Linkout" section on the next page).

## Stock Collections Link

- Links Community
- External Resources
  - Model Organisms (MODs)
  - Stock Collections

View a complete list of Stock Collections by following the link in the top dropdown menu.