

# FlyGene Wiki and FTYP

At the top of every gene report there is a link to our community-generated gene wiki

Simply register on the wiki to be able to edit the gene summaries and add your take on a particular gene

## Fast Track Your Paper

- Six steps:
1. Find your paper
  2. Identify yourself
  3. Indicate the data-types in the publication
  4. Identify the genes
  5. Provide information on new antibodies
  6. Confirm your submission

form continues...

# QuickSearch

Six tabs, many allowing controlled vocabulary searches:

"Simple" searches all text in all fields on every report

Note: The more boxes you fill out, the greater the chance you'll not get any hits. Try starting your search more broadly. Autocomplete in every controlled vocabulary box

Continue your search using the Refinement and HitList Conversion Tools



A Database of *Drosophila* Genes and Genomes

# What's New 2013

Genomic data and how to search for it

GBrowse 2 and FeatureMapper

High-throughput Expression Data

FlyGene Wiki and FTYP

QuickSearch

www.flybase.org

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# Searching large datasets

## Large Dataset Metadata (LDM) Reports

These reports contain information such as:

- Description of dataset
- Experimental procedures
- List of related datasets (parent or child)
- Link to list or file of dataset members

## Search Options

- QuickSearch allows you to search all fields on the LDM reports at once. To search for modENCODE data sets:

QuickSearch interface showing search options for modENCODE data sets. The search box contains 'modENCODE'. The 'Data Class' is set to 'large dataset metadata'. The 'Species' is set to 'D. melanogaster'. The 'Search' button is highlighted in green.

- QueryBuilder allows searches by specific field

## GBrowse Track labels link to relevant LDM reports

GBrowse Track labels showing various genomic features. The labels are: Insulator class I, Insulator class II, Protein Binding Site, Enhancer, Silencer, Regulatory Region, TFBS - HOT spot analysis, and TFBS - zinc finger domain.

GBrowse1  
GBrowse2(beta)

Sequence Feature reports contain links to datasets of which the feature is a member

General Information	
Symbol	Insulator_I_1800
Feature type	insulator
Collection	Insulator_Class_I_mE01

# FeatureMapper

**Purpose:** to identify features within a sequence range of interest:

- Features include insulators, transcription factor binding sites, point mutations, RNA editing sites, etc.
- Can search within genes, upstream of genes, downstream of genes, or within any desired sequence (enter sequence coordinates directly into search box)

FeatureMapper Mapping Options interface. The search box contains 'abd-A'. The 'Set region type to map' is set to 'Only Sequence Upstream of the Landmark'. The 'Range' is set to '10 Kb'. The 'Species' is set to 'D. melanogaster'. The 'Map Features' section includes checkboxes for various genomic features like Genes, mRNA, TFBS, etc.

Output lists features found within each landmark (in this case, 10kb upstream of several genes, *abd-A* shown). Features can also be downloaded in GFF format.

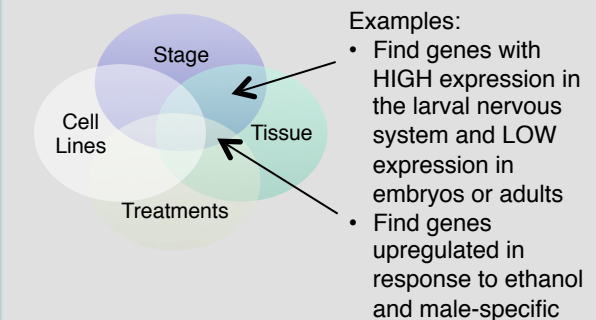
FeatureMapper output for the *abd-A* gene. The output lists features found within each landmark, such as TFBS - BTB/POZ domain, TFBS - helix-loop-helix domain, and TFBS - homeodomain. Each feature is associated with genomic coordinates and a feature ID.

# Expression data update

## High throughput expression search

High throughput expression search interface. The search box contains 'abd-A'. The 'Species' is set to 'D. melanogaster'. The 'Stage' is set to 'third instar larval stage'. The 'Tissue' is set to 'neuron'. The 'Cell Loc.' is set to 'growth cone'. The 'Search' button is highlighted in green.

- Identify sets of genes with similar expression patterns. There are currently four types of expression patterns that can be searched.
- You can search one more at a time
- Expression can be selected to be high or low for each subset



- Examples:
- Find genes with HIGH expression in the larval nervous system and LOW expression in embryos or adults
  - Find genes upregulated in response to ethanol and male-specific

## Expression section of the Gene Report

New sub-section: expression deduced from reporters

Expression Data section of a Gene Report. The section shows transcript expression, polypeptide expression, and expression deduced from reporters. The reporter is identified as P(Ser-GAL4.GF). The table below shows the expression data for the reporter.

Stage	Tissue/Position (including subcellular loc)
third instar larval stage	wing disc   distal
	wing disc   dorsal
wandering third instar larval stage	embryonic/larval proventriculus
	wing disc   restricted