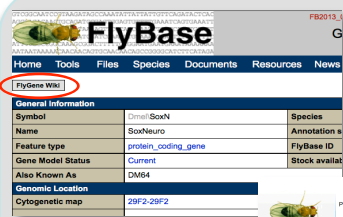


FlyGene Wiki and FTYP



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

Indicate Data Types in Publication

Drosophila Reagents

Gene Characterization

Expression

Phenotypes & Interactions

Genome Annotation Data

form continues...

QuickSearch

Six tabs, many allowing controlled vocabulary searches:

QuickSearch

Simple Expression Phenotype GO References Data Type

Species: include non-Dmel species

Enter text:

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

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

QuickSearch

Simple Expression Phenotype GO References Data Type

Phenotypic class:

refinement:

Tissue/cell affected:

refinement:

Autocomplete every controlled vocabulary box

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

QuickSearch

Simple Expression Phenotype GO References Data Type

Phenotypic class: apoptosis defective

refinement: embryonic and:

Tissue/cell affected: embryonic stage and:

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

87 matches to query (apoptosis defective)embryonic stage

#	Symbol	Class	Inserted Element	Stocks	Mutagen	HitList Conversion
1	DNase1 ^h	hypomorphic allele - genetic evidence	-	5	ethyl methane sulfonate	Yes
2	dsh ¹	loss of function allele	-	-	-	-

EXPLORE selected HITS TO: Batch Download, QueryBuilder (new session), FlyBase IDs file (to store on your computer), Cross-referencing FlyBase Records Table, Get FlyBase-curated external data links (for associated genes): Protein Data, Protein Domains, Get LinkOut external data links (for associated genes): FlyExpress - Expression Pattern Search, Fly GRID Interaction Data, FlyAtlas - Drosophila adult expression atlas, FLIGHT - Integrating Genomic and High-Throughput data, DRSC - Drosophila RNAi Screening Center, DEEB - Drosophila melanogaster Exon Database, FlyMine - integrated genomics and proteomics, NCBI Gene Expression Omnibus (GEO), Heidelberg Database for RNAi Phenotypes

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

FlyBase is supported by a grant from the National Human Genome Research Institute (NHGRI) at NIH #P41 HG000739. Support is also provided by the British Medical Research Council and the Indiana Genomics Initiative.

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 and a search term 'modENCODE'.

- QueryBuilder allows searches by specific field

GBrowse Track labels link to relevant LDM reports

- Insulator class I
- Silencer
- Insulator class II
- Regulatory Region
- Protein Binding Site
- TFBS - HOT spot analysis
- Enhancer
- TFBS - zinc finger domain

- Insulator class I [?]
- TFBS - HOT
- Insulator class II [?]
- TFBS - zinc f
- Protein Binding Site [?]
- TFBS - home
- Enhancer [?]
- TFBS - helix-

GBrowse1 GBrowse2

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 interface showing mapping options and a search term 'abd-A'.

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.

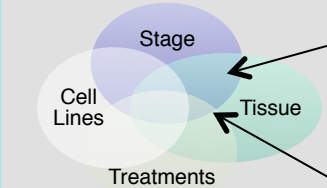
abd-A			
TFBS - BTB/POZ domain	3R:12655495..12655611	TF_binding_site:mE1_TFBS_Tri	TFBS_Tri_004327
	3R:12660020..12660915	TF_binding_site:mE1_TFBS_bab1	TFBS_bab1_000832
TFBS - helix-loop-helix domain	3R:12654562..12655601	TF_binding_site-BD1NP1_TFBS_tw	TFBS_tw_009450
	3R:12655358..12656348	TF_binding_site-BD1NP1_TFBS_da	TFBS_da_006895
	3R:12656383..12656620	TF_binding_site-BD1NP1_TFBS_da	TFBS_da_006896
	3R:12658080..12659589	TF_binding_site-BD1NP1_TFBS_tw	TFBS_tw_009461
	3R:12658442..12659415	TF_binding_site-BD1NP1_TFBS_da	TFBS_da_006897
	3R:12664157..12664822	TF_binding_site-BD1NP1_TFBS_tw	TFBS_tw_009462
	3R:12664490..12665514	TF_binding_site-BD1NP1_TFBS_da	TFBS_da_006898
	3R:12665514..12666521	TF_binding_site-BD1NP1_TFBS_da	TFBS_da_006899
TFBS - homeodomain	3R:12651409..12655530	TF_binding_site:mE1_TFBS_cad	TFBS_cad_007589
	3R:12655498..12656501	TF_binding_site-BD1NP1_TFBS_z	TFBS_z_001772
	3R:12656545..12657558	TF_binding_site-BD1NP1_TFBS_z	TFBS_z_001773
	3R:12657150..12660879	TF_binding_site:mE1_TFBS_cad	TFBS_cad_007590
	3R:12657594..12658581	TF_binding_site-BD1NP1_TFBS_z	TFBS_z_001774
	3R:12658625..12659630	TF_binding_site-BD1NP1_TFBS_z	TFBS_z_001775
	3R:12659656..12659980	TF_binding_site-BD1NP1_TFBS_z	TFBS_z_001776
	3R:12660203..12660370	TF_binding_site-BD1NP1_TFBS_z	TFBS_z_001777

Expression data update

High throughput expression search

High throughput expression search interface showing search options and a search term 'abd-A'.

- 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	
<input type="checkbox"/>	Transcript Expression
<input type="checkbox"/>	Polypeptide Expression
<input type="checkbox"/>	Expression Deduced from Reporters
Reporter: P(Ser-GAL4.GF)	
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
<input type="checkbox"/>	High-Throughput Expression Data
<input type="checkbox"/>	Expression Clusters
<input type="checkbox"/>	External Data & Images