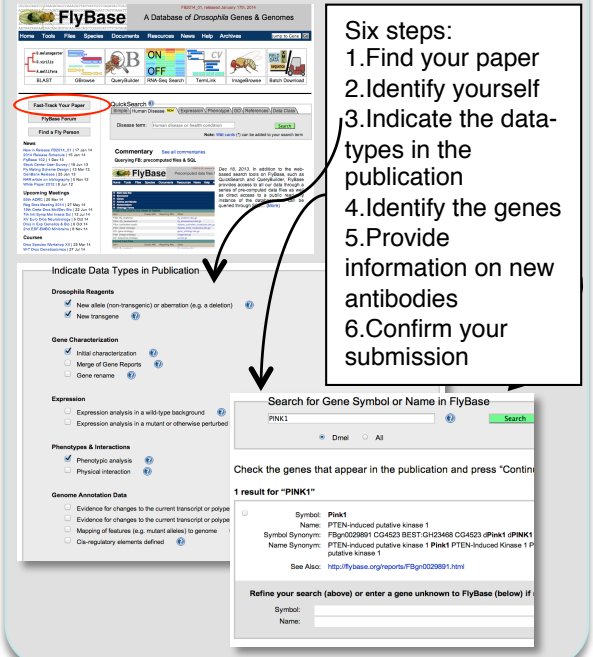
Get your paper into FlyBase

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

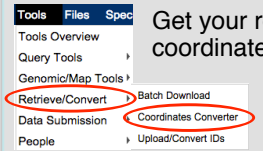
FlyBase Community Advisory Group

The FlyBase Community Advisory Group (FCAG) was launched in September 2014 with the aim of gaining greater feedback from the community about changes in FlyBase. The group consists of representatives from any lab worldwide that uses FlyBase as part of its research, and in just 6 months we already have over 550 members from more than 40 countries. If you would like to be involved, please see http://tinyurl.com/FlyBaseFCAG

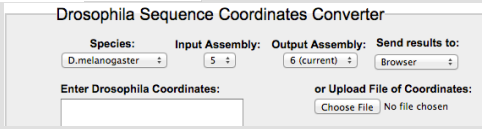
Genomes:
new assemblies, new gene models

2 New and Improved Genome Assemblies

- Release 6 is now the *Drosophila melanogaster* reference assembly



Get your release 5 data into release 6 coordinates using our coordinates converter tool



- The new reference assembly for *D. simulans* is that of Hu *et al.* (FBrf0220370) on strain W[501] and is designated release 2.
- Due to the scale of changes between the two assemblies we are not providing a converter for this species but see NCBIs remap service for options http://www.ncbi.nlm.nih.gov/genome/tools/remap.

5 New and Improved Automated Annotation Sets based on NCBI Gnomon

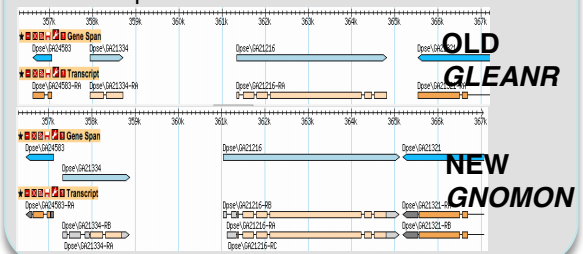
http://www.ncbi.nlm.nih.gov/genome/guide/gnomon.shtml

- *D. simulans*
- *D. pseudoobscura*
- *D. erecta*
- *D. ananassae*
- *D. Yakuba*

And Coming Soon

- *D. virilis*
- *D. mojavensis*
- *D. willistoni*

- RNAseq input adds UTRs and alternate transcript models



FlyBase

A Database of *Drosophila* Genes and Genomes

What's New 2015

- Gene Groups
- New GBrowse2 options
- Human Disease Models
- Get your paper into FlyBase
- Community Advisory Group
- Genomes: new assemblies, new gene models

www.flybase.org

FlyBase is supported by a grant from the National Human Genome Research Institute (NHGRI) at NIH #U41HG000739. Support is also provided by the British Medical Research Council and the Indiana Genomics Initiative.

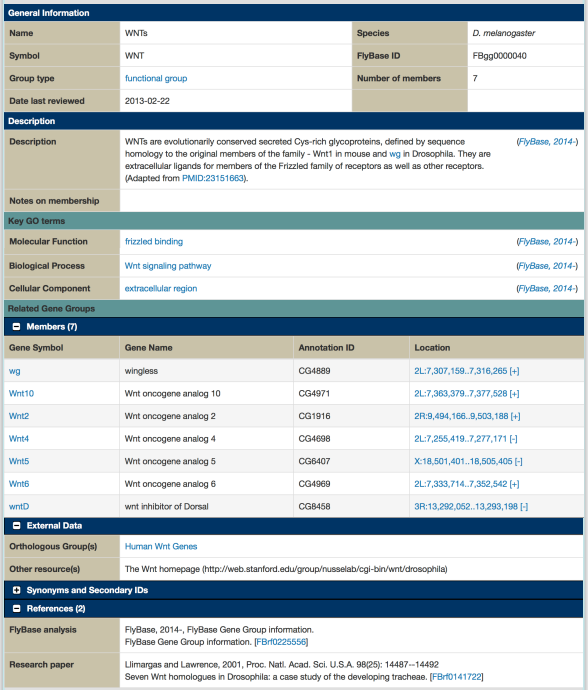
Gene Group Reports

Gene Groups

These new Reports bring together genes that are acknowledged to form a biological group, such as members of a gene family (e.g. Actins, Wnts) or subunits of a protein complex (e.g. proteasome, ribosome).

Gene Group Reports include:

- Group description & membership criteria
- Table of members
- Key Gene Ontology terms
- Links to related groups in FlyBase
- External links to orthologous groups
- Export/Download options for further analysis
- Source references



General Information			
Name	WNTs	Species	*D. melanogaster*
Symbol	WNT	FlyBase ID	FBgg0000040
Group type	functional group	Number of members	7
Date last reviewed	2013-02-22		

Description

Description: WNTs are evolutionarily conserved secreted Cys-rich glycoproteins, defined by sequence homology to the original members of the family - Wnt1 in mouse and wg in Drosophila. They are extracellular ligands for members of the Frizzled family of receptors as well as other receptors. (Adapted from PMID:23151663). (*FlyBase, 2014-*)

Notes on membership:

Key GO terms

Molecular Function	frizzled binding	(*FlyBase, 2014-*)
Biological Process	Wnt signaling pathway	(*FlyBase, 2014-*)
Cellular Component	extracellular region	(*FlyBase, 2014-*)

Related Gene Groups

Members (7)

Gene Symbol	Gene Name	Annotation ID	Location
wg	wingless	CG4889	2L:7,307,159..7,316,265 [+]
Wnt10	Wnt oncogene analog 10	CG4971	2L:7,363,379..7,377,528 [+]
Wnt2	Wnt oncogene analog 2	CG1916	2R:9,494,166..9,503,188 [+]
Wnt4	Wnt oncogene analog 4	CG4698	2L:7,255,419..7,277,171 [-]
Wnt5	Wnt oncogene analog 5	CG6407	X:18,501,401..18,505,405 [-]
Wnt6	Wnt oncogene analog 6	CG4969	2L:7,333,714..7,352,542 [+]
wntD	wnt inhibitor of Dorsal	CG8458	3R:13,292,052..13,293,198 [-]

External Data

Orthologous Group(s)	Human Wnt Genes
Other resource(s)	The Wnt homepage (http://web.stanford.edu/group/nusselab/cgi-bin/wnt/drosophila)

Synonyms and Secondary IDs

References (2)

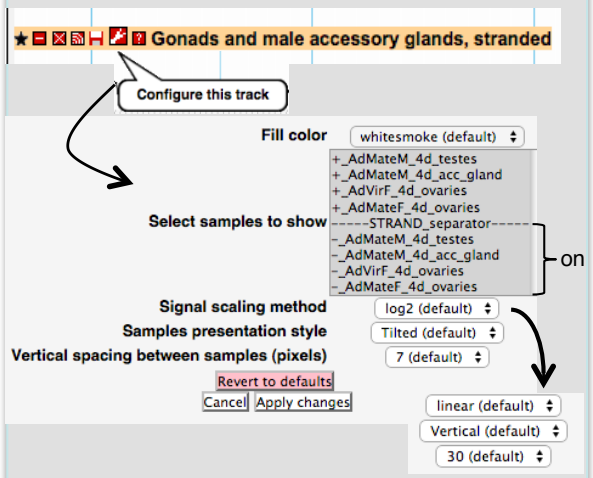
FlyBase analysis	FlyBase, 2014-, FlyBase Gene Group information. FlyBase Gene Group information. [FBrf0225556]
Research paper	Llimargas and Lawrence, 2001, Proc. Natl. Acad. Sci. U.S.A. 98(25): 14487--14492 Seven Wnt homologues in Drosophila: a case study of the developing tracheae. [FBrf0141722]

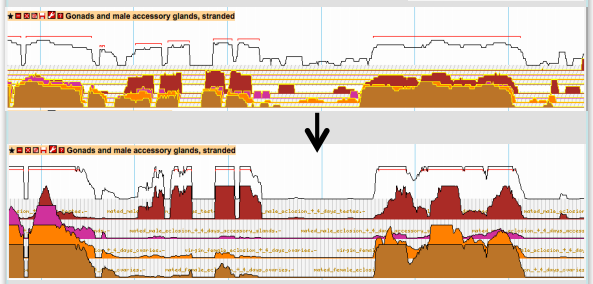
Available in the FB2015_02 release, April 2015.

New GBrowse2 options

Check out track toolbar options, including:

- RNA-Seq track configuration options include linear scaling and increased spacing.

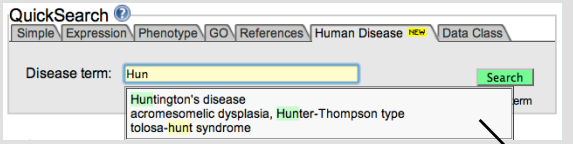




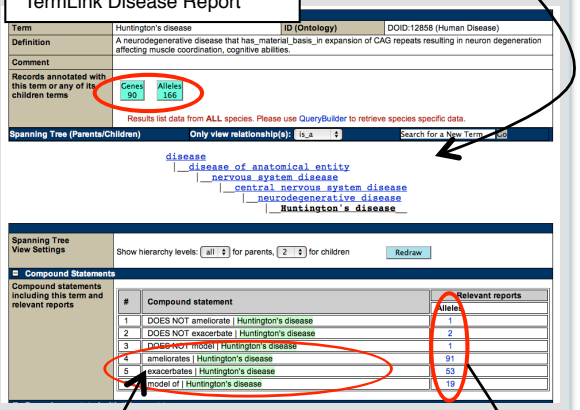
- Data for any group of tracks may be downloaded via the 'About tracks' menu.

Human disease models

We are now using Disease Ontology terms to annotate Drosophila alleles and transgenes and human transgenes inserted into Drosophila that reproduce a human disease phenotype.



TermLink Disease Report



Interacting alleles that relieve the disease phenotype or make it more severe.

Allele Report