View Phenotype & Strain Information

Phenotype Information
http://dictybase.org/Downloads/Mutants-all.html

Find all about a gene's mutant phenotype on the *Phenotype Details Page* linked from the Gene Page (e.g., *gefB*).

Mutant Type	Phenotype	Description	Reference(s)
Null	decreased phagocytosis	[parent: AX3]	Wilkins *et al.*
Multiple Null	increased cell motility	gefB-/rasS-[parent:AX3]	King *et al.*

Find genes with a specific Phenotype (e.g., decreased cell polarity).

Gene	Mutant Type	Description	Reference(s)
gbpC	Null	[parent: DH1]	Bosgraaf *et al.*
limB	Null	in cAMP gradient [parent: KAX3]	Chien *et al.*

Strain Information
http://dictybase.org/db/cgi-bin/dictyBase/SC/strainlist.pl

Strains are linked to the corresponding Gene Page. Find detailed information about each strain on its *Strain Details Page*.

vacA-			
Description	vacA null mutant; blasticidin resistant		
ID	1792	**Genotype**	axeA2, axeB2, axeC2, vacA-[vacA-KO], bsR
Strain Type	Axenic, Null mutant	**Mutagenesis Method**	Homologous Recombination
Parental Strain	AX2	**Plasmid**	vacA-KO(bsR)
Associated dictyBase Genes	vacA	**References**	9394012

Dicty Stock Center
http://dictybase.org/StockCenter/StockCenter.html

Search for strains and plasmids at the Dicty Stock Center.

The Dicty Community Pages

dictyWiki
http://wiki.dictybase.org

Play an active role in gene annotation by adding comments to the *Community Annotations Page* linked from every Gene Page.
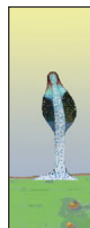
The Dicty ListServ
http://dictybase.org/ListServ_archive/

❖ Receive the dictyNews with abstracts of papers in press and participate in scientific discussions by signing up as a dictyBasecolleague.

❖ Write to the ListServ to ask questions or contribute to discussions. Send your Email to dicty@listserv.it.northwestern.edu

❖ To subscribe, visit: *http://dictybase.org/db/cgi-bin/dictyBase/colleague/colleagueSearch*

Dictyostelium Information

Find useful infomation about Dictyostelium on many helpful pages, such as:

➤ Learn about Dictyostelium
➤ Pictures/Videos
➤ Dicty Annual Conference
➤ Techniques

Picture courtesy of M.J. Grimson & R.L. Blanton

dictyBase Contact Info

Contact us with any questions or comments at dictybase@northwestern.edu

Search & Retrieve Data

Find & View Gene Sequences

Learn About a Gene's Function

View Phenotype & Strain Information

The Dicty Community Pages

Search & Retrieve Data

General Search Box

Search for gene names, gene product names, GO terms, strains, plasmids, colleagues, authors, dictyBaseIDs, GenBank accession numbers, and all dictyBase web pages. Choose 'Gene Names Only' to restrict your search to Gene Names and Synonyms.

	(Search All) (Gene Names Only)

Advanced Search: dictyMart
http://dictybase.org/biomart/martview

Use dictyMart to retrieve complex data, such as:

• gene flanking regions
• exon positions
• genes with specific GO annotations
• genes with ESTs

➤ Filter data based on multiple criteria
➤ Retrieve data as HTML, text, Excel, or FASTA file

Downloads
http://dictybase.org/Downloads/

Download frequently requested datasets:

➤ Gene Information
➤ Dictyostelium Sequences and Annotations
➤ Mutant Phenotypes
➤ Phenotype Ontology
➤ Protein Domains
➤ Gene Ontology (GO) Association File
➤ Genes on AX3/AX4 Chr. 2 Duplication

Find & View Gene Sequences

The Sequence Page

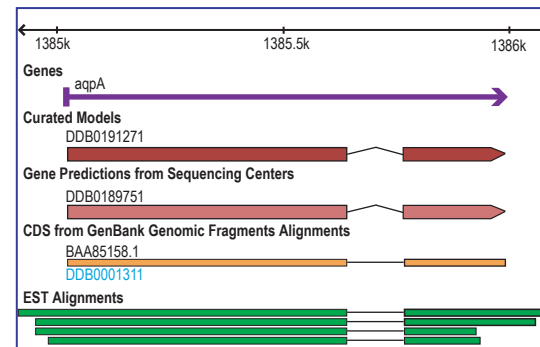Find chromosomal coordinates and retrieve sequences for all genes:

➤ Protein Sequence
➤ DNA Coding Sequence
➤ Genomic DNA Sequence

	CDS Coord.	Chrom. Coord.
Exon 1	1-116	1926792 - 1926907
Intron 1	117 -246	1926908 - 1927037
Exon 1	247 -1948	1927038 - 1928739

Genome Browser
http://dictybase.org/db/cgi-bin/ggb/gbrowse/

Search and view the genome with this dynamic, customizable map where annotated features are displayed on multiple, clickable tracks.

BLAST
http://dictybase.org/db/cgi-bin/blast.pl

Identify Dictyostelium genes and proteins using one of the many databases.

❖ Primary Features (*best gene models*)
❖ Sequencing Center Gene Predictions
❖ Curated Models (*manually verified*)
❖ GenBank sequences
❖ ESTs

Learn About a Gene's Function

General Gene Information

Find useful general information at the top of every Gene Page.

- Gene Name
- Synonym
- Gene Product
- Description
- Name Description
- dictyBase ID

Gene Ontology (GO)

Quickly find a gene product's role in the cell by clicking on the *View GO evidence and references* link on the Gene Page (e.g., mhkA).

Annotation(s)	Reference(s)	Evidence
Function myosin II binding	Steimle *et al.*	**IPI** (Inferred from Physical Interaction)
Process cytokinesis	Yumura *et al.*	**IMP** (Inferred from Mutant Phenotype)
Component cell cortex	Russ *et al.*	**IDA** (Inferred from Direct Assay)

Find genes annotated with a specific GO term by clicking on the term (e.g., GTP binding).

Gene	Reference(s)	Evidence
eRF3	dictyBase unpublished	**ISS**
fszA	Gilson *et al.*	**IDA**

dictyCyc
http://dictybase.org/Dicty_Info/dictycyc_info.html

Explore Dictyostelium **metabolic pathways** with this dynamic display. Browse or search by gene, pathway name, compound, or E.C. number. Pathways are also linked from the Gene Page.