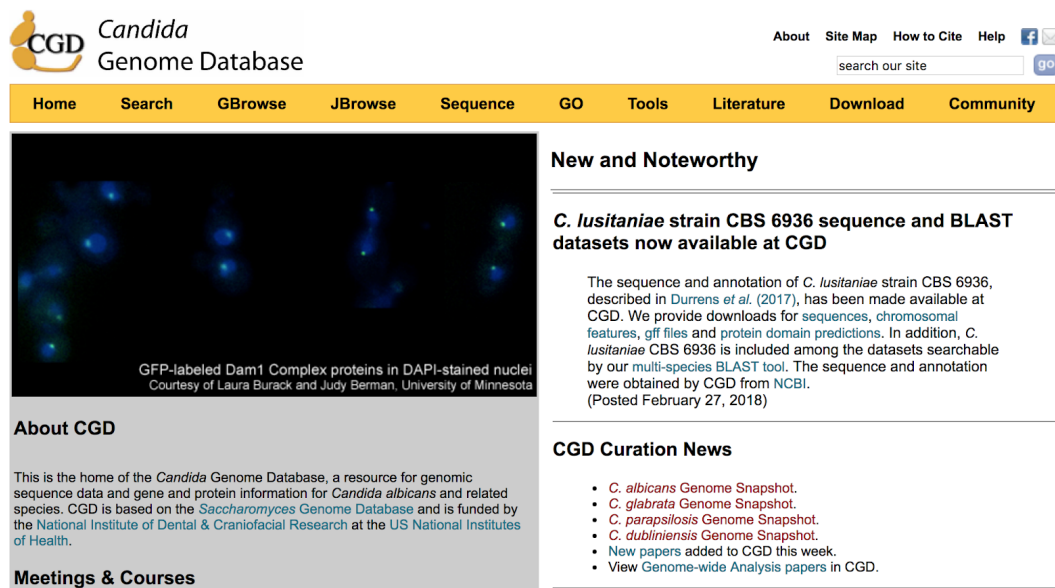


Searching CGD and Navigating Gene Pages

Explore gene-specific information in CGD using Quick search and Locus Summary page for aquaporin (AQY1)

- Open the CGD home page (<http://www.candidagenome.org>).
- Enter your query into the "search our site" box above the banner. Looking for a particular gene, you can enter a standard gene name (AQY1), a systematic name (CR_02920C), an alias or a systematic name from previous genome assemblies (orf19.2849, orf6.4943, CA2873), or an identifier from some of the external resources (NCBI's Gene ID: 3642587, as an example).



Candida Genome Database

About Site Map How to Cite Help

search our site go

Home Search GBrowse JBrowse Sequence GO Tools Literature Download Community

New and Noteworthy

C. lusitanae strain CBS 6936 sequence and BLAST datasets now available at CGD

The sequence and annotation of *C. lusitanae* strain CBS 6936, described in Durrens *et al.* (2017), has been made available at CGD. We provide downloads for sequences, chromosomal features, gff files and protein domain predictions. In addition, *C. lusitanae* CBS 6936 is included among the datasets searchable by our multi-species BLAST tool. The sequence and annotation were obtained by CGD from NCBI. (Posted February 27, 2018)

About CGD

This is the home of the *Candida* Genome Database, a resource for genomic sequence data and gene and protein information for *Candida albicans* and related species. CGD is based on the *Saccharomyces* Genome Database and is funded by the National Institute of Dental & Craniofacial Research at the US National Institutes of Health.

Meetings & Courses

CGD Curation News

- *C. albicans* Genome Snapshot.
- *C. glabrata* Genome Snapshot.
- *C. parapsilosis* Genome Snapshot.
- *C. dubliniensis* Genome Snapshot.
- New papers added to CGD this week.
- View Genome-wide Analysis papers in CGD.

CGD Quick Search Result

[Go to Advanced Search Page](#)

Below are the search results for your query, **aqy1**. If you would like to broaden your search, you may use one or more wildcard characters (*) to indicate the location(s) where any text will be tolerated in your search term.

General Search Results for : **aqy1**

- 0 Gene Ontology terms (GO terms, synonyms)
- 0 Colleagues (by last name)
- 0 Authors (by last name, first initial)
- 0 PubMed ID
- 0 Gene Ontology ID
- 0 External ID

Candida albicans Search Results for : **aqy1**

- 1 Gene names (gene name/alias/ORF name)
- 0 Biochemical pathways
- 0 General Descriptions
- 0 Phenotypes [Expanded Phenotype Search]
- 1 Ortholog or Best Hit

Candida glabrata Search Results for : **aqy1**

- 1 Gene names (gene name/alias/ORF name)
- 0 Biochemical pathways
- 0 General Descriptions
- 0 Phenotypes [Expanded Phenotype Search]
- 3 Ortholog or Best Hit

Candida parapsilosis Search Results for : **aqy1**

- 0 Gene names (gene name/alias/ORF name)
- 0 Biochemical pathways
- 0 General Descriptions
- 0 Phenotypes [Expanded Phenotype Search]
- 3 Ortholog or Best Hit

Candida dubliniensis Search Results for : **aqy1**

- 0 Gene names (gene name/alias/ORF name)
- 0 Biochemical pathways
- 0 General Descriptions
- 0 Phenotypes [Expanded Phenotype Search]
- 2 Ortholog or Best Hit

- If your query produces multiple hits, such as a gene name that is used in several *Candida* species represented in CGD, you will get a "CGD Quick Search Result" page that lists the type and number of hits, general and broken down by species. Positive hits are hyperlinked to either their respective Locus Summary pages, or to an intermediate list of individual hits. We will explore other search options later, but for now, select **1 Gene names (gene name/alias/ORF name)** under "*Candida albicans* Search Results" to open the Locus Summary page.

Explore the *C. albicans* AQY1 Locus Summary page:

- On the **Summary** tab, visit the Description and GO Annotations section. Scroll down to Locus Summary Notes.

***C. albicans* AQY1/CR_02920C Summary** ?

Summary	Locus History	Literature	Gene Ontology	Phenotype	Homologs	Protein
AQY1 BASIC INFORMATION [View References]						
Standard Name	AQY1 ¹					
Systematic Name, Reference Strain	CR_02920C_A (<i>C. albicans</i> SC5314)					
Assembly 19/21 Identifier	orf19.2849					
Alias	orf19.10368, IPF24496.1 ² , IPF10705.1 ² , Contig4-2389_0006 ³ , orf6.4943 ⁴ , CA2873 ² , CaO19.2849 ⁵ , orf19.2849, CR_02920C_B, CR_02920C					
Feature Type	ORF, Verified					
Description	Aquaporin water channel; osmotic shock resistance, WT freeze tolerance; virulent in mice; flucytosine repressed; flow model/RPMI/Spider/rat catheter biofilm induced; required for RPMI biofilm formation; Bcr1-induced in a/a RPMI biofilms (1, 6, 7, 8, 9, 10, 11) <div> Literature <input type="text" value="Literature Guide"/> <input type="button" value="View"/> </div>					
Allele Name	CR_02920C_B					
Allelic Variation	Synonymous variation between alleles Sequence variation between alleles within 100 bp upstream of feature start coordinates					
CUG Codons	CR_02920C_A: 0 CR_02920C_B: 0					
Systematic Names Used in Other Strains	CAWG_01628 (<i>C. albicans</i> WO-1)					
Orthologous genes in <i>Candida</i> species	<i>C. dubliniensis</i> CD36 Ortholog(s) : Cd36_27990 <i>C. parapsilosis</i> CDC317 Ortholog(s) : CPAR2_800150 View ortholog cluster : 12 genes among 12 <i>Candida</i> -related species/strains					
Ortholog(s) in non-CGD species	<i>A. nidulans</i> (AN10902) ; <i>N. crassa</i> (NCU08052) ; <i>S. cerevisiae</i> (AQY1)					
Best hit(s) in non-CGD species	<i>S. pombe</i> (SPAC977.17)					
Best hits in <i>Candida</i> species	<i>C. glabrata</i> CBS138 best hit(s) : CAGL0A01221g					
Chromosomal Location	GBrowse for <i>C. albicans</i> SC5314 Assembly 22 <div>Click on map for expanded view</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>CR_02920C_A</p> </div> <div style="text-align: center;"> <p>CR_02920C_B</p> </div> </div>					
JBrowse						
View all AQY1 GO evidence and references						
GO Annotations						
Molecular Function Manually curated	<ul style="list-style-type: none"> ■ water channel activity (ISS, IDA) 					
Biological Process Manually curated	<ul style="list-style-type: none"> ■ cellular response to freezing (IMP) ■ cellular response to osmotic stress (IMP) ■ single-species biofilm formation on inanimate substrate (IMP) 					
Computational	<ul style="list-style-type: none"> ■ ascospore formation (IEA with <i>S. cerevisiae</i>: AQY1) ■ transmembrane transport (IEA with <i>S. cerevisiae</i>: AQY1) ■ water transport (IEA with <i>S. cerevisiae</i>: AQY1) 					
Cellular Component Manually curated	<ul style="list-style-type: none"> ■ membrane (ISS) 					
High-throughput	<ul style="list-style-type: none"> ■ plasma membrane (IDA) 					
Computational	<ul style="list-style-type: none"> ■ endoplasmic reticulum (IEA with <i>S. cerevisiae</i>: AQY1) 					

- Open the **Gene Ontology** tab to see more information, including evidence and references. Hyperlinked phrases lead to definitions.

C. albicans AQY1/CR_02920C Gene Ontology Annotations ?

Summary Locus History Literature **Gene Ontology** Phenotype Homologs Protein

This page displays GO annotations in different sections according to the methods used in the reference from which the annotation was made:

- Manually Curated GO Annotations:** includes annotations based on published experiments or analyses that focus on specific genes.
- GO Annotations from High-throughput Experiments:** includes annotations made from published experiments performed on a high-throughput or genome-wide basis.
- Computational GO Annotations:** includes annotations that are predicted by computational methods (e.g., sequence similarity comparisons) and are not individually reviewed.

AQY1 Manually Curated GO Annotations*: Jump to: [Top](#) | [Computational](#) | [High-throughput](#)
 Last Reviewed on: 2011-10-25 [Molecular Function](#) | [Biological Process](#) | [Cellular Component](#)

Manually Curated Molecular Function			
Annotation(s)	Reference(s)	Evidence	Assigned By
water channel activity	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. <i>Yeast</i> 18(15):1391-6 CGD Paper PubMed Access Full Text	ISS : Inferred from Sequence or structural Similarity IDA : Inferred from Direct Assay Assigned on 2014-06-25	CGD

Manually Curated Biological Process			
Annotation(s)	Reference(s)	Evidence	Assigned By
cellular response to freezing	Tanghe A, et al. (2005) Aquaporin expression and freeze tolerance in Candida albicans. <i>Appl Environ Microbiol</i> 71(10):6434-7 CGD Paper PubMed Access Full Text	IMP : Inferred from Mutant Phenotype Assigned on 2014-06-25	CGD
cellular response to osmotic stress	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. <i>Yeast</i> 18(15):1391-6 CGD Paper PubMed Access Full Text	IMP : Inferred from Mutant Phenotype Assigned on 2014-06-25	CGD
single-species biofilm formation on inanimate substrate	Srikantha T, et al. (2013) Identification of genes upregulated by the transcription factor Bcr1 that are involved in impermeability, impenetrability, and drug resistance of Candida albicans α /alpha biofilms. <i>Eukaryot Cell</i> 12(6):875-88 CGD Paper PubMed Access Full Text	IMP : Inferred from Mutant Phenotype Assigned on 2014-06-25	CGD

Manually Curated Cellular Component			
Annotation(s)	Reference(s)	Evidence	Assigned By
membrane	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. <i>Yeast</i> 18(15):1391-6 CGD Paper PubMed Access Full Text	ISS : Inferred from Sequence or structural Similarity Assigned on 2014-06-25	CGD

*Manually Curated GO annotations reflect our best understanding of the basic molecular function, biological process, and cellular component for this gene product. Manually Curated annotations are assigned by CGD curators based on published, small-scale experiments. Curators periodically review all Manually Curated GO annotations for accuracy and completeness. The "Last Reviewed on:" date at the top of this section indicates when these annotations were last reviewed.

AQY1 GO annotations from High-Throughput Experiments:** Jump to: [Top](#) | [Computational](#) | [Manually curated](#)

Cellular Component Annotations from High-Throughput Experiments			
Annotation(s)	Reference(s)	Evidence	Assigned By
plasma membrane	Cabezon V, et al. (2009) Analysis of Candida albicans plasma membrane proteome. <i>Proteomics</i> 9(20):4770-86 CGD Paper PubMed Access Full Text	IDA : Inferred from Direct Assay Assigned on 2014-06-25	CGD

** GO annotation from High-throughput Experiments are made based on a variety of large scale high-throughput experiments, including genome-wide experiments. Many of these annotations are made based on GO annotations (or mappings to GO annotations) assigned by the authors, rather than CGD curators. While CGD curators read these publications and often work closely with authors to incorporate the information, each individual annotation is not necessarily reviewed by a curator. GO Annotations from high-throughput experiments will be assigned only when this type of data is available, and thus may not be assigned in all three aspects of the Gene Ontologies.

AQY1 Computational GO Annotations*:** Jump to: [Top](#) | [High-throughput](#) | [Manually curated](#)
 Biological Process | Cellular Component

Computational Predictions for Biological Process			
Annotation(s)	Reference(s)	Evidence	Assigned By
ascospore formation	CGD (2008) Prediction of Gene Ontology (GO) annotations based on orthology CGD Paper	IEA : Inferred from Electronic Annotation with <i>S. cerevisiae</i> : AQY1 Assigned on 2017-01-31	CGD
transmembrane transport	CGD (2008) Prediction of Gene Ontology (GO) annotations based on orthology CGD Paper	IEA : Inferred from Electronic Annotation with <i>S. cerevisiae</i> : AQY1 Assigned on 2017-01-31	CGD
water transport	CGD (2008) Prediction of Gene Ontology (GO) annotations based on orthology CGD Paper	IEA : Inferred from Electronic Annotation with <i>S. cerevisiae</i> : AQY1	CGD

- What are the phenotypes caused by mutations in this gene? In the Summary tab, find the Mutant Phenotype section. Open the **Phenotype** tab for more details, including experimental settings and references.

C. albicans AQY1/CR_02920C_A Phenotypes



Summary	Locus History	Literature	Gene Ontology	Phenotype	Protein
This page lists all curated single mutant phenotypes associated with AQY1. Click on a term in the phenotype column to see other genes associated with that term or download all data. Browse phenotype terms					
Jump to: Download Data					
13 Single Mutant Phenotype(s) for AQY1/CR_02920C_A					
Experiment type	Mutant Information	Strain background	Phenotype	Details	Virulence Model
heterozygous diploid, classical genetics	Description: repressible Allele: aqy1::FRT/aqy1::FRT AQY1-GFP::SATR	SC5314	biofilm formation: abnormal	Condition: RPMI medium 29 degrees C with rocking for 48 hr Details: mutant has minor defects in vertical orientation of hyphae and reduced extracellular matrix, complete permeability to Sypro Ruby and human PMNs and decreased fluconazole resistance	Srikantha T, et al. (2013) Identification of genes upregulated by the transcription factor Bcr1 that are involved in impermeability, impenetrability, and drug resistance of Candida albicans a/alpha biofilms. Eukaryot Cell 12(6):875-88 CCO CURATED PubMed Access Full Text
heterozygous diploid, classical genetics	Description: repressible Allele: ADH1/adh1::pTET-AQY1-GFP::SATR (tet repressed)	P37005	biofilm formation: abnormal	Condition: RPMI medium 29 degrees C with rocking for 48 hr Details: decreased Sypro Ruby and human PMN penetrability, decreased resistance to fluconazole	Srikantha T, et al. (2013) Identification of genes upregulated by the transcription factor Bcr1 that are involved in impermeability, impenetrability, and drug resistance of Candida albicans a/alpha biofilms. Eukaryot Cell 12(6):875-88 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null Allele: a/alpha aqy1::FRT/aqy1::FRT	SC5314	biofilm formation: abnormal	Condition: RPMI medium 29 degrees C with rocking for 48 hr Details: mutants have reduced vertical orientation of hyphae, an abnormal extracellular matrix, complete penetrability to Sypro Ruby and human PMNs and increased sensitivity to fluconazole	Srikantha T, et al. (2013) Identification of genes upregulated by the transcription factor Bcr1 that are involved in impermeability, impenetrability, and drug resistance of Candida albicans a/alpha biofilms. Eukaryot Cell 12(6):875-88 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	SC5314	biofilm formation: abnormal	Details: forms biofilm with altered detachment properties	Sellam A, et al. (2009) A Candida albicans early stage biofilm detachment event in rich medium. BMC Microbiol 9:25 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	CAI-4	flocculation: normal	Condition: liquid YPD medium	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. Yeast 18(15):1391-6 CCO CURATED PubMed Access Full Text
heterozygous diploid, classical genetics	Description: repressible	Not recorded	freeze-thaw resistance: decreased		Tanghe A, et al. (2005) Aquaporin expression and freeze tolerance in Candida albicans. Appl Environ Microbiol 71(10):6434-7 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	Not recorded	freeze-thaw resistance: decreased		Tanghe A, et al. (2005) Aquaporin expression and freeze tolerance in Candida albicans. Appl Environ Microbiol 71(10):6434-7 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	CAI-4	hyphal growth: normal	Condition: solid Spider medium	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. Yeast 18(15):1391-6 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	CAI-4	invasive growth: normal	Condition: solid YPD medium	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. Yeast 18(15):1391-6 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	CAI-4	osmotic stress resistance: increased	Details: greater-than-wild type resistance to both hyper- and hypoosmotic shock	Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. Yeast 18(15):1391-6 CCO CURATED PubMed Access Full Text
heterozygous diploid, large-scale survey (haploinsufficient phenotype assay, barcode deletion set)	Description: null	SC5314	viable		Xu D, et al. (2007) Genome-wide fitness test and mechanism-of-action studies of inhibitory compounds in Candida albicans. PLoS Pathog 3(6):e92 CCO CURATED PubMed Access Full Text Web Supplement
homozygous diploid, classical genetics	Description: null	CAI-4	viable		Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. Yeast 18(15):1391-6 CCO CURATED PubMed Access Full Text
homozygous diploid, classical genetics	Description: null	CAI-4	virulence: normal	Details: organ colonization is also normal	mouse intravenous infection Carbrey JM, et al. (2001) Aquaporin in Candida: characterization of a functional water channel protein. Yeast 18(15):1391-6 CCO CURATED PubMed Access Full Text

- What are the orthologs in other *Candida* species? Return to Summary tab and find Orthologous Genes and Best Hits among items listed in Basic Information section with links to their source databases. Open the **Homologs** tab to see a Phylogenetic Tree and multiple sequence alignments.

***C. albicans* AQY1/CR_02920C Homology Information**

Summary Locus History Literature Gene Ontology Phenotype **Homologs** Protein

AQY1 HOMOLOG INFORMATION

Ortholog Cluster
From CGOB

Download cluster sequence files:
 Proteins (multi-FASTA format)
 Coding (multi-FASTA format)
 Genomic (multi-FASTA format)
 Genomic +/- 1000 BP (multi-FASTA format)

View CGOB cluster and synteny information

Sequence ID	Organism	Source	Status
AQY1/CR_02920C_A	<i>Candida albicans</i> SC5314	CGD	VERIFIED
Cd36_27990	<i>Candida dubliniensis</i> CD36	CGD	UNCHARACTERIZED
CPAR2_800150	<i>Candida parapsilosis</i> CDC317	CGD	UNCHARACTERIZED
AQY1/YPR192W	<i>Saccharomyces cerevisiae</i> S288C	SGD	VERIFIED
CAWG_01628	<i>Candida albicans</i> WO-1	EnsemblFungi	
CLUG_01034	<i>Candida lusitanae</i> ATCC 42720	EnsemblFungi	
CORT_0A00270	<i>Candida orthopsilosis</i> Co 90-125	EnsemblFungi	
LELG_00007	<i>Lodderomyces elongisporus</i> NRLL YB-4239	EnsemblFungi	
DEHA2F27104g	<i>Debaryomyces hansenii</i> CBS767	EnsemblFungi	

Best hits in CGD species: *C. glabrata* CBS138 best hit: CAGL0A01221g

Orthologs in fungal species: *A. nidulans* (AN10902) ; *N. crassa* (NCU08052)

Best hits in fungal species: *S. pombe* (SPAC977.17)

Reciprocal best hits in other species: *M. musculus* (AQP1) ; *R. norvegicus* (Aqp1) ; *D. discoideum* (wacA)

☒ Phylogenetic Tree

Built with SEMPHY

Download tree files:
 Unrooted Tree (Newick format)
 Rooted Tree (Newick format)
 Rooted Tree (phyloXML format)
 Rooted, Annotated Tree (phyloXML format)

Tree rooted by midpoint; total tree length = 2.45 subs/site

0.2 subs/site

☒ Protein Sequence Alignment

Built with MUSCLE

Download alignment files:
 Protein alignment (Multi-FASTA format)
 Protein alignment (ClustalW format)

Reference sequence (1): CR_02920C_A
 Identities normalized by aligned length.
 Colored by: identity >= 80% and property:

Hydrophobic (A, I, L, M, V)
 Aromatic (F, W, Y)
 Polar (N, Q, S, T)
 Negative charge (D, E)
 Positive charge (H, K, R)
 Backbone change (G, P)
 Cysteine (C)

Sequence	Identity	Alignment
1 CR_02920C_A	100.0%	-----MVAESSSIDNT-----PNDVEAQ
2 CAWG_01628	100.0%	-----MVAESSSIDNT-----PNDVEAQ
3 Cd36_27990	98.9%	-----MVAESSSIDNT-----ANDVEAQ
4 CPAR2_800150	81.6%	-----MVAESSSIDNT-----
5 CORT_0A00270	79.3%	-----MTVEAT----SP-----IDDIEQQ
6 LELG_00007	80.4%	-----MTAAGSIAEPT-----PNEIEAQ
7 DEHA2F27104g	19.4%	-----MDSTLGSDSLEPERTTIDSEGLNHRNPERFEGENRLSPDLEAQ
8 CLUG_01034	75.0%	-----MT-----ASDVEAQ
9 YPR192W	45.9%	MSSNDSNDTDKQHTRLDPT-----GVDDAYI

- Explore the **Protein** tab. What is known about the structure and physicochemical properties of this protein?

***C. albicans* Aqy1p/Cr_02920cp Protein Information**

Summary Locus History Literature Gene Ontology Phenotype Homologs **Protein**

Aqy1p PROTEIN INFORMATION [View References]

- Note the “predicted protein structure,” now available from AlphaFold
- What are the genomic and protein sequences for both AQY1 alleles? On the Summary tab, scroll down to Sequence Information section and explore the Retrieve Sequences pull-down menu. To analyze the AQY1 sequence, in the Sequence Information section, open the Sequence Analysis Tools pull-down menu to run BLAST, design primers, and get restriction maps.

Sequence Information Ca22chrRA_C_albicans_SC5314:668602 to 667781 | [GBrowse](#)
Note: this feature is encoded on the Crick strand.


Coordinates: 2016-01-21 | Sequence: 2014-06-24

	Relative Coordinates	Chromosomal Coordinates	Most Recent Update	
			Coordinates	Sequence
CDS	1 to 822	668,602 to 667,781	2016-01-21	2014-06-24

Retrieve Sequences -- C. albicans SC5314 Assembly 22 -- View

Sequence Analysis Tools -- C. albicans SC5314 Assembly 22 -- View

Maps & Displays Flanking Features Table View



- What literature is available on AQY1? View references at the bottom of AQY1 Locus Summary page and click on Complete Literature Guide, or simply open the **Literature** tab. To filter out papers that deal with a specific topic, such as mutants and phenotypes, click on that topic using the menu on the left side of the page.

C. albicans AQY1/CR_02920C Literature Guide

Summary
Locus History
Literature
Gene Ontology
Phenotype
Homologs
Protein

Other names in use for C. albicans AQY1: orf19.10368, IPF24496.1, IPF10705.1, Contig4-2389_0006, orf6.4943, CA2873, CaO19.2849, orf19.2849, CR_02920C_B, CR_02920C, CAWG_01628, CR_02920C_A

This page displays all the papers associated with C. albicans AQY1 in CGD, along with all the literature topics those papers address. Click on a topic on the left to see the papers that address it.

AQY1 LITERATURE TOPICS

- Virulence-related**
 - Animal Model
 - Sensitivity/response to drugs/other treatments
- Related Genes/Proteins**
 - Cross-species Expression
 - Fungal Related Genes/Proteins
- Nucleic Acid Information**
 - DNA/RNA Sequence Features
 - RNA Levels and Processing
- Research Aids and Literature**
 - Strains/Constructs
- Proteome-wide Analysis**
 - Large-scale protein detection
- Gene Product Information**
 - Protein Domains/ Motifs
 - Protein Physical Properties
 - Substrates/Ligands/Cofactors
- Life Cycle**
 - Biofilms
- Curated Literature**
 - Alias
 - Reviews
 - List of all Curated References
- Regulation**
 - Transcriptional Regulation
- Genetics/Cell Biology**
 - Cell Growth and Metabolism
 - Cellular Location
 - Function/Process
 - Genetic Interactions
 - Mutants/Phenotypes
 - Signal Transduction
- Related Species**
 - Candida albicans
- Genome-wide Analysis**
 - Genome-wide Analysis
 - Genomic expression study
 - Large-scale phenotype analysis

AQY1 Literature Curation Summary

Curated References for AQY1: 16
References Not Yet Curated: 0
References for Curation: 0
Number of Other Genes referred to in AQY1 Literature: 3401
Date of last curation: 2014-06-25
Date of last PubMed Search: 2017-04-02

Reference	Species	Other Genes Addressed
Srikantha T, et al. (2013) Identification of genes upregulated by the transcription factor Bcr1 that are involved in impermeability, impenetrability, and drug resistance of Candida albicans a/alpha biofilms. <i>Eukaryot Cell</i> 12(6):875-88 	C. albicans	IBCR1 BRG1 C1_05890W_A CHK1 CR_06500C_A CSA1 CSA2 EAP1 ECE1 GCA1 GCA2 GSL1 HAP3 HWP1 MORE
Bonhomme J, et al. (2011) Contribution of the glycolytic flux and hypoxia adaptation to efficient biofilm formation by Candida albicans. <i>Mol Microbiol</i> 80(4):995-1013 	C. albicans	IAAF1 ABC1 ACS1 ADH1 ADH5 ADK1 AHP1 ALP1 ALS3 ALT1 AMS1 ARE2 ARG1 ARG4 MORE
Vylkova S, et al. (2011) The fungal pathogen Candida albicans autoinduces hyphal morphogenesis by raising extracellular pH. <i>MBio</i> 2(3):e00055-11 	C. albicans	IAH1 ACS1 ARG1 ARG3 ARG4 ATO1 ATO10 ATO2 ATO5 ATO6 ATO7 ATO9 C2_02650C_A C4_06910W_A MORE
Synnott JM, et al. (2010) Regulation of the hypoxic response in Candida albicans. <i>Eukaryot Cell</i> 9(11):1734-46 	C. albicans	IAAH1 ABP1 ADH1 ALS4 ARE2 ASR2 ATO2 BCR1 BIO2 BMT3 C1_00160C_A C1_01360C_A C1_02700C_A C1_03510C_A MORE
Cabezon V, et al. (2009) Analysis of Candida albicans plasma membrane proteome. <i>Proteomics</i> 9(20):4770-86 	C. albicans	IAH1 AFG3 AGC1 ALI1 ALO1 AOX2 ATP1 ATP17 ATP18 ATP19 ATP2 ATP20 ATP3 ATP4 MORE
Cottier F and Muhlischlegel FA (2009) Sensing the environment: response of Candida albicans to the X factor. <i>FEMS Microbiol Lett</i> 295(1):1-9 	C. albicans	IACE2 BUD2 CAG1 CAN1 CCH1 CEK1 CPH1 CYR1 CZF1 EFG1 FIG1 GAP1 GAP2 GAT1 MORE
Hua X, et al. (2009) Morphogenic and genetic differences between Candida albicans strains are associated with keratomycosis virulence. <i>Mol Vis</i> 15:1476-84 	C. albicans	IAAP1 AAT21 ACB1 ACO2 ADAEC AHP1 ALD6 ALS1 ALS2 ALS4 ALS7 AMO2 AOX2 APE3 MORE
Nett JE, et al. (2009) Time course global gene expression analysis of an in vivo Candida biofilm. <i>J Infect Dis</i> 200(2):307-13 	C. albicans	IAAH1 AGP2 ALD6 ALS1 AOX2 ARG1 ARG8 BGL2 C1_10570C_A ICAN1 ICAT8 CDC21 CDG1 CDR2 MORE
Sellam A, et al. (2009) A Candida albicans early stage biofilm detachment event in rich medium. <i>BMC Microbiol</i> 9:25 	C. albicans	IALS1 ALS3 AMS1 BCR1 CWH8 HSP21 HWP1 IMKC1 PGA13 PSA2 YWP1
Trunk K, et al. (2009) Depletion of the cullin Cdc53p induces morphogenetic changes in Candida albicans. <i>Eukaryot Cell</i> 8(5):756-67 	C. albicans	IAOX2 ARG1 C4_05610C_A C4_06910W_A CDC53 CFL2 CR_09140C_A GLO1 HSP12 MET1 PHO112 STE11
Xu D, et al. (2007) Genome-wide fitness test and mechanism-of-action studies of inhibitory compounds in Candida albicans. <i>PLoS Pathog</i> 3(6):e92 	C. albicans	IAAH1 AAP1 AAT1 AAT21 ABC1 ABD1 ABP140 ABZ1 ACC1 ACF2 ACO1 ACO2 ACP12 ACS2 MORE